Outline

Stabilization policy

24.1, 24.2 (Not equations 24.1, 24.2)

24.3

Open economy: 18, 19.

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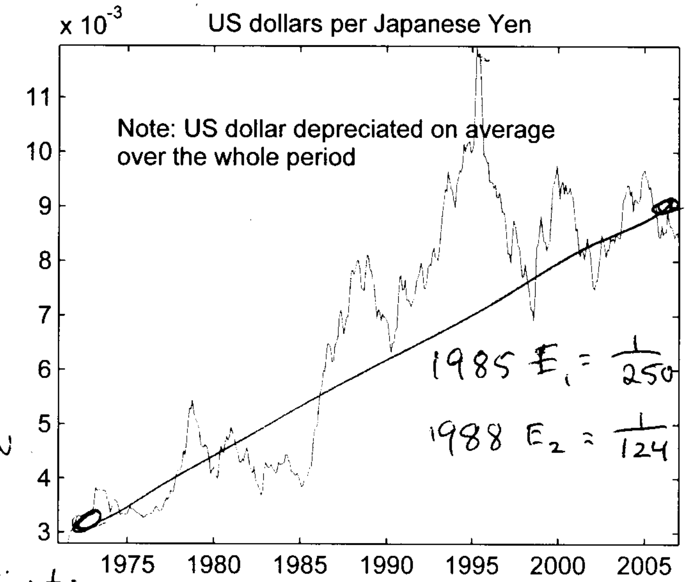
1. Exchange Rate (Nominal)
2. International Financial Markets
   Uncovered Interest Rate Parity.
3. Exchange rate overshooting.
4. Real exchange rate.
5. National Income & Product Accounts
   Modify the total planned spending curve, to accommodate foreigners, & fact that domestic residents buy foreign stuff.

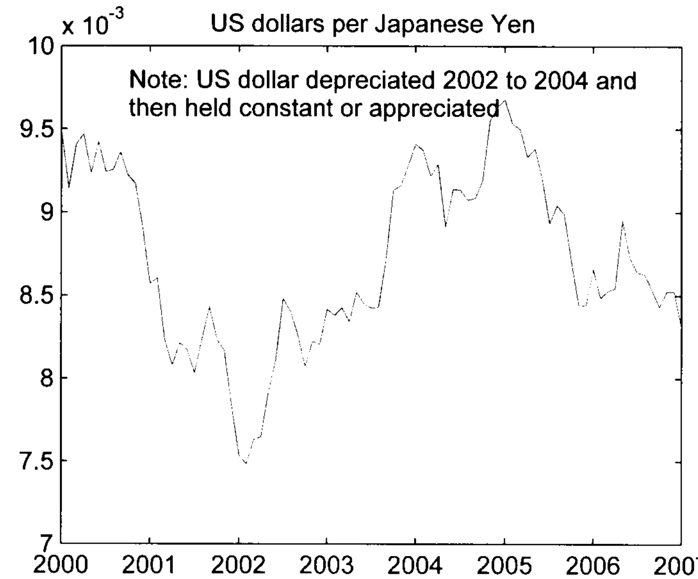
$i_{US} > i_{JAPAN}$ $i = i^f + \frac{E^e}{E} - 1$ $\frac{E^e}{E} > 1$

