

Lecture 17: Real Interest Rates / Open economy AD-AS framework

- Nominal and real interest rates
- AD-AS in an open economy

Real and Nominal Interest Rates

$$\text{IS: } Y = C(Y-T) + I(Y,r) + G$$

$$\text{LM: } \frac{M}{P} = YL(i)$$

$$\mathbf{r} = \mathbf{i} - \boldsymbol{\pi}^e$$

$$\text{The Long Run: } \boldsymbol{\pi}^e = \boldsymbol{\pi} = \mathbf{g}_m - \mathbf{g}_y$$

Changes are relatively small; a “constant.”

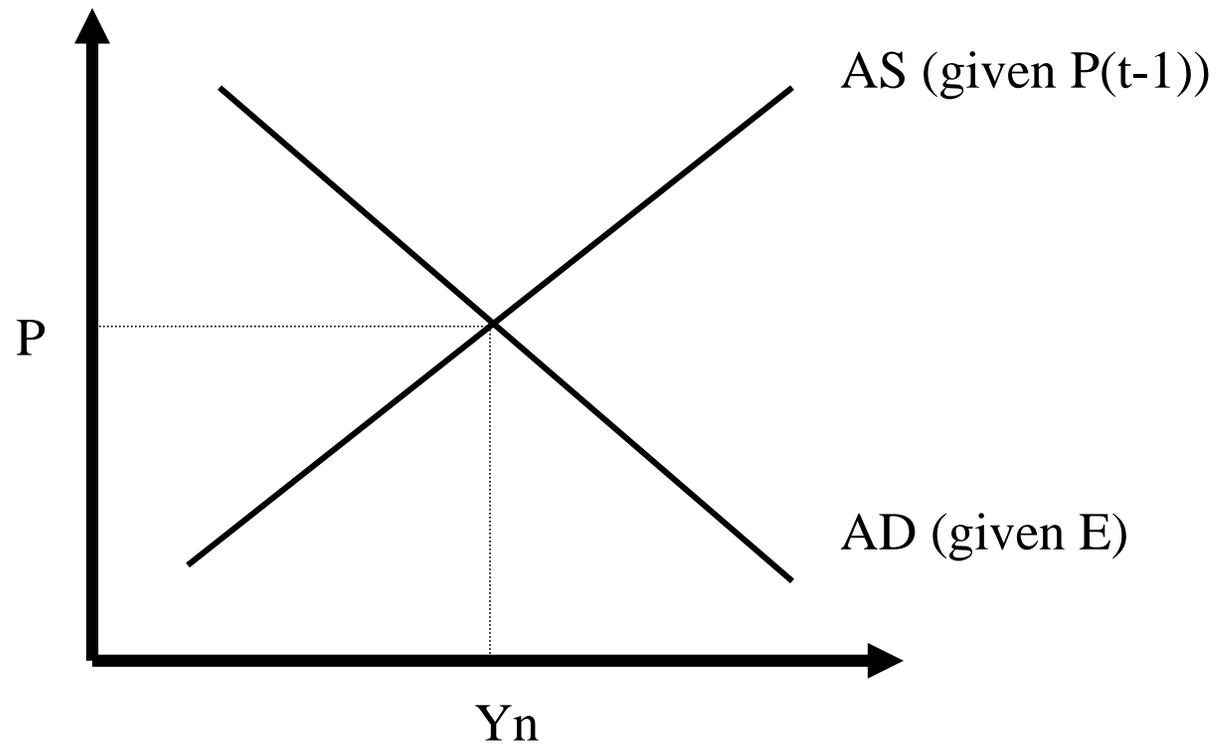
AD-AS in Open Economy

$$i = i^* + \frac{E^e - E}{E} \quad \text{infl. Approx} = 0 \text{ / disregard dynamics}$$

$$Y = C(Y-T) + I(Y, i^*) + G + NX(Y, Y^*, \frac{E P^*}{P})$$

$$Y = Y(\overset{+}{\frac{E P^*}{P}}, \overset{+}{G}, \overset{-}{T})$$

$$P(t) = P(t-1) (1 + \mu) F(1 - \frac{Y(t)}{L}, z)$$



Devaluation dynamics / Adjustment to an Overvaluation / Costs (expectations)

Figures 21-1 / 21-2 / 21-3