6th session

20th March 2014

EXCHANGE RATE REGIMES

Pugel, chap. 20, 23, 25

Cruz-Rodriguez (2013)

From last session presentation:

- Textbooks classify exchange rate regimes in one of two categories: fixed *vs* floating. There are more variations.
- *De facto* regimes may be different from *De jure* regimes.
- There is no "perfect foreign exchange regime". It depends on the characteristics of each economy. - Arguments from the theory identifying the recommended regime (fixed or floating) according to certain criteria.

Extreme Fixed

- Currency Board (Painel de Moedas)
- Dollarization/Euroization
- Monetary Union

Tradi-tional Peg

Crawling Peg

Currency Bands

Floating exchange rates

- Dirty
- Clean

Fixed Exchange Rates

- How is parity defended?
  - The authorities buy or sell foreign currency in exchange for domestic currency.
  - The authorities impose exchange controls to influence the exchange rate by constricting the demand or supply in the foreign exchange market.
  - The authorities alter domestic interest rates to influence short-term capital flows, and therefore, the foreign exchange rate .

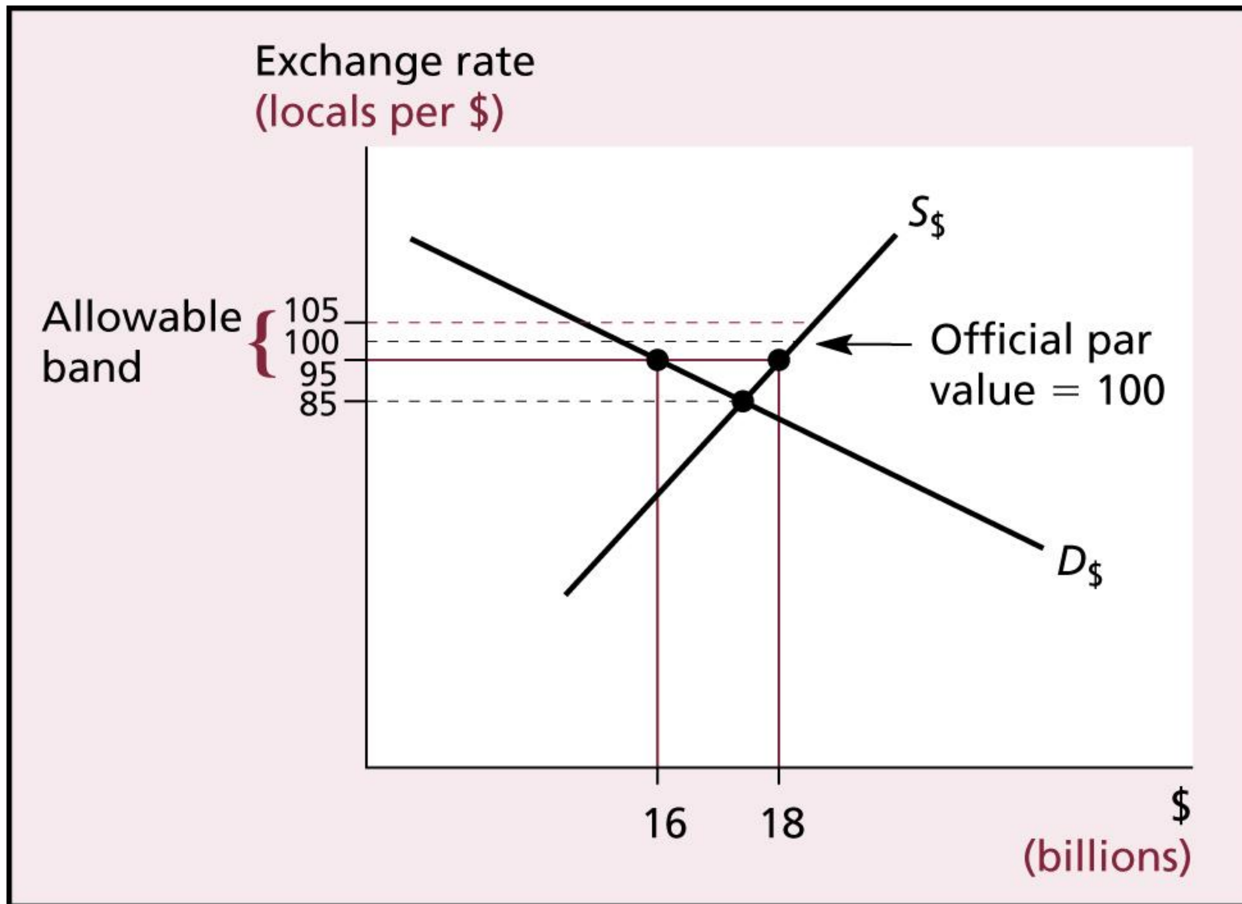
Buying or selling foreign currency

- Defending against depreciation
  - Buy domestic currency/sell foreign currency.
  - Corresponds to the financing of a country's deficit.
  - The sale of foreign currency decreases the stock of official reserves. If it runs out of reserves, it is possible to borrow from abroad.
  - The purchase of domestic currency reduces money in circulation: reduces Money Supply.
- Defending against appreciation: similar, in the opposite direction.

Central bank Balance Sheet (simplified)

Assets	Liabilities
Domestic Assets	**Monetary Base**
Debt securities	Currency in circulation
Loans to Banks	Deposits from banks
International Reserve Assets	
Foreign-Currency Assets	

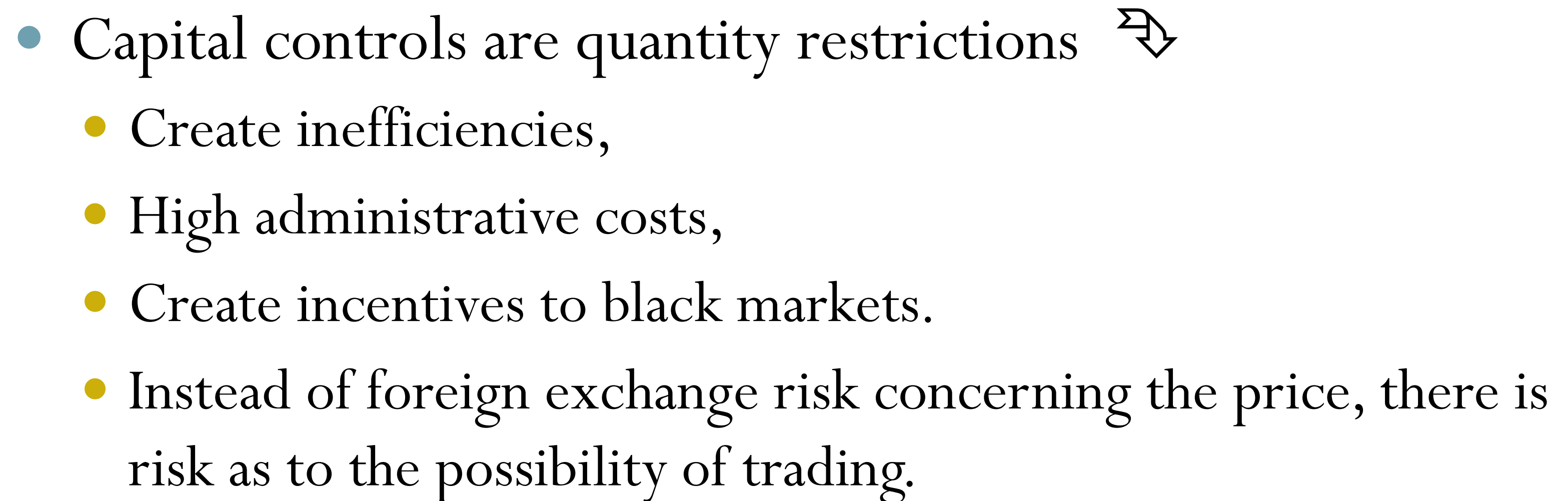
Money Supply = Currency + Deposits from the public in regular banks