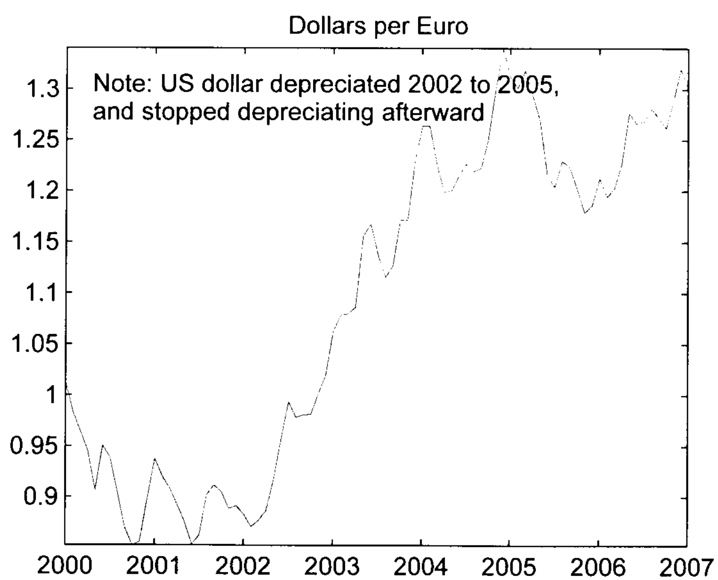
$E = \frac{\$}{foreign}$

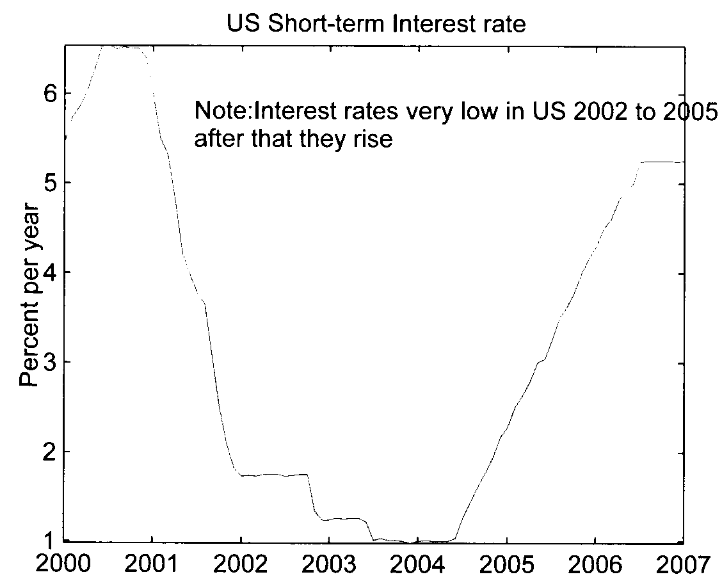
$E \uparrow$ depreciation

$E \downarrow$ appreciation





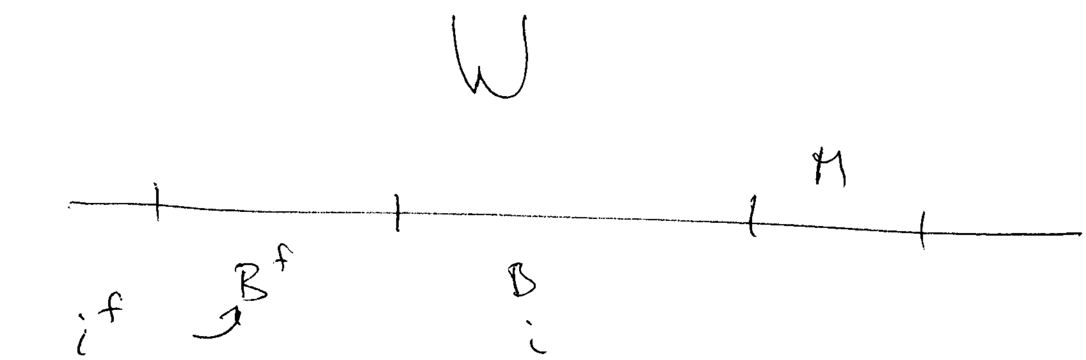




Note: in recent times, depreciation of dollar associated with low US interest rate and depreciation stopped (or turned around) with high US inter

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

Uncovered Interest Parity.



1\$ $\Longrightarrow$ end of period $1+i$ \$.

1\$ $\Longrightarrow$ $\frac{1}{E}$ units of foreign currence.

$$E = \frac{\$}{\text{foreign}} \qquad \frac{\text{foreign}}{\$} = \frac{1}{E}.$$

$$\frac{1}{E}(1+i^f) \times E^e \leftarrow \text{expected foreign exchange rate.}$$

foreign bonds are more risky, because future exchange rate is unknown.

Assumption: traders don't worry about risk.

$$\boxed{1+i = \frac{(1+i^f)E^e}{E}} \leftarrow \text{Uncovered interest parity.}$$

derived two assumptions

(1) Financial markets move quickly

(2) traders only worry about E^e

$E_1 \sim$ tomorrow's exchange rate.

