

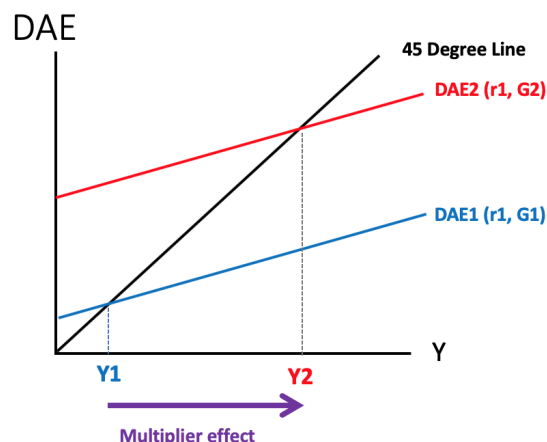
EE312 Macroeconomics, 2/2019 (Sec. 046402/ Sicha) Review IS-LM

1. DAE Model : [Constant r, Constant P]

$$\begin{aligned} DAE &= C + I + G \\ &= [C_a - bT_a + I_a + G_a] + [b + d]Y \\ &= AE_0 + MPTS \cdot Y \end{aligned}$$

At equilibrium $Y = Y^E = DAE$, Leakage = Injection

$$\begin{aligned} Y^E &= \frac{1}{1 - (b + d)} \times [C_a - bT_a + I_a + G_a] \\ &= \text{multiplier} \times [\text{autonomous expenditure}] \\ \text{multiplier (k)} &= \frac{\Delta Y}{\Delta \text{Autonomous Expenditure}} = \frac{\Delta Y}{\Delta AE} \\ \Delta Y &= k \times \Delta AE : k = \frac{1}{1 - \text{Slope of DAE}} \end{aligned}$$



- DAE shift up : autonomous expenditure \uparrow (i.e. : $\{C_0, G_0, I_0\} \uparrow$ or $\{T_0\} \downarrow$), DAE \uparrow for all levels of Y
- DAE shift down : autonomous expenditure \downarrow (i.e. : $\{C_0, G_0, I_0\} \downarrow$ or $\{T_0\} \uparrow$), DAE \downarrow for all levels of Y

2. IS-LM Model : [r changes, Constant P]

LM

Derivation:

$Y \uparrow \Rightarrow M^d \uparrow \Rightarrow r \uparrow$

Slope of LM :

High $\varepsilon_Y^{M^d}$, steep LM,

High $\varepsilon_r^{M^d}$, flat LM

Shift in LM :

Real Ms $\left(\frac{MS}{P}\right)$,

Change in Md for all Y, r

IS

Derivation:

$r \uparrow \Rightarrow I \downarrow \Rightarrow DAE \downarrow \Rightarrow Y \downarrow$

Slope of IS :

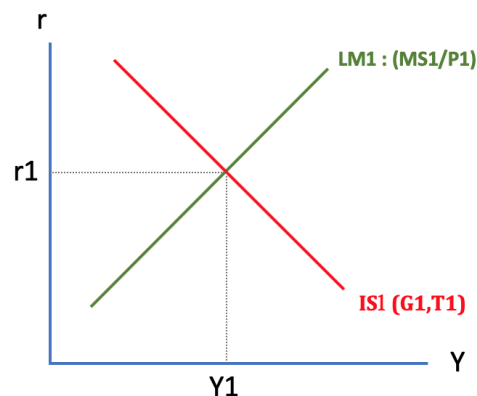
High MPC, flat IS

High ε_r^I , flat IS

Shift in IS :

Fiscal Policy (G, T)

Change in C, S, I for all Y, r



3. Aggregate Demand : [r changes and P changes]

- Price level $\uparrow \Rightarrow$ Real Money Supply $\left(\frac{MS}{P}\right) \downarrow$

\Rightarrow LM shifts to the left \Rightarrow interest rate \uparrow

\Rightarrow DAE $\downarrow \Rightarrow$ Output (Y) \downarrow

- IS shift to the right \Rightarrow Y \uparrow for all levels of Price

\Rightarrow AD shifts to the Right

- LM shift to the right (not because of a change in Price) \Rightarrow Y \uparrow for all levels of Price \Rightarrow AD shifts to the Right

