

## Lecture 20: The East Asian Currency Crisis

### I. OVERVIEW

- In the last lecture we looked at episodes of currency crisis in Latin America - in particular the debt crises of the 1980s and the peso crisis in Mexico in 1994.
- In today's lecture, we examine another notable episode of recent currency crisis: the 1997 East Asian currency crisis.
- If you are interested in reading more about this topic, please check out Nouriel Roubini's amazing web page at <http://www.stern.nyu.edu/~nroubini/asia/AsiaHomepage.html>

### II. BACKGROUND FOR THE EAST ASIAN CURRENCY CRISIS

- We will focus our attention on 8 East Asian countries Hong Kong, Indonesia, Malaysia, The Philippines, Singapore, South Korea, Taiwan and Thailand. Of these 8, Thailand, Korea, Indonesia, the Philippines and Malaysia were hit hard by the crisis, while Taiwan, Hong Kong and Singapore were more mildly hit.
- The dramatic improvements these countries made were reflected in extremely high growth rates of real GDP and real GDP per capita from the early 1960's to the late 1990's. The 1997 economic crisis hit most of these countries hard: some like Indonesia are still in deep trouble.
- The crisis was a hodge-podge of falling currencies, spiraling deficits, collapsing stock markets, high inflation and financial bankruptcies.
- By understanding the underlying economic circumstances that may have brought about the crisis as well as understanding the severity and the speed of the crisis itself will help us think intelligently about both the propensity for such crises to emerge in the future as well as think about solutions to reduce the impact of a crisis once it occurs.
- There is some disagreement still about where exactly the roots of the crisis lay. However, economists have a fairly good idea about the immediate causes of the crisis.

### III. THE ONSET OF THE CRISIS

#### Capital Inflows Come to a Halt

- Many East Asian countries whose currencies came under attack, Thailand, Malaysia, Indonesia, etc. had currencies that were fixed to the U.S dollar either explicitly or implicitly; i.e. they had a strictly fixed exchange rate system or a tightly managed float exchange rate system with active central bank intervention.

- The systems they had at the time were:
  1. Malaysia: the currency moved in a 10% range of 2.7 to 2.5 ringitt to the dollar.
  2. Thailand: effectively fixed in a narrow 25.2 to 25.6 to the dollar.
  3. The Philippines fixed at 26.2 rate to the dollar
  4. Korea traded in a very narrow range of 800 to 770 won to the dollar.
  5. Indonesia allowed the nominal exchange rate to move to keep the real exchange rate fixed.
- For the three countries that avoided the crisis, their exchange rate system at the time was:
  1. Hong Kong: a currency board with the parity tied to that of the US dollar.
  2. Taiwan allowed the nominal exchange rate to move to keep the real exchange rate fixed.
  3. Singapore had a managed floating exchange rate system
- Even though these countries had some type of fixed exchange rates, they continued to conduct monetary policy autonomously relying on controls on money moving into the country in the 1960s and 1970s. These controls were liberalized in most of these countries resulting in a move towards having fixed exchange rates and perfect capital mobility - thus no room for autonomous monetary policy.
- Many of these countries ran large CA deficits

Current Account Balances (as a % of GDP)

Country	1990	1991	1992	1993	1994	1995	1996
Korea	-1.2	-3.2	-1.7	-0.2	-1.4	-1.9	-4.9
Indonesia	-4.4	-4.4	-2.5	-0.8	-1.5	-4.2	-3.4
Malaysia	-2.3	-9.1	-4.1	-10.1	-11.5	-13.5	-5.6
Philippines	-6.3	-2.5	-3.2	-6.7	-3.7	-5.1	-5.9
Singapore	9.5	12.4	12.4	8.5	18.1	17.9	16.3
Thailand	-8.7	-8.6	-6.3	-6.5	-7.2	-9	-9.2
Hong Kong	8.4	6.6	5.3	8.1	2.0	-2.2	0.6
China	3.0	3.1	1.1	-2.2	1.2	1.0	-0.3

- Given their stellar economic performance during the 1960s and 1970s, these countries had no problem financing CA deficits using capital inflows. Many foreign companies started setting up plants and buying subsidiaries in East Asia so FDI flows boomed.
- In addition, in the last 15 years or so these countries began relaxing controls on the movement of money. Soon, the stock markets of Bangkok, Seoul, Hong Kong, Singapore, Jakarta and Kuala Lumpur became the darlings of U.S. and other countries' mutual funds. Huge amounts of foreign portfolio investment came into East Asia.
- Furthermore, there was a large boom in lending as foreign banks hungry for profitable investment projects began lending large sums of money to companies and governments in these countries. Given the superior economic record of East Asia, these banks felt that the companies were a good lending risk, especially when compared to other opportunities in Africa and Latin America.

