Lecture 11: currency Crises

1) Background on currency crises.

Fixed exchange rate regimes do not last indefinitely, but often only a few years. It is common for a regime to collapse under pressure from the private market, involving a significant fall the in the value of a currency.

Mechanics of a classic currency crisis in words (in general case):

Suppose a country has an external imbalance, with a current account deficit that is not sustainable. The central bank is continuously selling off its foreign assets to finance the current account deficit with a capital account surplus (capital inflow). Eventually the central bank will run out of foreign reserves and will be unable to maintain the fixed exchange rate.

As a result, people know that eventually the currency will have to devalue. So private traders see a profit opportunity. They can sell the currency to the central bank in exchange for its foreign reserves. When the home currency eventually is devalued, they can sell the foreign currency back at the new exchange rate and end up with more of the home currency than initially.

Note that this activity in the private markets works to make the devaluation happen even faster! As the private traders sell the currency to the central bank in exchange for foreign reserves, this further depletes its reserves. So the country is forced to devalue the currency even sooner. In this sense, the expectations of the private traders are self-fulfilling.

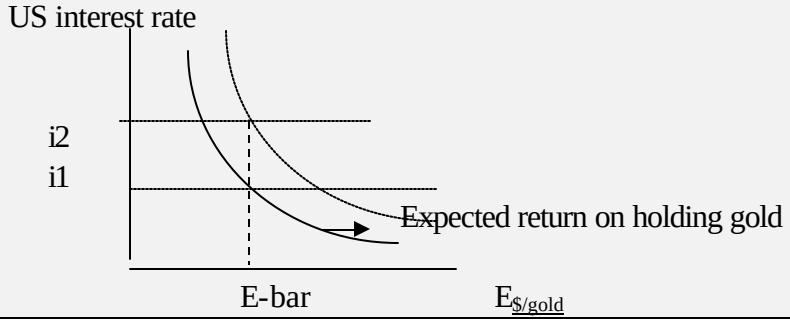
This process by the private traders is called a "currency crisis" or a "speculative attack". And the private traders are called "speculators."

Show in graph:

When people come to expect the currency to depreciate in the future, the foreign returns curve shifts to the right, since foreign returns equals foreign interest rate plus expected future exchange rate appreciation.

To maintain the exchange rate at E-bar, the central bank must raise the domestic interest rate. This was necessary to make people willing to hold domestic assets despite the expected domestic currency depreciation.

This requires a contractionary monetary policy to defend the peg. This is why currency crises are often preceded by extremely high interest rate.



2) The case of the EMS crisis: 1992

Start by considering events in Germany, which was acting as the policy leader in the EMS system of fixed exchange rates. The reunification of East and West Germany began July 1990.

Consider Germany goods market:

- Consumption: As East Germans gained access to Western consumer goods, there was a increase in consumption demand for German goods.
- Also large fiscal expenditures on the East for reconstruction and training and support of the unemployed.
- Model this as a rightward shift in the IS curve for Germany.

Consider German money market: due to fear of inflation, Germany reduced money supply. Model this as a leftward shift in LM curve.

Both of these shifts tended to raise German interest rates.

