Rigidez Reales Desempleo Clásico

→ Supuesto:

- Mercado de trabajo es imperfecta

$\frac{w}{P} = \lambda$ → Expresión landa que es constante (exógena)

genera → $N^T < N^S \Rightarrow N^T = N^d$

Constituyen el supuesto del modelo

→ Modelo

- $y^T = C(y^T) + I(r-\pi) + \bar{AD}$
- $L(y^T, r) = \bar{M}/P$
- $N^T = N^d(w/P) \rightarrow N^T = N^d(\lambda)$
- $y^T = F(N^T)$

Identidad:

$$y^T - C(y^T) - I(r-\pi) - AD \equiv 0$$

$$L(y^T, r) - \bar{M}/P \equiv 0$$

$$N^T - N^d(\lambda) \equiv 0$$

$$y^T - F(N^T) \equiv 0$$

Si solo si

$$\bar{y}^T = y^T(\bar{AD}, \bar{\pi}, \bar{M}, \lambda)$$

$$\bar{r} = r(\bar{AD}, \pi, \bar{M}, \lambda)$$

$$\bar{P} = P(\bar{AD}, \pi, \bar{M}, \lambda)$$

Aplicar diferencial

$$(1-C')dy^T - I'dr + I'd\bar{\pi} - \bar{AD} = 0$$

$$L_y dy^T + L_r dr - \left(\frac{P d\bar{\pi} - \bar{M} dP}{P^2}\right) = 0$$

$$dN^T - N^{d'} d\lambda = 0$$

$$dy^T - F' dN^T = 0$$

$$(1-C')dy^T - I'dr = d\bar{AD} - I'd\bar{\pi}$$

$$L_y dy^T + L_r dr \quad \frac{\bar{M}}{P^2} dP = \frac{1}{P} d\bar{\pi}$$

$$dN^T = N^{d'} d\lambda$$

$$dy^T - F' dN^T = 0$$

$$\begin{bmatrix} (1-C') & -I & 0 & 0 \\ L_y & +L_r & 0 & \bar{M}/P^2 \\ 0 & 0 & 1 & 0 \\ 1 & 0 & -F' & 0 \end{bmatrix} \begin{bmatrix} dy^T \\ dr \\ dN^T \\ dP \end{bmatrix} = \begin{bmatrix} 1 & -I & 0 & 0 \\ 0 & 0 & 1/P & 0 \\ 0 & 0 & 0 & N^{d'} \\ 0 & 0 & 0 & 0 \end{bmatrix} \begin{bmatrix} d\bar{AD} \\ d\bar{\pi} \\ d\bar{\pi} \\ d\lambda \end{bmatrix}$$

Método de cramer

$$\Delta = \begin{vmatrix} 1-C & -I & 0 & 0 \\ L_y & L_r & 0 & \bar{M}/P^2 \\ 0 & 0 & 1 & 0 \\ 1 & 0 & -F' & 0 \end{vmatrix}$$

$$\Delta = \begin{vmatrix} 1-C' & -I' & 0 \\ L_y & L_r & \bar{M}/P^2 \\ 1 & 0 & 0 \end{vmatrix}$$

$$\Delta = \begin{vmatrix} -I' & 0 \\ L_r & \bar{M}/P^2 \end{vmatrix}$$

$$\Delta = -\frac{\bar{M}}{P^2} \cdot I' > 0$$

CUADRICULADO

College

$$d\lambda \neq 0 \Rightarrow d\bar{n}_0 = d\bar{r} = d\bar{M} = 0$$

$$\begin{bmatrix} 1-c' & -I & 0 & 0 \\ L_y & L_r & 0 & \bar{M}/P^2 \\ 0 & 0 & 1 & 0 \\ 1 & 0 & -f' & 0 \end{bmatrix} \begin{bmatrix} dy^T \\ dr \\ dn^T \\ dP \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ n^{d_1} \\ 0 \end{bmatrix} d\lambda$$

$$\begin{bmatrix} 1-c & -I & 0 & 0 \\ L_y & L_r & 0 & 0 \\ 0 & 0 & 1 & \bar{M}/P^2 \\ 1 & 0 & -f' & 0 \end{bmatrix} \begin{bmatrix} dy^T/d\lambda \\ dr/d\lambda \\ dn^T/d\lambda \\ dP/d\lambda \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ n^{d_1} \\ 0 \end{bmatrix}$$