- Once the capital controls were relaxed the East Asians were moving to a different part of the trinity: monetary policy flexibility had disappeared, and they were vulnerable to negative shocks.
- However the reality of the economic situation in many of these countries soon became inconsistent with the expectations: there are many stories of huge construction projects in Bangkok and Kuala Lumpur where large sky scrapers were being indiscriminately constructed using foreign borrowing with little regard to finding companies who would be willing to lease out office space in these buildings.

### **What Comes In Can (and Will!) Go Out**

- Soon problems started to appear in the banking sector where banks were borrowing dollars from other international banks and lending domestic currency denominated loans to domestic investors. This was further complicated by the fact that the foreign borrowing often consisted of short-term loans while the domestic lending consisted of long-term loans.
- So borrowing dollars using a 6 month loan, converting those dollars to baht, for example, and lending them out to homebuyers in the form of a 30 year mortgage meant that these meant that the banks were vulnerable to exchange rate fluctuations. They needed to have a steady stream of cash coming in order to pay off the dollar denominated debt.
- Furthermore, these companies and banks would continue to borrow substantial money from abroad as long as they were big enough so that the government would bail them out: banks in Thailand and the large corporations in Korea (the chaebol) were prime examples.
- Economists describe this type of behavior as “moral hazard”, many banks took on overly risky projects because they were confident that the government would bail them out. As a result the projects may in fact fail and the government would actually have to bail them out.
- So overall, economists agree that some combination of a general economic slowdown in East Asia, the continued weakness of the Japanese economy (a prime buyer of East Asian goods), bankruptcy problems of East Asian companies and insolvency of East Asian banks led to the crisis.
- At some point in the summer of 1997, signs of a banking crisis were beginning to develop and speculators and investors began to wonder about potential weaknesses in these currencies.
- In particular, if the domestic projects were not generating returns, many companies and banks would need to acquire dollars to pay off their debt. This would increase the demand for dollars and force the domestic currency to depreciate relative to the dollar.
- As long as there were foreigners seeking to put their money into East Asian stock markets, the governments of these countries were able to use reserves of foreign currency to sustain the fixed exchange rate at their desired value but as the inflow started to halt, the ability of the government to sustain the currency started to be doubted.
- The first country to face this problem was Thailand so we will use it as an example for our description of the crisis. However, the story for Korea, Malaysia and Indonesia was broadly similar.

- On top of that the inflow of portfolio investment into the Thai stock market slowed down; managers of mutual funds in fact started to move money out of Thailand. This not only cuts off the supply of reserves that the government needs to accumulate but also reduces the existing stock of reserves.
- This leads to a vicious circle of sorts, speculators believe that the Thai currency is weak, i.e. the government does not have enough reserves to defend the currency, and attack the currency. Asset managers fearing that exchange rates are going to fall start pulling their money out, this cuts into reserves and puts more pressure on the Thai currency. This brings more speculators into the attack and soon they put unbearable pressure on the currency.
- Speculative attacks typically consist of borrowing the local currency and exchanging it for dollars hoping that the domestic currency would crash against the dollar. For example, suppose that the exchange rate in Thailand is 20 baht/\$. A speculator can borrow 20 billion baht and convert it to \$1 billion. This demand for dollars requires a massive intervention by the Thai government, who sells dollars to buy baht in order to keep the value of the baht stable.
- If they are unable to do so and the baht depreciates to 25 baht/\$ then the speculator has won. He/she can now pay back the original debt using 800 million dollars (plus interest) and pocket the remaining 200 million dollars or so as profits.
- The government can try to stop the rut by raising interest rates to prevent speculators from borrowing but this puts the stock market into a panic, which in turn makes foreign investors queasy and pull out, furthering the vicious cycle.

