

12. Combating Financial Crises

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Hello, I'm George von Furstenberg, the Robert Bendheim Chair in Economic and Fiscal Policy at Fordham University at the Lincoln Center Campus in New York City. I'm going to speak to you on "Combating Financial Crises," having a dozen insights and some comments afterwards on financial crises.

A. Defining a Financial Crisis

Before we start, we need to define what a financial crisis is: how to recognize that particular enemy and guard against it, and what to do about it once a financial crisis has struck.

"Financial crisis" is a collective term referring to different sectors, in which financial crises can erupt. Particularly, one distinguishes banking crises, currency crises and debt crises. Of course, these tend to be mutually reinforcing and often occur together.

I will briefly describe each of these crises and what they entail. A banking crisis involves essentially the destruction of a great deal of the aggregate bank capital. In other words, banks — a number of banks — begin to have negative net worth, basically becoming insolvent. That leads to failing banks, government takeovers and costly government bail-outs. That is the scenario of a significant and severe banking crisis.

Currency crises have to do with a forced change in parities, an abandonment of the fixed exchange rate system and a rapid depletion of international reserves as well as, possibly, international rescue operations such as emergency loan funds from the **International Monetary Fund** (IMF) or some such institution. The recognition of an exchange crisis sometimes involves multiple variables, because some crises can be repressed for a while by a sharp increase in interest rates that will eventually be severely deleterious to economic welfare and

therefore not sustainable over the long run. To "date" exchange crises, one often uses exchange market pressure variables that involve a combination of exchange-rate change (meaning devaluation), interest-rate change (meaning increases) and loss of reserves. If the combination of these variables assumes certain magnitudes, one calls it an exchange rate crisis even though it appears that the exchange rate has not yet gone bust — it is about to.

The debt crisis, of course, usually involves a **moratorium** on interest and principal repayments; it involves defaults, and ultimately **debt forgiveness** and **debt rescheduling**. Basically, from the point of default, you would recognize the debt crisis.

Again, these three types of crises often occur together, particularly in **emerging markets**. Indeed 75% of crises of this kind have historically occurred in emerging markets. Their incidence in the most advanced countries has been restricted to the period including the Great Depression — in other words, the inter-war period. That was the time when many of the most advanced countries had severe banking and financial crises — certainly the United States and most European countries had them. At other times, it is mostly emerging market countries that do. Both before World War One and after World War Two, it has been mostly about crises in emerging markets — that is high- and middle-income developing countries.

What is the probability of such a crisis? Having at least one of these crises, although not necessarily a joint crisis (meaning all three types of crisis occurring together) has a probability of 12% on an annual basis in the post-**Bretton Woods** period from 1973 to 1997. In any one year, there is a 12% chance that such a crisis will occur, among a total of 56 countries considered.

The frequency of crises is not insignificant, and the severity of these crises is quite horrendous. If they are joint crises, they tend to last from three to four years and involve a cumulative loss of output equal to 15% of **gross domestic product** (GDP), something like one seventh of a year's worth of output. That is very severe, but you might ask if this is attributable to the financial crisis. Perhaps it is part and parcel of a general business **recession** — of which financial crises are a part — and frequently an accompaniment that may be induced by the business recession. So the question of causality arises. It does appear, however, that the severity of the output loss is about twice as great if a recession is accompanied by a financial crisis of the sort that I have mentioned.

B. Predicting a Financial Crisis

The “forecastability” of financial crises has been exceedingly limited. There is simply no simple mapping from economic fundamentals to crisis probability and, hence, to financial crisis. One of the few variables that has a robust relationship to financial crisis is the current account deficit. If current account deficits exceed 5% to 7% of GDP for several years in a row, a financial crisis usually is not far away, although exactly how close at hand it is proves to be quite variable. In other words, some countries can sail along like this for several years, while other countries immediately go down in flames.

So, again, we have a problem.

