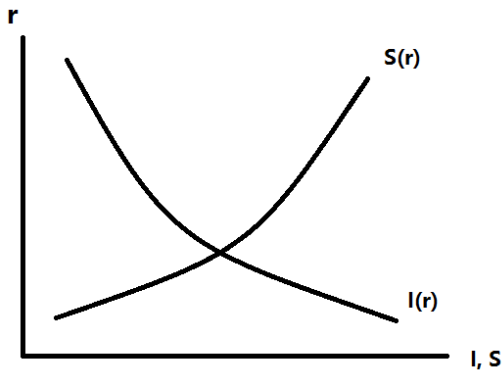


Macroeconomics Class Note (03/15/2017)

The Classical Theory

Y is fixed



(1) MPC ↑

MPS ↓ - Less loanable funds
 $r \uparrow$; $I \downarrow$; $S \downarrow$

Some prediction for r , I and S :

Lower propensity to save leads to higher interest rate. So even with unchanged liquidity preference and unchanged stock of money, the interest rate does change and leads to change in the people's propensity to consume.

Parallel result would happen if MPC ↓:

(2) MPC ↓

MPS ↑ - more loanable funds
 $r \downarrow$; $I \uparrow$; $S \uparrow$

So here too same prediction for r , I and S .

But with the major difference that the General Theory predicts that a decline in the MPC will lead to a recession.

(3) MEC ↑ marginal efficiency of capital

MEC ↑; more demand for loanable funds
 $r \uparrow$; $I \uparrow$; $S \uparrow$

Same prediction here – the General Theory says that anything that affects positively the marginal propensity to invest will give a boost to the economy.

(4) MEC ↓ less demand for loanable funds.

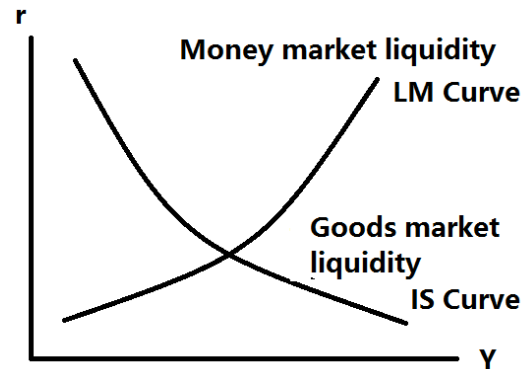
$r \downarrow$; $I \downarrow$; $S \downarrow$

Bottom line: the interest rate reflects not only the liquidity preference and the supply of money, but also the marginal propensity to save and the marginal efficiency of capital. Changes in these parameters not only affect r , I and S , but also output and employment. In particular, an ↑ in MPS or a decline in MEC might push the economy into a recession.

(5) An increase in the liquidity preference:

Nothing to say.

The General Theory



MPC ↑

$y \uparrow$; $r \uparrow$; $I \downarrow$, counteracting some of the increase in y ;
 because $I \downarrow$, $S \downarrow$, therefore $C \uparrow \uparrow$ more than income.

MPC ↓

$y \downarrow$; $r \downarrow$; $I \uparrow$, counteracting some of the increase in y ;
 because $I \uparrow$, $S \uparrow$, therefore $C \downarrow \downarrow$ more than income.

MEC ↑;

$I \uparrow$; $y \uparrow$; $r \uparrow$; some offset of the increase in I
 Because $I \uparrow$; $S \uparrow$; therefore, $C \uparrow$ less than Y .

MEC ↓;

$I \downarrow$; $Y \downarrow$; $r \downarrow$ some partial offset of the decline in I ;
 $I \downarrow$; $S \downarrow$; therefore $C \downarrow$ less than Y .

$r \uparrow$; $I \downarrow$; $Y \downarrow$; $C \downarrow$; $S \downarrow$.

(6) A decline in the liquidity preference:

Nothing to say.

$r \downarrow; I \uparrow; Y \uparrow; C \uparrow; S \uparrow.$

(7) An increase in M: an easing of monetary policy:

Nothing to say.

$r \downarrow; I \uparrow; Y \uparrow; C \uparrow; S \uparrow.$

(8) A decline in M: a tightening of monetary policy:

Nothing to say.

