

Lecture 10: The Goods Market and the Exchange Rate

- Devaluations (static and dynamic responses)
- Exchange rate determination (capital markets)
- The open economy IS-LM

The Goods Market

$$Z = C + I + G + X - eQ$$

$$C(Y-T) + I(Y,I) + G$$

$$Q = Q(Y,e)$$

+ -

$$X = X(Y^*,e)$$

+ +

Figures

- Figs 19-4, 19-5
- Increase in foreign demand
- games countries play
- depreciation

The J-Curve

- $eQ(Y,e)$: increase or decrease with e ?
- In the very short run: it may increase!
- And if strong enough: $X(Y^*,e) - eQ(Y,e)$ may do the same.
- Dynamics of NX in response to a depreciation; fig 19-6

The Exchange Rate

The Goods Market

$$Y = C(Y-T) + I(Y,i) + G + NX(Y,Y^*, \underbrace{E P^*/P}_{\text{constant}})$$

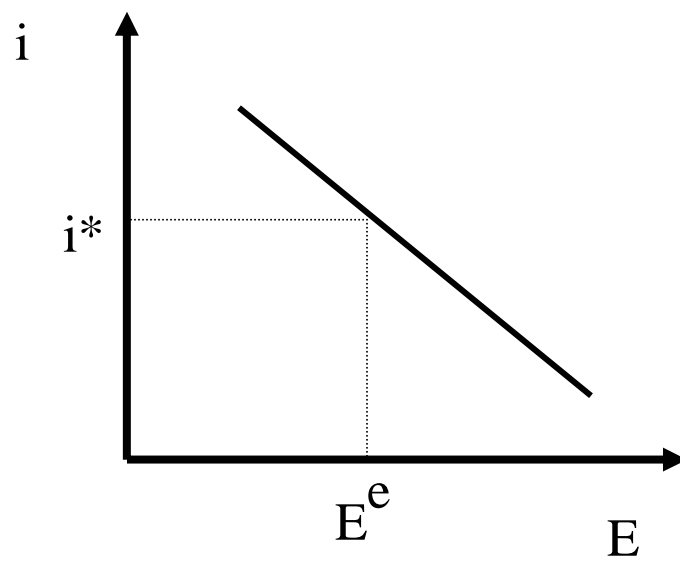
constant

Financial Markets

$$M/P = YL(i)$$

$$i(t) = i^*(t) + \frac{E^e(t+1) - E(t)}{E(t)}$$

Cont. The Exchange Rate



$$i = i^* + \frac{E^e - E}{E}$$

given E^e and i^*

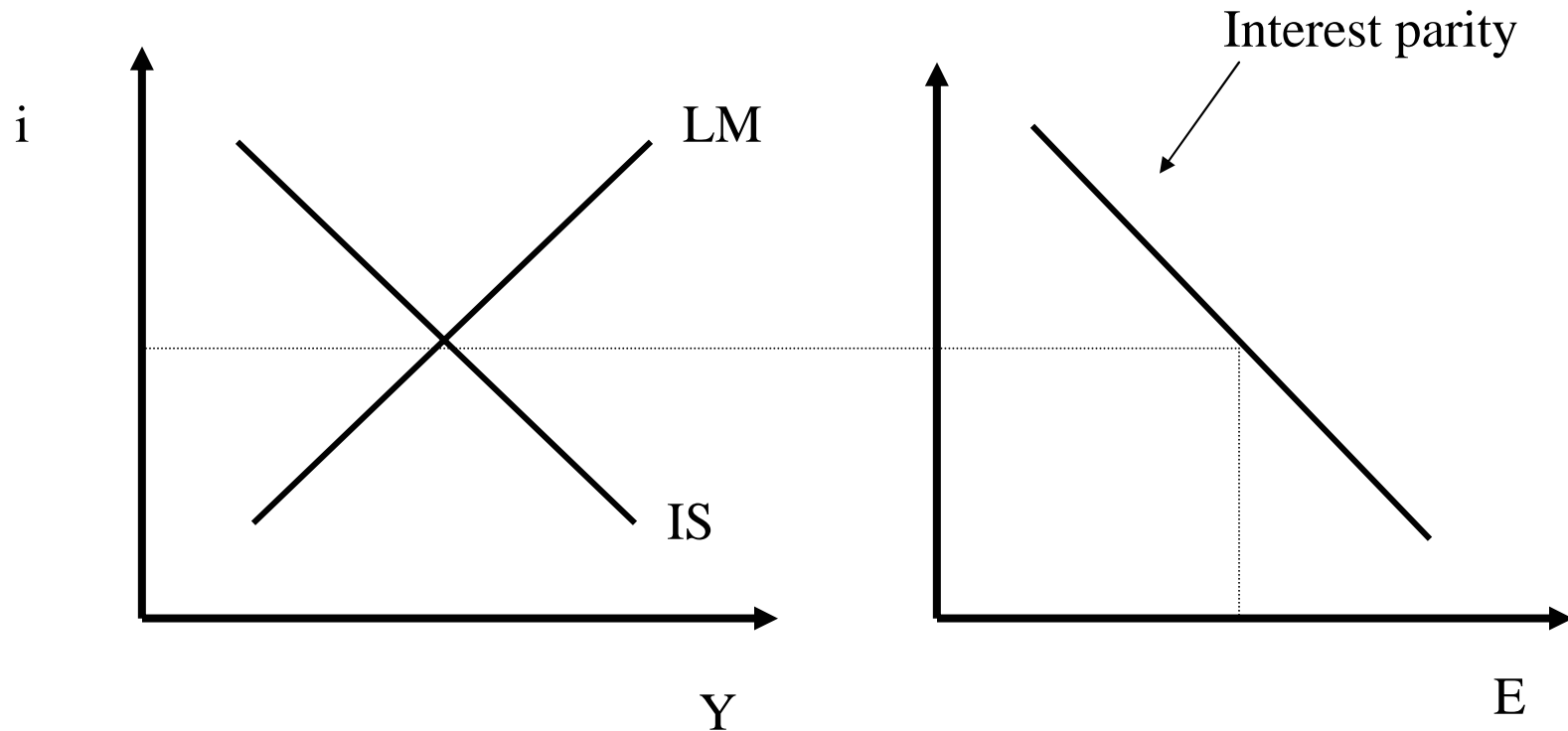
The Open Economy IS-LM

$$Y = C(Y-T) + I(Y,i) + G + NX(Y,Y^*,E)$$

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

$$E = \frac{E^e}{1+i-i^*}$$

$$\text{IS : } Y = C(Y-T) + I(Y,i) + G + NX(Y,Y^*, E^e / (1+i-i^*))$$



Two IS caveats:

- a) Multiplier is smaller
- b) Interest rate affects aggregate demand through the E as well.**

* Fiscal and Monetary policy