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FIXED EXCHANGE RATES AND FOREIGN EXCHANGE INTERVENTIONS (PART 2)

**(THESE LECTURE NOTES ARE BASED ON THE
CORRESPONDING CHAPTER IN KRUGMAN-OBSTFELD)**

Balance of payment crises and capital flight

- So far, we assumed that the foreign exchange market believes that a fixed exchange rate will be maintained at its current level forever.
- But if the CB is running sort of foreign reserves, or the gvt faces high unemployment, market actors know that CB may respond to such situations by devaluing the currency.
- Then, e_E is not equal to the fixed rate e anymore.
- This belief by market participants that change in the fixed rate may occur gives rise to a balance of payment crisis: a sharp change in official foreign reserves sparked by a change in expectations about the future exchange rate.

- Here, we'll use the graph combining the asset approach and money market equilibrium to look at how a capital flight happens when the market expects a devaluation (from Krugman Obstfeld chapter 17)

Main ideas:

- Expectation of a future devaluation causes a BoP crisis marked by a sharp fall in reserves and a rise in the domestic interest rate above the world interest rate.
- An expected revaluation causes a sharp rise in foreign reserves and a fall of r below r^* .

- The reserve loss triggered by a devaluation is often labeled « capital flight », because there is a private capital outflow (people expect deposits in domestic currency to become less valuable, because they expect a devaluation)
- Capital flight is a particular concern for the CB when fears of devaluation arise in situations where its reserves are already low: people get rid of the domestic currency because they think it's going to be devalued, so they the CB has to provide foreign currency (from its reserves) in exchange at the fixed rate. But if CB runs out of foreign exchange reserves, it has to devalue even sooner, since it cannot intervene to maintain the fixed rate anymore.

Reserve Currencies

- So far, we studied a country that fixes its currency in terms of a hypothetical foreign currency. In reality, there are lots of currencies, and a country can fix its exchange rate in terms of some but allow fluctuations relative to others.
- Next, we study two possible systems for fixing exchange rates of all currencies against each other: reserve currency; and gold standard.
- Reserve currency: one currency is singled out as the reserve currency, which central banks hold in their foreign reserves, and each nation's CB fixes its exchange rate against the reserve currency (and does so in the way we described previously)
- Between 1945 and 1973, the US dollar was the main reserve currency and almost every country pegged the dollar exchange rate of its currency.

- How did it work?
- Every central bank fixed the dollar exchange rate of its currency by trading domestic currency for dollar assets on the forex market.
- The frequent need to intervene meant that central banks had to hold sufficient dollar reserves to meet any excess supply of their home currency that might arise.
- Because each currency was pegged to the dollar by interventions of central banks on the forex market, the exchange rate between any two currencies was automatically fixed as well.

- In this system, the country whose currency serves as reserve currency is in a special position: it never has to intervene on the forex market, since everybody else fixes their exchange rates against the reserve currency. Then, the reserve currency is automatically fixed against the others, without any need for the reserve-issuing country to intervene.
- The reserve-issuing country is then in a privileged position, because it can still use its monetary policy for macroeconomic goals such as fighting unemployment, although it also has a fixed exchange rate! But the other countries do all the forex intervention work to make it hold.

- This implies that anything the reserve issuing country does that may move the value of its currency forces all the other countries to intervene so that their currencies remains at a fixed rate against the reserve.
- Example: if the CB in the reserve country buys domestic assets, this increases its money supply, which momentarily pushes its interest rate below that of other countries.
- This causes a excess demand for foreign currencies, and to prevent their appreciation, all other CB needs to intervene by buying reserve assets with their own currencies, which pushes their money supply and hence their interest rate down to the level imposed by the reserve country. This makes output rise worldwide.

- Obviously, such a system leads to an asymmetric position of the reserve country.
- The reserve country then has immense economic power: ability to affect its own economy as well as all other economies, by using monetary policy.
- This is likely to lead to policy disputes within the system!
- Such problems caused a breakdown of the postwar « dollar standard » in 1973.

The Gold Standard

- An international gold standard avoids the asymmetry mentioned above.
- Each country fixes the price of its currency in terms of gold, by standing ready to trade domestic currency for gold whenever necessary to maintain the fixed rate.
- Then, each country is responsible for pegging its currency in terms of the official international reserve asset, gold, and no country is in a privileged position.
- This keeps the exchange rate between any two currency fixed.

- Under this system, suppose that the Bank of England increases its money supply by buying domestic assets.
- This puts downward pressure on UK interest rate, which makes other currencies relatively more attractive.
- People who hold Pounds will try to sell them for other currencies, but because the Pound is relatively less attractive, no private buyer will come forward!
- What then? Because central banks are obliged to trade their currencies for gold at fixed rates, unhappy holders of Pounds will sell them to the Bank of England in exchange for gold, then sell the gold to other central banks to get their foreign currencies and use these currencies to buy deposits at rates higher than that on Pounds!

- The UK then experiences a capital outflow and other countries a capital inflow. As the Bank of England buys people's gold in exchange for Pounds, these Pounds go out of circulation and the UK money supply falls, which brings UK interest rate back up.
- The Bank of England thus loses reserves of gold, while foreign central banks gain gold reserves as they sell their currencies for gold. There is more of these currencies in circulation, which raises foreigners' money supplies, which pushes their interest down.
- This stops when UK interest rate (going back up) and foreign interest rates (going back down) are equalized again.

Benefits and drawbacks of the gold standard

Benefits:

- Symmetry, no country in privileged position
- Since Central banks must fix the money price of gold, they cannot allow money supply to grow more rapidly than money demand, since this would raise prices of all goods, including gold. This means the gold standard automatically limits the extent to which CB can cause inflation by raising money supply.

Drawbacks:

- Constraints on the use of monetary policy to fight unemployment, which may be desirable in the event of a world wide recession.

- Fixing currency values to gold ensures a stable price level (low inflation) only if the relative price of gold and other goods is stable. For example, suppose there is a major gold discovery somewhere. Then, gold becoming more abundant, its relative price with respect to other goods falls, which means that the relative price of other goods rises. (Studies of the gold standard era (1870 – 1914) indeed find wide price level fluctuations due to changes in gold's relative price.)
- When gold is the official international reserve, countries experiencing growth cannot increase their reserves of gold, unless there are continual new gold discoveries. Central banks compete for the reserve, gold, by selling domestic assets, which reduces money supply and may lead to unemployment.

- Finally, the gold standard can give countries with large gold production the ability to influence the world economy, through their sales of gold.
- While most central banks continue to hold part of their reserves in gold, the price of gold now plays no role in influencing countries' monetary policies.

The gold exchange standard:

- Half way: central banks' reserves consist both of gold and currencies whose prices are fixed in terms of gold price.
- Post WW II: US was responsible for pegging the dollar in terms of the price of gold, and other countries did the job of pegging their currency to the dollar.