CASE 1 $\quad E_1 = .5$ w.p. $\frac{1}{2}$

1.5 w.p. $\frac{1}{2}$

$\Rightarrow E^e = 1$

CASE 2

$E_1 = .95$ w.p. $\frac{1}{2}$

$E_1 = 1.05$ w.p. $\frac{1}{2}$

$E^e = 1$

Assume traders think

~~#1~~ #1, #2 are same because they only consider E^e when thinking about foreign assets.

$$1+i = (1+i^f)\frac{E^e}{E}$$

.05 $\quad$ .10 $\quad$ .95

$$i \simeq i^f + \frac{E^e}{E} - 1$$

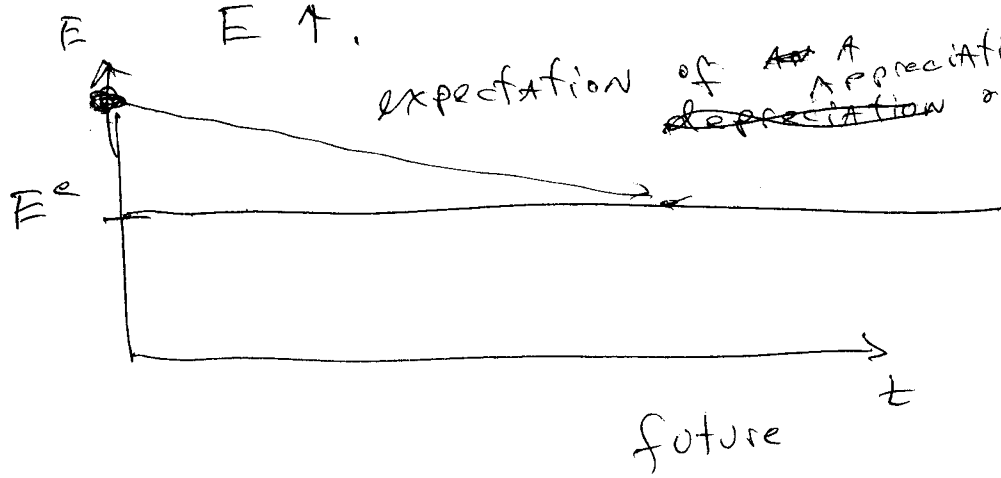
$$.05 \quad .10 + .95 - 1$$

start with

$$\frac{E^e}{E} = 1$$

E ↑.

expectation of ~~depreciation~~ appreciation of currency.



$$\underset{\downarrow}{i} = \underbrace{i^f + \frac{E^e}{E} - 1}_{\downarrow}$$

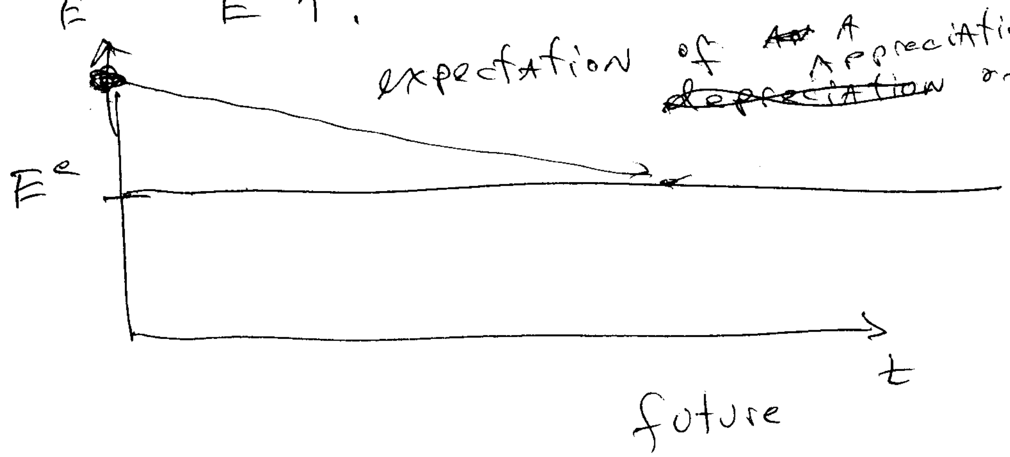
1. Cut domestic interest rate, i.
2. triggers stampede out of domestic currency. E ↑.
3. E ↑ creates anticipation that domestic currency will appreciate (Assumption that E^e does not change).
4. Expected appreciation of domestic currency, reduces return on foreign currency ("foreign currency depreciation, so you're losing money on round trip part of foreign return")

start with

$$\frac{E^e}{E} = 1$$

$E \uparrow$.

expectation of ~~depreciation~~ appreciation of currency.



