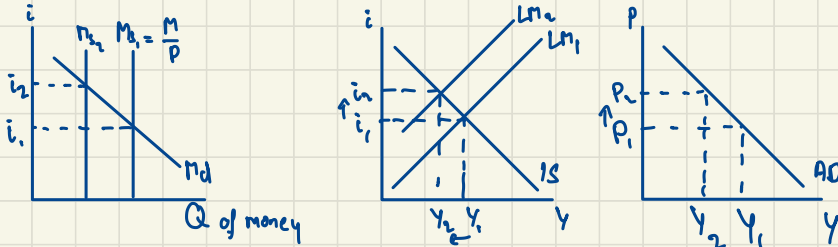


Name: Chanpanha Chay

Exercise 7:

1. Derived AD from money market diagram and IS-LM

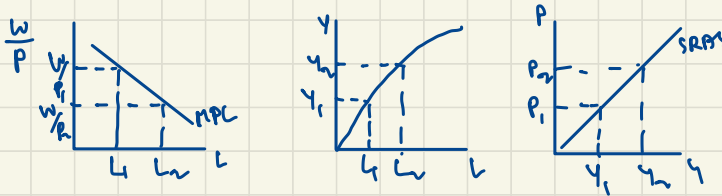


Demand depend on  $P$  of  $Y$ . and  $M_s = M_d \Leftrightarrow \frac{M}{P} = L(i, Y)$ .

When  $P$  goes up,  $\frac{M}{P}$  will goes down ( $M_{s1} \rightarrow M_{s2}$ ).  $i$  will goes up which will lead to fall in investment.  $I$  goes down,  $Y$  goes down. Thus, when  $P$  goes up,  $Y$  goes down. it creates AD downward sloping graph.

2. Sticky wage theory is an economic concept describing how wages adjust slowly to changes in labor market condition.

As in the SR, wage is sticky. When  $P$  goes up,  $\frac{w}{P}$  will goes down. Firm will hire more labors due to cheap real wage. Thus,  $Y$  will increase. When  $P$  increase,  $Y$  also increase.

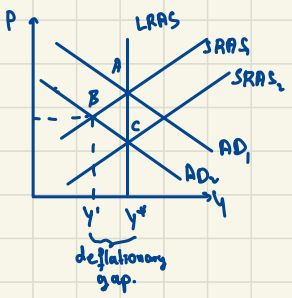


3. LRAS is vertical because in the LR, output is at the full employment level. In long run, wage is flexible, so when  $p \uparrow$ , nominal wage  $\uparrow$  too. Firm will not demand more or less labor. Thus, output does not change. Therefore even price change, output does not change. so LRAS is vertical.

4.

Variable/Event	AD	SRAS	LRAS
$P \uparrow$	move down	move up	-
$G \downarrow$	shift down	-	-
$T \downarrow$	shift up	-	-
Autonomous $C \uparrow$	shift up	-	-
Autonomous $I \downarrow$	shift down	-	-
$M \downarrow$	shift down	-	-
$i \uparrow$	shift down	-	-
Temporary epidemic (assuming AD unchanged)	No effect	Shift to the left	-
Permanent increase in population growth rate (assuming AD unchanged)	No effect	Shift to the right	Shift to the right
$W \uparrow$ (AD no change)	-	Shift to the left	-
Bad seasonal weather	-	Shift to the left	-
Permanent loss in agricultural land due to climate change	-	Shift to the left	Shift to the left
Discovery of new technology	-	Shift to the right	Shift to the right
Short-term worker training	-	Shift to the left	-
Permanent education reform	-	Shift to the right	Shift to the right

5).



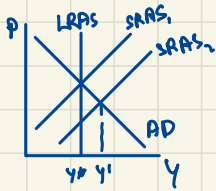
- The economy faces a negative AD shock, thus it will shift AD downward. We get new short-run equilibrium at B. Therefore, there is deflationary gap which output is produced under full-employment.

- If the government wants to correct such output gap, they should use expansionary fiscal policy.

Increasing  $G$  or decreasing  $T$  will encourage consumption. For example when  $G \uparrow$   $Y \uparrow$  and AD will shift upward back to A.

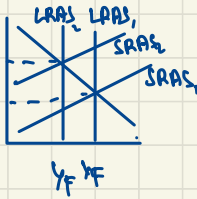
- If there is no government intervention: Nominal wage is sticky, but real wage increase because  $P$  decrease. Thus, firm will hire less due to expensive wage and low profit. Hence,  $Y$  fall. In the LR, nominal wage is flexible. Unemployed workers are willing to accept lower nominal wage. Hence,  $Y$  increases ( $Y' \rightarrow Y^*$ ). ( $SRAS_1 \rightarrow SRAS_2$ )

6. When the economy faces a temporary positive AS shock, it will shift SRAS to the right. Example: good weather.



- If there is no government intervention, the economy will do self-correcting mechanism. When SRAS shift to the right,  $P \downarrow$ ;  $Y \uparrow$ . In SR, when  $P \downarrow$ ,  $\frac{W}{P} \uparrow$ . firm will produce more ( $Y \uparrow$ ). However, in LR, wage is flexible, it will rise as price increase, so firm will produce less as cost of input is high, which shift SRAS<sub>2</sub> back to SRAS.

7. When economy face permanent negative AS shock, it will shift SRAS to the left and LRAS to the left as well.

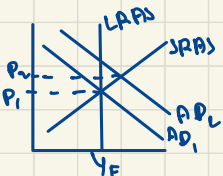


- without government intervention, permanent negative AS shock will shift SRAS to the left resulting high price and lower output.

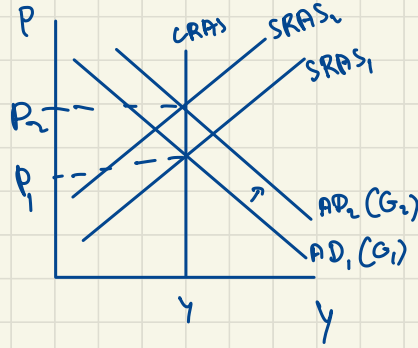
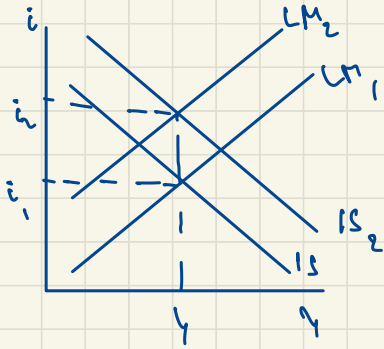
8. The idea of money neutrality is true for AD-AS-model. As AD-AS model. As AD-AS model analyzes the economy in both long-run and short-run, so in long-run, change in money supply will not affect real variable like employment, or real GDP. This is because in LR, AD-AS will adjust itself back. Therefore, the change in stock of money can only affects nominal variable, but real variable remain the same.

9. To change output in long-run, government can inward migration, or organic growth, or improvement in the quality of resources, through technology and better education.

10. In SR, AD shifts up, there's low unemployment, but price also increase (high inflation). In LR, wage is flexible, when inflation is high, firms choose to hire labor at full employment only.



11.



When  $G \uparrow$ :

- IS & AD curve will shift to the right.
- For LM curve, when  $P$  goes up, it shifts to the left as the money supply decreases.
- with new IS ( $IS_2$ ) & LM ( $LM_2$ ), the new equilibrium in the IS-LM curve.
- with  $AD_2$  in SR, there will be an inflationary gap, but in LR, firms with demand less labor which makes SRAS shift to the left.