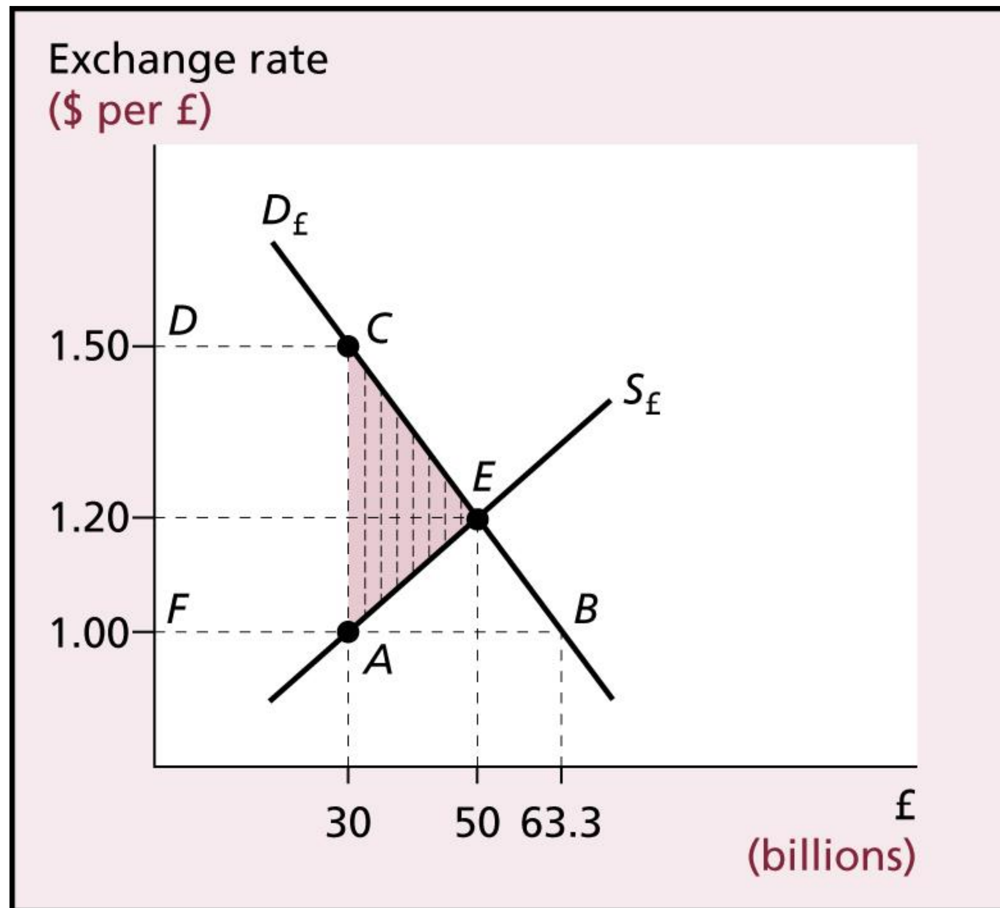
<u>Source:</u> Chap. 20 from Pugel.

- A temporary external unbalance can be overcome in this way. It is not sustainable to defend a permanent disequilibrium. *Costs*

Using capital controls



- Capital controls are quantity restrictions ⮷
  - Create inefficiencies,
  - High administrative costs,
  - Create incentives to black markets.
  - Instead of foreign exchange risk concerning the price, there is risk as to the possibility of trading.