However, the actual onset of a financial crisis in a situation of this sort tends to come from a phenomenon known as the “sudden stop.” For reasons not fully understood, the international investment community, or perhaps opinion leaders, or maybe a political trigger — a political event in the country — suddenly gives international investors pause, and instead of continuing to pour money into the country, they simply stop doing so. The country gets jerked around. It then suddenly has to do without this

5% or 6% current account deficit and that means that it has to dramatically reduce its own absorption of resources by an equivalent amount. Consumption investment and imports must fall very steeply. As a result, there will be a general economic crisis in these countries.

And so the problem of a sudden stop is, of course, more severe if the country has been going at high speed until then. In other words, if it has been importing capital at a high rate, the higher the rate is, the sharper the jolt from the sudden stop is. That is how it relates to the probability and frequency of crisis.

Let me say a little bit about banking crises and the conditions under which they are more costly and severe. Banking crises tend to be very severe essentially when the safety net for the financial system is so ill defined that there is almost unlimited lending to banks that have solvency problems, until the government itself is no longer able to continue this support operation. Until that point is reached, an enormous amount of money has been wasted. Indonesia, for instance, managed to have support funds worth US\$16 billion disappear totally down the drain. That amount is equal to one quarter of a year's GDP in Indonesia. It was poured down a rat hole. Those funds — whatever good they may have done — have never been found to this day. This only happened in the financial crisis of 1997–98.

It is a very severe issue: When you have conditions of this sort, banking crises turn out to be enormously costly.

Another element contributing to such crises is to have a **fixed or pegged exchange rate** regime. In other words, in Asia an exchange rate regime is usually pegged to the U.S. dollar, but is not credibly supported with either a currency board or a very high level of reserves so as to discourage a major speculative onslaught, or is exposed to change in investor sentiment, or the willingness of foreigners to lend on a short-term basis to the banking system or other agencies in the country. So, a fixed exchange rate system makes people

believe there is an exchange rate guarantee and they don't have to hedge their foreign exchange exposure; they can take advantage of higher interest rates without fearing that an exchange rate change will take the difference away. When people position themselves this way, they are setting themselves up for a highly disruptive and costly banking crisis, should the exchange rate peg be broken, as it tends to be. There you can clearly see the link between a currency crisis and a banking crisis: one tends to aggravate the other. That's why a twin or triple crisis always involves much greater losses than one confined to just one of those sectors.

Let us talk about prevention for a second. Essentially, early-warning models are supposed to tell countries that they are approaching the danger point. But early-warning models and systems are very difficult to operate, because you don't want to sound the alarm at the point where the country is so vulnerable that by sounding the alarm everybody rushes for the exit and you have precipitated the very crisis you are warning about. Then you have a self-fulfilling warning system. This is very hard to avoid by operating early-warning systems, unless they begin to uncover vulnerabilities very early in the process — just as they are beginning to form — and warn these countries to cease and desist, rectify or correct — immediately or as soon as possible — these vulnerabilities so that they will not fall into crisis.

Very often, however, by the time the early-warning model sounds — if they sound at all — it is much too late to do anything. They are merely saying, "Look, you are already in flight down the precipice and I can surely predict that you will crash at the bottom." That, indeed, is all that early-warning models often manage to do. However, what sort of elements do they have to contend with? First of all, they must avoid giving too many false alarms — sounding the alarm when nothing much is wrong and nothing much will happen — and at the same time they should not fail to sound the alarm when, in fact, a crisis is likely to occur.

You can already infer that these models tend to be structured in such a way that they don't miss too many actual crises in exposed applications (that is, when you build and test them out). You would have sounded the alarm for all the past crises — and you want to make sure that they sound the alarm for most of the past crises — but in return for that you usually have to make them sound three or four times as many alarms as there ever were crises. If the alarms are overly sensitive, just like with a fire alarm in a building, before we start running we always ask ourselves whether it is a test or the real thing. If you think it is a test, then you are not going to hurry up to fix the issue — in this case, to get out of the building. So that is essentially the difficulty with this.

Let me give you at least a few of the elements that used to gauge an impending crisis. They are exchange rate overvaluations, the current account deficit, the international reserve position (short-term debt in relation to reserves, or short-term international debt in relationship to some scale such as GDP), the rate of growth of exports, and so forth. Generally, any composite of these factors or any single factor — other than one or two perhaps — tends not to have very high forecasting abilities; it is not helpful, although a group of those factors taken together may at some point certainly be worth considering as an advisory component to a broader evaluation and deeper analysis of a country's prospects.