### **When Thailand Sneezes.**

- In the end Thailand gave into the pressure and devalued, this had major effects on the economy because many companies had short-term dollar denominated debts whose effective interest rates ballooned and put companies out of business.
- Similar pressures were mounting in Indonesia, Korea and to a lesser extent in Malaysia and Taiwan. Furthermore, the Thai devaluation made the exchange rates in these countries look overvalued and their NX started to fall as their goods became uncompetitive. This effect was dwarfed by the financial outflows as investors expected that Korea and Indonesia would succumb to the same pressures as did Thailand.
- Some countries like Hong Kong, confident that they could resist the attack by speculators, were able to ward them off by raising short term interest rates very high. Despite the adverse effects on the stock market they were able to defend the HK \$ thanks to the huge volume of Chinese foreign exchange reserves.
- The East Asian crisis left most of the economies in a terrible state. The extent of the carnage can be gleaned by looking at some figures relating to the stock market and the foreign exchange market for 1997.

COUNTRY	Change in Stock Market	Depreciation of e	Change in f/x Reserves
Korea	-55%	58%	-49%
Indonesia	-46%	47%	-11%
Malaysia	-73%	33%	-27%
Philippines	-54%	30%	-50%
Singapore	-37%	13%	
Thailand	-80%	41%	-23%
Hong Kong	-22%	1%	-32%
Taiwan	17%	13%	-14%

Source: Nouriel Roubini's East Asian Crisis web page

- As you can see from this table, most of these countries' stock markets suffered devastating blows as a result of the sudden outflow of money. The stock markets in most of these countries lost at least a third of its value for the year, in Thailand the number was as high as 80%.
- Along with the outflow of portfolio investment came substantial devaluations in currency as these countries lost significant reserves defending their currencies. The devaluations/depreciations of the East Asian currencies were particularly severe in the case of Korea, Indonesia, Thailand, Malaysia and the Philippines. Some countries like Taiwan and Hong Kong were better able to weather the storm, mainly because the large holding of reserves helped them deter the attempts of speculators.

### **A Knight Galloping to the Rescue?**

- To reduce the impact of the substantial speculative pressures on the currencies, the IMF stepped in with substantial loan packages to many of these countries at various points during the year. The IMF offered the Philippines \$1 billion in July, Thailand \$16 billion in August, Indonesia \$23 billion in October and Korea \$57 billion in November.
- While some of these loans were intended to replenish reserves most were granted as part of a reform package by which countries agreed to devalue their currencies or allow them to float more freely, reform the financial sector, take steps to reduce government budget deficits and arrange for restructuring of short-term dollar denominated loans.
- Since the dramatic events of 1997, some of these countries have recovered fairly successfully. Both Thailand and Korea have done well in terms of reforming their economies, although Korea still has trouble with the highly influential conglomerates. Stock markets in these countries as well as in Hong Kong, Singapore and Malaysia have boomed in the last year.
- Malaysia moved to a much more rigid system whereby they imposed strict currency controls on the movement of money from abroad. This was because the Malaysian president publicly blamed George Soros for the debacle in his country's currency and stock markets.
- However, evidence shows that Soros was not a significant player in East Asia and currency controls may not work as Malaysia intends. Indonesia has undergone far more turbulent social change following the crisis with the ouster of President Suharto, the separation of East Timor etc. Clearly, these changes can not all be attributed to the crisis but the crisis certainly acted as a catalyst.

- The other East Asian economies are getting rescue packages from the IMF to tide over the turbulent times, refinance debt, move the currency to a new level and get the house in order.
- The latter is very important because otherwise the fix will only be temporary and there will be a new attack on the currency. This was true in Mexico during the general stabilization following the crisis in 1994.
- Economists disagree on the implication of this crisis on the arguments for or against fixed exchange systems. However, the evidence certainly shows that a combination of dwindling reserves, which encourages speculators to attack a currency under a fixed exchange rate and moral hazard, which eliminates downside risk for borrowers of foreign currency denominated debt combine to make these crises very severe.