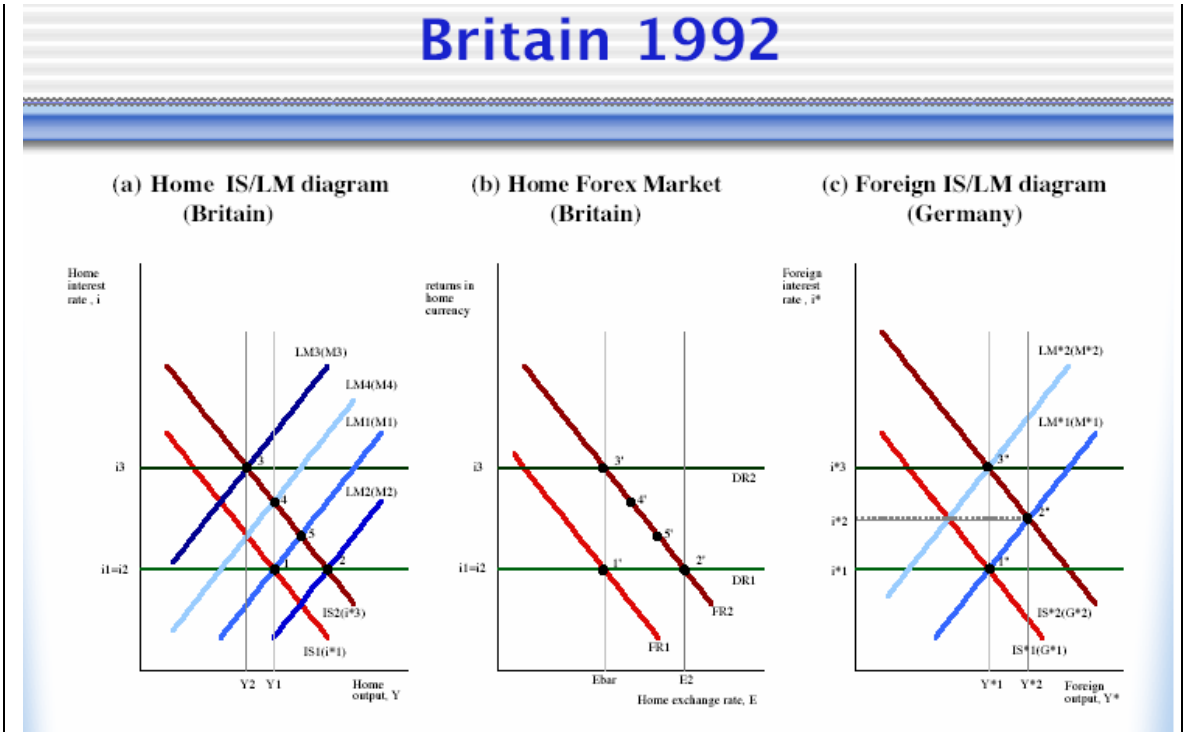
Now consider implications for the UK, a member of the EMS fixed exchange rate regime.

In the forex market, the foreign (German) returns curve shifted right. This represented the fact that the higher German interest rates exerted pressure for the German currency (DM) to appreciate relative to the British pound.
To maintain the fixed exchange rate, the British interest rate needed to be raised, via monetary contraction shifting the LM curve left.

Now look at the UK goods market. The leftward shift in the LM induced a recession. Financial markets began to doubt that the British would be willing to endure this recession, so they began to speculate that the pound would devalue or exit the EMS system.

The expected change in the value of the pound further raised the expected foreign returns curve in the forex market, requiring yet further rises in the UK interest rate to make people willing to continue to hold British assets.
And the recession became worse. Eventually the UK abandoned the EMS system. So the Foreign Returns curve in the Forex market shifts right for two reasons: rise in German interest rate, and change in expected future exchange rate.

Lesson: Even if a country is not in danger of running out of reserves, it still might be forced to abandoned a fixed exchange rate by the cost in terms of high interest rates and recession. This is a second type of currency crisis, which was predicted by theory prior to the 992 crisis.



Other countries also involved in Crisis: Italian lira abandoned system. Friance: While France suffered the same effects as the UK, it endured the recession in order to stay part of the EMS system.

Aftermath:

Question if France was the unlucky/unwise one. France continued in recession with very high unemployment.

But UK and Italy did better. In part due to depreciated exchange rate made their goods more competitive, so CA improved. Lira dropped in value almost 50%, CA went from neg (over previous 10 years from 1992) to pos in 1993. Also true for UK, Sweden and Ireland. Helped most of these countries to have improved output levels in 1993.

Note that this came at cost of their European trading partners, especially France, which kept currency high and goods uncompetitively priced. Output fell much in France and unemployment rose. Are accounts of firms that closed up shop in France and moved across English channel to use cheaper British Labor. Worsened unemployment in France.

3) Argenina Currency Crisis (2001)

Background:

Sad story. In 1910 had higher GDP than France or Canada.
But bad government over much of 20th century.
History of excessive government spending, printing of money to pay for it, and so high inflation over last 50 years. Political pressure to spend more than tax, then to print money to pay the debt. 1989 was 197% during the year. Tried various plans to reduce inflation, but no one believed the promises, and prices continued to rise.