The IMF is constructing such indicators, as are Crédit Suisse First Boston, Deutsche Bank, Goldman Sachs, and so forth. All of them have had similar experiences. In the latest crisis in Argentina, for instance, the performance of the indicators was mediocre to miserable. They signalled a crisis very late and then they stopped signalling a couple of months before it was actually aggravated; then they kicked in again when the crisis was just about upon us. Most knowledgeable observers were far more prescient than any of these "mechanical" or "factor-loaded" warning systems. So, their record is not splendid.

What can you say about the kinds of things that you can do about these crises? Obviously, you want to avoid conditions that are more likely to lead to them. On the other hand, we know so little about what the most severe things are to watch for — other than to make sure that the banking systems are soundly regulated, soundly reserved and transparent in terms of how they deal with debt problems (how they analyze default and delinquent loans, report on them and so forth). There is also, perhaps, a chance to discourage an excessive reliance on short-term capital imports, particularly by the banking system. In Chile, for instance, extra reserve requirements were imposed until a few years ago on the flow of foreign funds into the banking system so as to discourage short-term inflows, but not long-term inflows, because they involved a single fixed charge. Spread over a long investment period, this doesn't amount to much, but in the short term, it is discouraging.

C. Preventing a Financial Crisis

There are a few suggestions to prevent the emergence of conditions likely to lead to crises, but they are not generally viewed as very powerful or very useful — one of the least useful, certainly, is the **Tobin tax**. There are other suggestions, such as having a global lender of last resort, that also have not been translated into any kind of reliable action.

Overall we are still very much in the stage of working on the banking side of the issue: trying, perhaps, to discourage excessive short-term capital inflow; changing the composition of flows towards longer maturities, towards more **foreign direct investment** — but knowing the whole time that any of this involves interference with market forces. Such interference is very hard to sustain over an extended period because circumvention is usually possible in international financial markets, and it also turns out to be quite costly in terms of opportunities foregone.

Often there is a lot of regulation involved that

discourages the good and the bad alike. The bottom line, I think, is that financial crises are “hardy perennials” (Eichengreen 1999). We have had them for at least a hundred years. We have had them for as long as we have had international capital markets — that is, well back into the nineteenth century — and they will continue. The struggle to find ways to reduce exposure to them will succeed just as rapidly as new opportunities and new devices to generate crises are developed in international financial markets and risky practices are pursued.

So, that is the discouraging message that one has to give about this. But let me just say that if you believe that the financial system is, in fact, a source of major economic problems in the world economy, of course you are then led to think about a more fundamental strengthening of the architecture of the international financial system, which is the subject of the next lecture.

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Further Reading

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Discussion Questions

1. What kind of financial crisis is most severe and why?
2. Does anyone gain from financial crises? If so, who?
3. What is the best way to prevent financial crises from erupting?
4. Should the international community use public funds, through the International Monetary Fund or directly, to assist Argentina through its current financial difficulties?
5. What are the advantages and disadvantages of the Tobin tax and why does it remain such a popular concept with critics of the current system?
6. Should the International Monetary Fund be the global lender of last resort?

Quiz

1. How often have financial crises occurred in emerging markets:
 - a. 10% of the time
 - b. 25% of the time
 - c. 55% of the time
 - d. 75% of the time
2. Among the 56 countries considered in the post-Bretton Woods period, the probability of having at least one type of financial crisis each year is:
 - a. 1%
 - b. 12%
 - c. 37%
 - d. 73%
3. Joint crises tend to last from three to four years and involve a cumulative GDP loss of output equal to:
 - a. 5%
 - b. 10%
 - c. 15%
 - d. 25%
4. The economic factor that best predicts a financial crisis is the:
 - a. current account deficit
 - b. government fiscal deficit
 - c. government debt as a portion of GDP
 - d. the Phillips curve
5. Indonesia's GDP in the late 1990s was approximately:
 - a. US\$16 billion
 - b. US\$24 billion
 - c. US\$64 billion
 - d. US\$164 billion