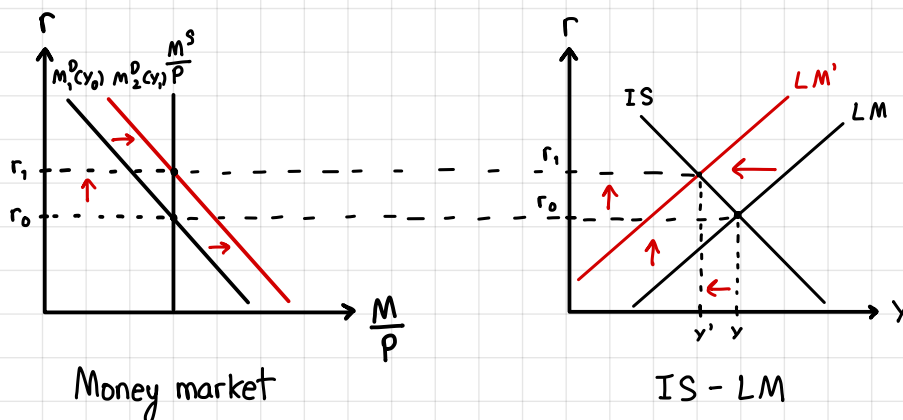


2. after a wave of credit card fraud, consumers using cash more frequently in transactions. (Odds number) Even

For each shock,

- use the $IS-LM$ diagram to show the effects of the shock on Y and r . Explain the mechanism.
- determine what happens to C , I , and the unemployment rate.



- a) After a wave of credit card fraud, consumers turn to use more cash, then the money demand shifts to the right as the demand for money increases ($M^D_1 \rightarrow M^D_2$). The new equilibrium interest rate increases from r_0 to r_1 for each level of y . Assuming that all other exogenous variables (including M^S and P) are not change, so $\frac{M^S}{P}$ does not change. From this consequence in the money market, we can derive the LM curve. LM curve will shift to the left from LM to LM' . The new equilibrium output will be at y' . (decreasing from y to y')
The new equilibrium interest rate will be increased from r_0 to r_1 .
(P.S: $r_1 > r_0$, $y' < y$)

- b) As the shift in LM , the level of output decreases and the interest rate increases. The fall in Y makes the consumption (C) to fall. The increasing in r makes the investment to be decreased. Moreover, the unemployment rate will be increased as the decreasing in Y . (As income falls, the number of labors that the firm want to hire will be decreased/smaller. It leads to the increasing in unemployment rate)