

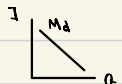
Exercise 5 -

- store of value - transport purchasing power
 - medium of exchange - generally accepted
 - unit of account - allow comparison of values

Gold no longer serves the 3 functions as it's not generally accepted as a medium of exchange for daily use, despite being able to store and compare values.

- narrow money, $M_1 = 2000 \$$ = money supply
broad money, $M_2 = 3000 \$$
- FRS is when money deposited to banks is partially reserved into Central Bank based on the required reserve ratio (RR) and excess reserve is lent out as loans. This initial deposit then creates a chain of deposits and expands the money supply. Hence, only a fraction of deposits are backed by actual cash.
- a) 20% of the deposit is reserved into Central Bank, 40 \$
 - b) $MS = 100 + 200 = 300 \$$
 - c) $MM = 1/RR = 1/0.2 = 5$
 - d) total deposits = $200 \times 5 = 1000 \$$
 - e) $\Delta \text{deposits} = 800 \$$
 - f) $MS = 100 + 1000 = 1100 \$$
- control the money supply in the economy - monetary policy
 - govern and support commercial banks
 - manage exchange rate
- Liquidity = how easily assets can be converted into a mean of exchange
most liquid : cash

 - transaction demand for daily use
 - precautionary demand for unexpected use
 - speculative demand for future investment \Rightarrow causes downward-sloping, negative relationship with interest rate
- a) shifts to the left, transaction demand is likely to be lower
 - b) shifts to the right, transaction & precautionary are likely to be higher
 - c) shifts to the left, demand to hold cash decreases due to technology



d) movement down the curve, increase in speculative demand as investors clear their portfolios at low interest rate

8. MS isn't determined by interest rate = vertical line

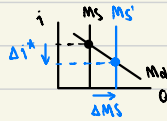
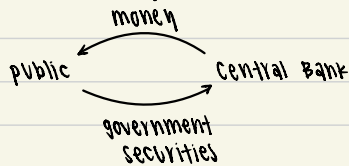
a) with FRS, shifts to the right, more excess reserve to be lent out & expand MS

b) RR↑, lower money multiplier, MS↓, shifts to the left

c) discount rate ↓, commercial banks can provide more loans, MS↑, shifts to the right

d) no change, interest rate doesn't affect MS

9.



open market operation: CB purchases government bonds from the public to increase MS in the economy, so i^* decreases

10. $i > i^*$, excess MS, people convert cash into interest-bearing assets, bond issuers are unable to pay all interest, i will be lowered to i^*

11. $MV = PY$, value of transaction = nominal GDP

velocity & real output are assumed constant so money supply is proportional to price level: in the long-run (full unemployment), monetary policy and printing money will only lead to inflation

12. a) $200 - 1000i = 100$

$$i^* = 0.1 \Rightarrow 10\%$$

b) transaction & precautionary demand increase by 200