Pimpitcha 6404640812

1. What are the three functions of money? Evaluate whether "gold" can effectively serve these three functions.

1. A medium of exchange
2. A store of value
3. A unit of account

- Gold has been used throughout the ages as money although today it is not used as money but rather is valued for its other attribute.

[used as "commodity money"

2. Suppose that people hold 1000$ as cash, 1000$ as demand deposits, and 1000$ as savings; calculate narrow money and broad money. How much is the "money supply" in the economy?

M1: Narrow money = 1000+1000 = 2000
M2: Broad money = 2000+1000 = 3000
Money supply (M1) = 2000

3. What is Fractional Reserve System (FRS)? Explain how money can be created through this system.

FRS - The banking system used by goldsmiths and banks

- only a fraction of deposites are backed by actual cash on hand and are available for withdrawal.

4. Suppose that the reserve ratio is 20% and that Mr.Bean has <u>100$ CASH and 200$ DEPOSIT</u>. Assume that people deposits all their money, and that the banks lend all their deposits; answer the following questions.
a) What does the reserve ratio of 20% means?
b) WITHOUT the fractional reserve system (FRS), how much is the money supply?
c) Calculate the money multiplier.
d) WITH the FRS, how much is the TOTAL DEPOSIT within the economy?
e) How much deposit is <u>created from the FRS</u>?
f) WITH the FRS, how much is the money supply?

a) RR of 20% means banks have to keep 20% reserve of deposits.

b) Money supply will be $200 in deposit and $100 in cash

c) Money multiplier = $\frac{1}{RR} = \frac{1}{0.2} = 5$

d) Total deposit = MM (money multiplier) = 200 × 5 = $1000

e) $200 — deposit from Mr. Bean creating $800

[Total deposit – deposit]

f) with FRS, MS is $1100

5. Explain three roles of central banks.

- Central bank plays a significant roles → control money supply
  ex, when using monitary policy
  - expansiondry : i↓ → I↑ → AE↑ → Y↑
  - contractionary : i↑ → I↓ → AE↓ → Y↓
- Lender of Last resort
  -provides funds to bank that confront the difficulties and cannot any resources of funds from their financial positions.
- Central bank responsibility for managing exchange rates whether to buy or sell $ and ฿

6. What is Liquidity? What is the most liquid asset? Explain the three reasons (according to Keynes) why people prefer to have liquidity. Which of these three reasons causes the money demand curve to be downward-sloping?

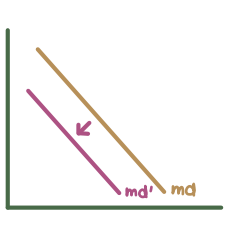
Three key points that cause money demand to be downward sloping,

3.1) Transaction Demand – Demand Cash : daily use (include debit card)
3.2) Precautionary Demand (unexpected use)
3.3) Speculative Demand for future investment.

7. How does each of the followings affect the money demand curve? (That is, will it shift the curve, or is it movement along the curve?) Also, explain your reasoning.

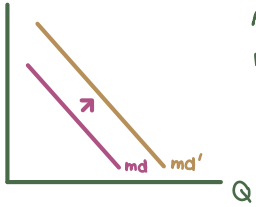
a) People become poorer.
b) Goods become more expensive.
c) People prefer to hold less cash due to debit/credit cards
d) The central bank decreases interest rate.

a)



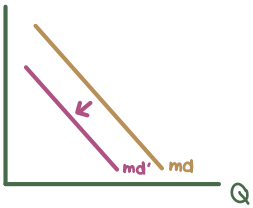
- People become less wealthy due to income factor, making individuals to buy less good and sevices.
- People will hading less money causing md shift left.

b) i



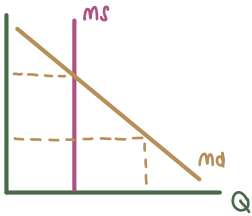
According to the condition, people don't have enough money on their hands like before, so they will demand more cash to spend goods and products.

c) i



money demand curve shift leftward from M^{d1} to $M^{d'}$ because the "preference" that make people holding less cash from their personal factors.

d) i



The role of central bank is control the money supply
"movement along the curve"
→ people want more M^d because when i decreasing people will hold less bond due to the interest rate
- speculative demand

8. Why is the money supply curve a vertical line? How does each of the followings affect the money supply curve? Also, explain your reasoning.

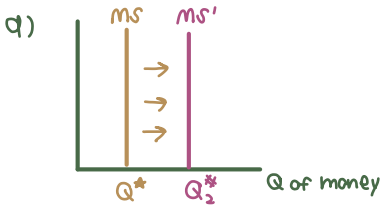
a) People deposit more money. MS↑

b) The central bank increases reserve ratio. MS↓

c) The central bank decreases discount rate. MS↑

d) The central bank decreases interest rate. doesn't shift

a)

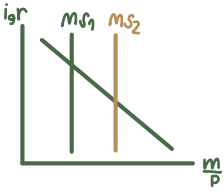


c) because commercial banks borrow more reserves from CB, so ms curve will rise.

d) only movement along the curve

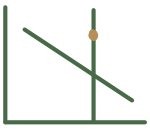
9. Suppose that the central bank wants to lower interest rate to boost the economy. Explain, together with the money market diagram, how the central bank can achieve this through an open market operation.

To boost the economy bank has to increase money supply and reduce interest rate.



The CB by securities, the central bank pay to the public,

10. Suppose that the money market is NOT in equilibrium because the current interest rate is higher than the equilibrium rate, $i > i^*$. Explain how the money market adjusts to reach the equilibrium.



"excess supply" we have to reduce the interest rate to turn people to buy bond.

11. Write down the equation for the Quantity Theory of Money. Explain how this equation can be used to explain inflation.

$MV = PY$ V and Y is constant so, if M↑ → P↑ (inflation)

12. Let the money demand function be $M_D = 200 - (1000)i$ and the money supply function be $M_S = 100$.

a) Calculate the equilibrium interest rate, i*. (Hint: set $M_D = M_S$ and solve for i*)

b) Suppose that new money demand function becomes $M_D = 400 - (1000)i$. What can be inferred about the transaction and precautionary demand?

a.) $M_S = M_d$

$100 = 200 - 1000i$

$1000i = 100$

$i = \frac{100}{1000}$

$i = 0.1$

b.) $100 = 400 - 1000i$

$i = \frac{300}{1000}$

$i = 0.3$

it doesn't affect the transaction and precautionary demand because both of them don't depend on interest rate but they depend on income.