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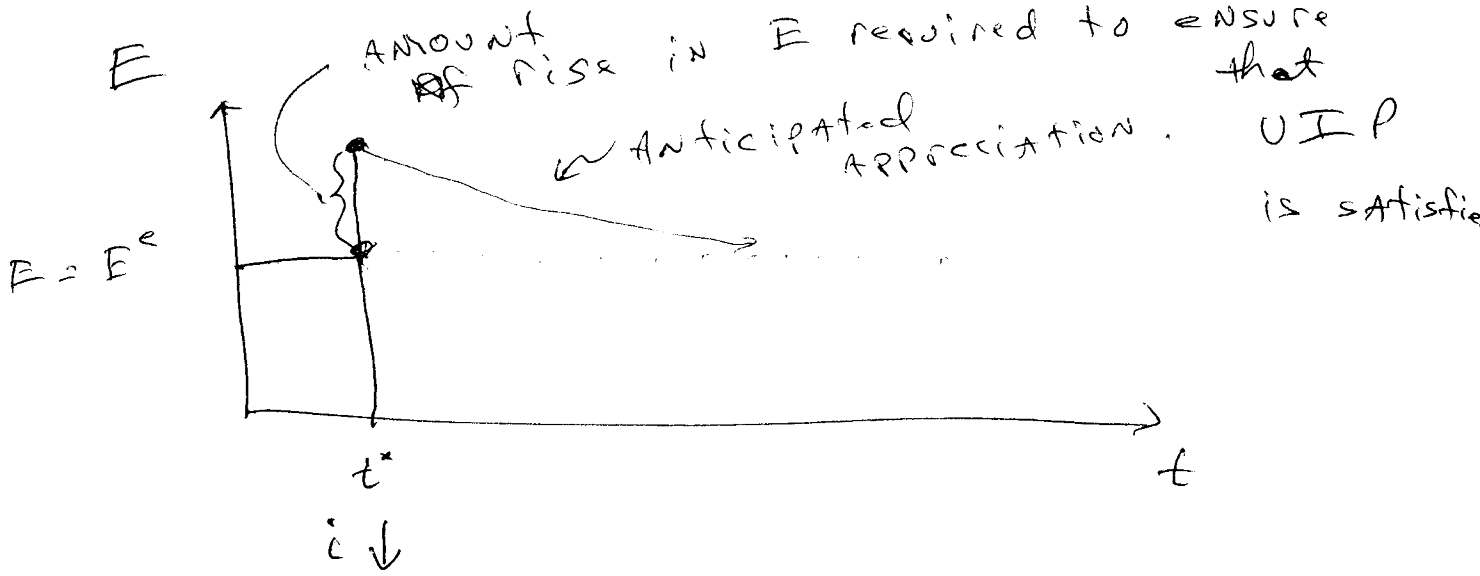

"Theory about E determination": moves with change in demand for domestic/foreign currency triggered by ~~by~~ changes in i, i^f".

Foreign C.B. $i^f \uparrow \Rightarrow E \uparrow$ so that

$$\boxed{i = i^f + \frac{E^e}{E} - 1.}$$

National I. Prod. Accounts

$$C + I + G + \underbrace{X - M}_{NX} = Y$$

NX " current account

$$C = c_0 + c_1 (Y - T)$$

$$I = \bar{I} - bi + \gamma Y.$$

~~NX~~

E "nominal" exchange rate.

Real exchange rate.

ϵ = how many units of domestic goods give up to get one foreign good.

P^* ~ units of foreign currency to get one unit of foreign good.

EP^* ~ dollar cost of one unit of foreign good.

Suppose I give up

1 unit of US goods

how many dollars does

that give me? P.

$$\epsilon = \frac{EP^*}{P}$$