- $$\frac{dn^T}{d\lambda} = \frac{\begin{vmatrix} 1-c & -I' & 0 & 0 \\ L_y & L_r & 0 & 0 \\ 0 & 0 & n^{d_1} & \bar{M}/P^2 \\ 1 & 0 & 0 & 0 \end{vmatrix}}{\Delta}$$

$$= \frac{- \begin{vmatrix} -I' & 0 & 0 \\ L_r & 0 & \bar{M}/P^2 \\ 0 & n^{d_1} & 0 \end{vmatrix}}{\Delta}$$

$$\frac{dn^T}{d\lambda} = \frac{n^{d_1} \begin{vmatrix} -I' & 0 \\ L_r & \bar{M}/P^2 \end{vmatrix}}{\Delta}$$

$$\frac{dn^T}{d\lambda} = \frac{-\frac{\bar{M}}{P^2} \cdot \overset{(-)}{n^{d_1}} \cdot \overset{(-)}{I'}}{\underset{(+)}{\Delta}} = \frac{-}{+} (-) < 0$$

$\therefore \dfrac{dn^T}{d\lambda} < 0$ $\uparrow \lambda \rightarrow \downarrow n^T$

$\downarrow$

tiene una relación inversa

- $$\frac{dr}{d\lambda} = \frac{\begin{vmatrix} 1-c & 0 & 0 & 0 \\ L_y & 0 & 0 & 0 \\ 0 & n^{d_1} & 1 & \bar{M}/P^2 \\ 1 & 0 & -f' & 0 \end{vmatrix}}{\Delta}$$

$$= \frac{-\bar{M}/P^2 \begin{vmatrix} 1-c & 0 & 0 \\ L_y & 0 & 0 \\ 0 & n^{d_1} & 1 \end{vmatrix}}{\Delta}$$

$$= -\bar{M}/P^2 \begin{vmatrix} 1-c & 0 \\ L_y & 0 \end{vmatrix}$$

$$= \frac{-\bar{M}/P^2 \cdot 0 \cdot 0}{\Delta} = \frac{0}{\Delta} = 0$$

$\therefore \dfrac{dr}{d\lambda} = 0$

Se comporta de manera cíclica.

$\odot \ \frac{dy}{d\lambda}$

$$= \frac{\begin{vmatrix} 0 & -I' & 0 & 0 \\ 0 & Lr & 0 & 0 \\ N^{d1} & 0 & 1 & M/P^2 \\ 0 & 0 & -F' & 0 \end{vmatrix}}{\Delta}$$

$$= \frac{-\frac{M}{P^2}\begin{vmatrix} 0 & -I' & 0 \\ 0 & Lr & 0 \\ N^{d1} & 0 & 1 \end{vmatrix}}{\Delta}$$

$$= \frac{-M/P^2 \begin{vmatrix} 0 & -I' \\ 0 & Lr \end{vmatrix}}{\Delta}$$

$$= \frac{-M/P^2 \cdot 0 \cdot 0}{\Delta} = \frac{0}{\Delta} = 0$$

$$\frac{dy}{d\lambda} = 0$$

Se comporta de manera cíclica.

$\odot \ \frac{dP}{d\lambda}$

$$= \frac{\begin{vmatrix} (1-c) & -I' & 0 & 0 \\ Ly & Lr & 0 & 0 \\ 0 & 0 & 1 & N^{d1} \\ 1 & 0 & -F' & 0 \end{vmatrix}}{\Delta}$$

$$= \frac{-N^{d1}\begin{vmatrix} 1-c & -I' & 0 \\ Ly & Lr & 0 \\ 0 & 0 & 1 \end{vmatrix}}{\Delta}$$

$$= \frac{-N^{d1}\begin{vmatrix} 1-c & -I' \\ Ly & Lr \end{vmatrix}}{\Delta}$$

$$= \frac{\overset{(-)}{-N^{d1}} \cdot \overset{(-)}{Lr}\,(1-c) \cdot \overset{(+)}{Ly} \cdot \overset{-}{I'}}{\Delta}$$

$$= \frac{dP}{d\lambda} = \frac{(-)}{\Delta} = \frac{(-)}{(+)} = (-)$$

$$= \frac{dP}{d\lambda} < 0$$

$\uparrow \lambda \rightarrow \downarrow P$

$\downarrow$

tiene una relación inversa