— IS – LM Modeli —

1. IS Modeli

Varsayımlar

1. Kapalı ekonomi
2. Devlet var
3. Vergi var.

$$Y = C(1-t)Y + I(i) + G$$

Örtük işlev teoreminden

$$F(Y, i, G) = C(1-t)Y + I(i) + G - Y = 0$$

$$\left.\frac{di}{dY}\right|_{IS} = -\frac{F_Y}{F_i} = -\frac{c'(1-t)-1}{I'} = \frac{1-c'(1-t)}{I'} < 0$$

$$\left.\frac{di}{dG}\right|_{IS} = -\frac{F_G}{F_i} = -\frac{1}{I'} > 0$$

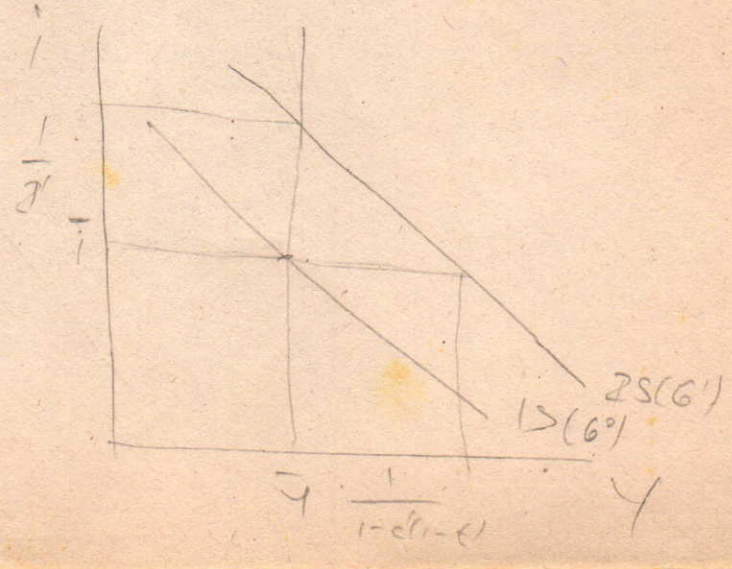
$$\left.\frac{dY}{dG}\right|_{IS} = -\frac{F_G}{F_Y} = -\frac{1}{c'(1-t)-1} = \frac{1}{1-c'(1-t)} > 0$$

$0 < c' < 1$

$0 < t < 1$

$I' < 0$

$0 < s' < 1$



2. LM Model

$$\frac{M}{P} = L(Y, i)$$

$$F(Y, i, M, P) = L(Y, i) - \frac{M}{P} = 0$$

$$\left.\frac{di}{dY}\right|_{LM} = -\frac{F_Y}{F_i} = -\frac{L_Y}{L_i} > 0$$

$$\left.\frac{di}{d\left(\frac{M}{P}\right)}\right|_{LM} = -\frac{F_{M/P}}{F_i} = -\frac{-1}{L_i} < 0$$

$$\left.\frac{dY}{d\left(\frac{M}{P}\right)}\right|_{LM} = -\frac{F_{M/P}}{F_Y} = -\frac{-1}{L_Y} > 0$$

$L_Y > 0$

$L_i < 0$

3. Neo-Klasik Model

Endogenous → P, i
Exogenous → Y, G, M

$$c(1-t)Y + I(i) + G - Y = 0$$
$$L(Y,i) - M/P = 0$$

$$\begin{bmatrix} P & i \\ 0 & I' \\ \frac{M}{P^2} & L_i \end{bmatrix} \begin{bmatrix} dP \\ di \end{bmatrix} = - \begin{bmatrix} G \\ dG \\ 0 \end{bmatrix} \wedge - \begin{bmatrix} M \\ 0 \\ -\frac{1}{P} dM \end{bmatrix}$$

$$|J| = -I' M P^{-2} > 0$$

$$\frac{dP}{dG} = \frac{\begin{vmatrix} -1 & I' \\ 0 & L_i \end{vmatrix}}{-I' M P^{-2}} = \frac{-L_i}{-I' M P^{-2}} > 0$$

$$\frac{di}{dG} = \frac{\begin{vmatrix} 0 & -1 \\ M/P^2 & 0 \end{vmatrix}}{-I' M P^{-2}} = \frac{M P^{-2}}{-I' M P^{-2}} = \frac{1}{-I'} > 0$$

Klasik modelde maliye politikası P ve i yi değirsal etkilerken full crowding out oluyor

$$\frac{dP}{dM} = \frac{\begin{vmatrix} 0 & I' \\ \frac{1}{P} & L_P \end{vmatrix}}{-I'MP^{-2}} = \frac{-I'P^{-1}}{-I'MP^{-2}} = \frac{1}{P}\,\frac{P^2}{M} = \frac{P}{M} > 0$$

$$\frac{di}{dM} = \frac{\begin{vmatrix} 0 & 0 \\ \frac{M}{P^2} & \frac{1}{P} \end{vmatrix}}{-I'MP^{-2}} = \frac{0}{-I'MP^{-2}} = 0$$

$\frac{dP}{dM}\,\frac{M}{P} = 1$ Neutrality of money.

Klasik modelde, işgücü piyasasındaki dalgalanmalar reel değişkenleri etkilemez buna klasik dikotomi denir.

$$Y = C(1-t)Y + I(i) + G$$

$$MP^{-1} = L(Y,i)$$

$$-\frac{M}{P^2}dP = L_i\,di$$

$$-\frac{M}{P^2}dP = -\frac{1}{I'}dG\,L_i$$

$$\begin{cases} I'di = -dG \\ di = \frac{-1}{I'}dG \\ \frac{di}{dG} = -\frac{1}{I'} > 0 \end{cases}$$

$$\frac{dP}{dG} = \frac{P^2}{M}\cdot\frac{L_i}{I'} > 0$$