Convertibility Plan:
Motivation: a way to end the cycle of inflation.
Currency board with dollar: 1peso can be freely converted into 1 dollar. The exchange rate was fixed by law, and could be devalued only by an act of congress.
So money supply growth limited by supply of dollars.
Should impose discipline to reduce inflation.
Implemented April 1991.
Called convertibility plan, because guaranteed full ability to exchange dollars for pesos – no capital controls.
Plan worked. Inflation dropped to 5% by 1995.

Good economic performance in 1990s.
Solid growth in international trade and economic growth. Survived contagion from Mexico crisis in 1995 and Asia crisis in 1997.

Problems develop in late 1990s-2000.

a) Recession for 4 years. In part because loss of competitiveness when Brazil devalued 40% in 1999. Since was pegged to the dollar, Argentina had to accept that its goods lost competitiveness.

b) Develop large government debt. Partly because of recession – reduce tax revenue and increase transfer payments. Also because of excessive spending by regional governments, which central government had some obligation to share tax revenues with. Lead to large debt, 50% of annual GDP. Also large debt because much tax evasion (Much smaller fraction of GDP collected in Argentina than in neighboring countries.) Leads to temptation to print money and use to buy government debt, and finance it that way. Would require domestic inflation and abandoning the currency board and the fixed exchange rate. This would lower dollar value of peso debt. Risk was that if creditors feared this, then might refuse to give new loans, needed to roll over existing ones. If required immediate repayment, would have to default.

Crisis begins in 2001: Argentina asks IMF for help in financing the debt. IMF give loans, but imposes tough conditions that they reduce the budget deficit. Cut spending late in 2001. Upset many people. Riots.

Dec 2001.
IMF halted new loans because government not adequately satisfying conditions on budget.(Dec 5)
Some fear that will devalue. Lead to capital outflow. Between July and Nov, Argentines withdrew $15 bil from banks.

January 2002: Duhalde become new president. Departure of Cavallo, finance minister and creator of "convertibility plan"
Abandon Convertibility Plan: changed peg: from dollar to a basked of dollar, euro and Brazil's real. Included a 29% devaluation. Imposed capital controls because fear capital flight in expectation of greater devaluation. Close banks for a while, continued longer restricted access to bank accounts in dollars : $46 billion in savings in dollars in Argentina.
Default on debt: 141$ bil of debt – largest default ever. Devaluation made the costs of this debt higher in terms of domestic currency.
February 11: Allow peso to float. Drops to 1 peso equals about 0.50 dollars. Has depreciated further since.

4) Asian Financial Crisis (1997)

a) Background

Until 1997, several east Asian countries were remarkable development success stories. South Korea for example multiplied its GDP by a factor of eight from the 1960s through the 1980s. Similar stories apply for Hong Kong, Taiwan and Singapore. In the 1970s and 1980s additional east Asian economies began to grow rapidly, including Malaysia, Thailand, Indonesia and China.

Possible explanations for rapid growth: There is some dispute about what facilitated this rapid economic development.

1) Export orientation: One explanation is that these economies opened themselves to the international economy and focused on producing exportable goods. This forced companies to be competitive, and promoted the transmission of new technologies. Prior to this time, these economies had pursued inward-looking policies, where they discouraged competition from foreign imports, to make it easier for domestic industries to develop.
2) High private saving rates, which made funds available for investment projects.
3) High education levels among the work force.
4) Industrial policy and government-industry cooperation: Some of these economies had government programs to choose which industries should receive access to capital. But this was not true for all (Hong Kong and Taiwan for example.)

Because of their success, these economies became attractive places to invest capital. In the 1990s, large capital inflows caused growing current account deficits in several of the countries. People did not think this represented an external imbalance, because the current account deficit was financed by willing private capital inflows and was used for worthwhile investment projects.