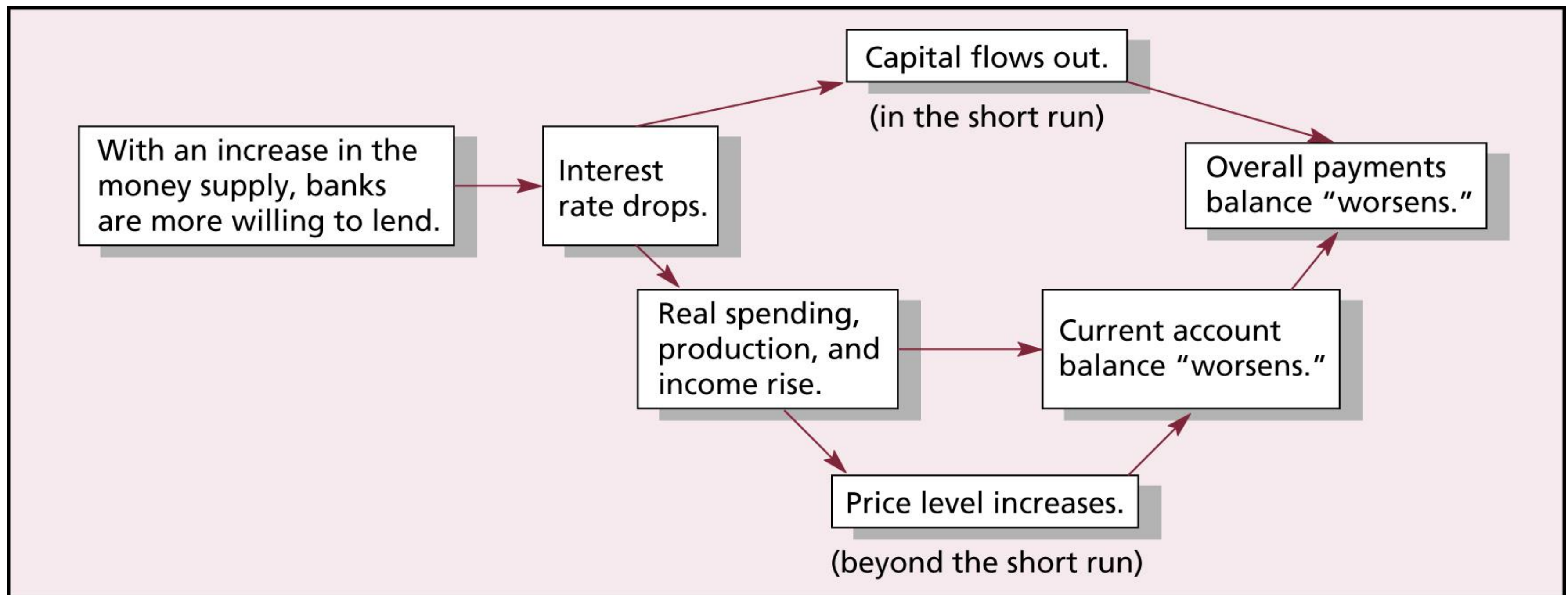


Source: Chap. 20 from Pugel.

Changing interest rates

The foreign currency demand and foreign currency supply move.

- Effects of the intervention in the FOREX
  - Official intervention alters the central bank's assets and liabilities: the country's official international reserves and also the Money Supply → impossible to have an independent monetary policy.
  - Surplus → appreciation pressure on the national currency → intervention: purchase of the foreign currency/sale of the domestic currency → increase in the Money Supply →



Source: Chap. 23 from Pugel.

- Intervention defending the parity helps the country move back towards external balance.
- …Problem: the effect of the change in the Money Supply on Prices may not be consistent with the internal balance.
- Solution: STERILIZATION.
  - Surplus → appreciation pressure on the domestic currency → intervention: purchase of the foreign currency/sale of the national currency <u>together with</u> open market operations: purchase of national currency/sale of government bonds.
  - Money Supply does not change. The only change is the composition of the Central Bank's assets: more official reserve assets and less domestic assets.

- Deficit: similar rationale, in the opposite direction.
- Limitations:
  - Deficit: difficulties in obtaining foreign currency.
  - Surplus: complaints by other countries about the country's ongoing surplus, unwillingness of the Central Bank to keep on increasing its holdings of official reserve assets.
    - Ongoing surplus: If interest rates and prices do not change, there is no reason to have capital movements and changes in competitiveness.

- Trilemma – (Impossible trinity)

One cannot have simultaneously:

- Fixed exchange rates
- Independent monetary policy
- Free capital movements (no capital controls)