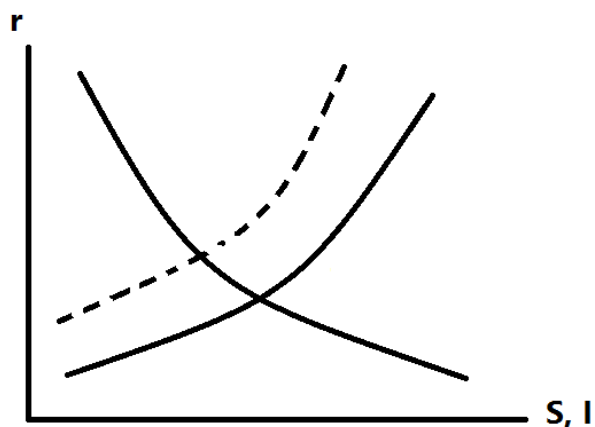
$r \uparrow; I \downarrow; Y \downarrow; C \downarrow; S \downarrow.$

Classical theory has nothing to say about the impact of monetary shocks.

(9) An increase in government spending:

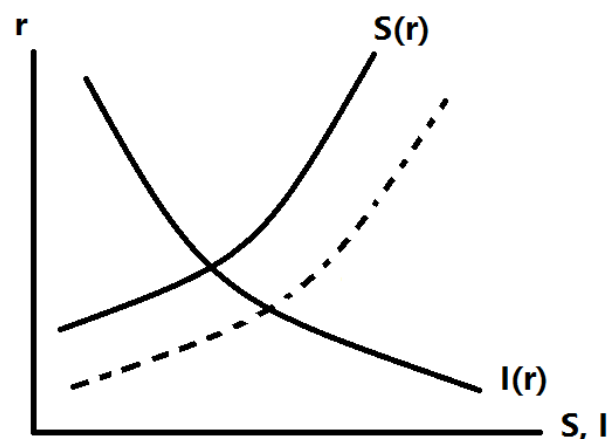
The public sector has negative savings, so less loanable funds: $r \uparrow; S \downarrow; I \downarrow$

$G \uparrow; Y \uparrow; r \uparrow; I \downarrow$ partially offset by the increase in Y ,
-Still, $Y \uparrow, C \uparrow \uparrow$ as $S \downarrow$



- Same prediction on r, s, I , but how we know that a fiscal expansion can help the economy go back to full employment.

What happens if the government increases taxation without increasing spending?



$$C = C_0 + c(Y - T)$$

$$\Delta C = -c\Delta T$$

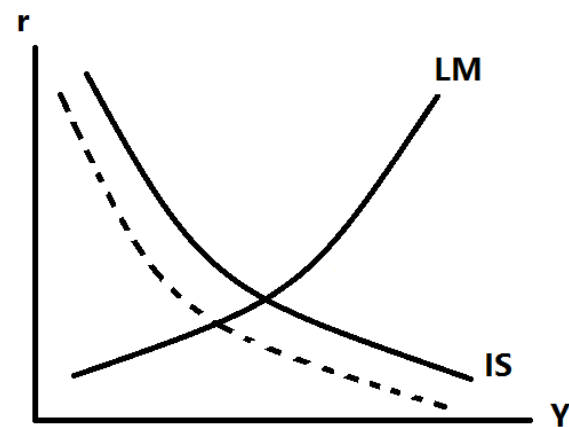
$$\Delta S_{\text{priv}} = -\Delta T + c\Delta T = (c-1)\Delta T$$

$$\Delta S_{\text{total}} = (c-1)\Delta T + \Delta T = c\Delta T$$

So the S schedule shifts to the right;

$r \downarrow; S \uparrow$ and $I \uparrow$.

Looks great if indeed the economy manages to keep full employment. This could be a good policy if the economy was overheating.



If $T \uparrow$, Y counteracts;

$r \downarrow; I = S \uparrow$

More savings, more investment; lower interest rate, but this comes at a cost in terms of unemployment and output.

Conclusion: So in both models, lower private consumption, lower government consumption or higher taxation increase the investment and savings and lower the interest rate. But while this looks good if we assume that Y is fixed at full employment, we have to realize that this decrease the economy and throw people out of work if we have no reason to believe that the economy is always operating at full employment.

- Higher marginal efficiency of capital leads to higher I and r in both models, and creates an economic expansion in General Theory.