Despite the strengths of these economies, there were also some underlying weaknesses:

1) Slow productivity growth: Studies suggest that the rapid gains in output were the result of rapid gains in the labor inputs (as agricultural workers moved to the city) and rapid gains in physical capital inputs (because of high rates of investment). There did not seem to be much of a role for technological advancement, which implies that eventually the high level of capital being accumulated will deliver a declining return to investors. This called into question the wisdom of the large inflow of foreign financial capital.
2) Poor banking regulation: Most Asian countries had little regulation restricting potentially risky behavior by banks. But people felt safe, because the government took some responsibility for bailing out banks if the risky ventures caused them trouble. This created Moral hazard: an incentive to take on more risky ventures, because the cost of failure would be born by someone else. (For example, in Thailand and Indonesia, banks often made loans for very risky real estate ventures sponsored by relatives of government officials.)

   This interacted badly with the international financial deregulation at this time, as many Asian economies removed restrictions on the ability of banks and firms to borrow money

from abroad in the form of foreign currencies. One common practice was for banks to borrow short term loans in foreign currencies, then to make long term loans to domestic companies in the domestic currency. This is very risky if a currency devaluation were to occur.

3) Undeveloped bankruptcy law. In the past, few big companies failed, so there were not clear laws on how to deal with the problem in an orderly way.

b) The crisis: Summer 1997

It began with Thailand. In 1996 confidence of foreign investors waned as the over-investment in real estate and capital became more clear, and the stock market and real estate market began to decline. As people pulled out their capital, this lead to a fall in reserves, and in early 1997speculation against the currency further lowered reserves. July 1997 the Thai baht was hit by a large speculative attack that forced it to abandon its fixed exchange rate.

Contagion: One prominent feature of the Asia crisis is that it spread to several other countries in the area. In the minds of speculators at least, neighboring countries like Malaysia, Indonesia, Korea, and the Philippines were similar enough to Thailand in terms of the weaknesses listed above that they too became victims of capital outflow and speculative attacks.

All of these countries except Malaysia turned to the IMF for help:
- received loans, in return for:
- raising interest rates to limit the exchange rate depreciation (monetary contraction)
- fiscal contractions
- structural reforms to help resolve the underlying weaknesses listed above.

One implication was a sharp fall in output in these countries, because of the monetary and fiscal policy contractions. Average real output growth in the five Asian countries went from +7% in 1996 to –7% in 1998. Perhaps the most dramatic case was Indonesia, where the rupiah lost 85% of its value.

Given that many banks and companies had debts in terms of foreign currencies, the devaluation and high interest rates forced many banks and companies to go bankrupt. Given the lack of clear bankruptcy laws, this forced a great deal of disruption in the economy, as companies and banks tried to limp along, without the ability to borrow in capital markets and carry on their business.

This also forced a current account reversal, as the level of imports fell with falling income and rising imports prices.

c) Making sense of the Asian crisis:

Who is to blame? There is controversy over who bears the blame for the dramatic events of the Asian crisis.

1) Crony capitalism: Some blame the underlying weaknesses in the Asian economies, and say to prevent crises in the future, it is necessary to fix this "crony capitalism."

2) Some blame the freedom the international financial system gives to speculators to undermine a country's fixed exchange rate regime. They say there is a need to create laws to prevent speculators from doing this. Some a

3) Some blame the IMF. Certainly the monetary and fiscal policy contractions make the fall in output worse than it needed to be. In addition, some blame the IMF for undermining confidence in the Asian countries by requiring these types conditions on their loans at the early stages of the crises, and thus worsening the capital output and the degree of the crisis that developed.

Nevertheless, there are some lessons to be learned here:
Lessons:

1) Choosing the right exchange rate regime. It is risky for a developing country to peg its exchange rate unless it has the means to defend it.

2) Banking crises can interact with currency crises. The poor banking sector was one thing that made international investors nervous. Secondly, the collapse of weak banks exacerbated the effects of the crisis on GDP. This was something that had not really been seen in past currency crises.

3) Proper sequence of reforms: Part of the problem was that Asian economies opened themselves to international capital before their domestic financial systems were properly regulated and strong enough to accommodate the huge inflow of capital that arrived.

4) Importance of speculator expectations and Contagion: Even countries with less severe underlying problems, like Korea, can experience a crisis if a neighbor experiences one, and if speculators associate the two countries as being similar. To a large degree, countries are subject to the perceptions (and sometimes misperceptions) of individuals in the international financial markets. (Example: "Buenos Aires is the capital of Brazil" problem.)