

General Discussion: Financial Crises and Economic Activity

Chair: Mario Draghi

Mr. Sinai: It is clear this episode is unique. An important point of the paper and something for all of us to think about is that it is unique on the country layout. This was a U.S. and G-7 crisis, one reason why this episode has been so different and why it really has been a financial crisis as opposed to a banking crisis. I think of financial crises as much broader than banking crises.

As an aside on your paper, I was a little confused at points, because you seemed to use the terms interchangeably, and I wasn't quite clear what you were getting at.

One reason why it is so much a financial crisis and why the output cost has been so much higher—and the Fed response is necessarily so much greater—is the role of nonbank financial intermediaries in this episode. Still unknown, still not quantified, numbers still not available, but hugely so in terms of the nonbank intermediaries' functioning in credit and activity in our economy that is not understood and described nor talked about hardly at all in the paper or in the discussion by Mark Gertler.

The evidence of that is in the firms that went down. They weren't in name commercial banks: Bear Stearns, Lehman Brothers, AIG, the mortgage supplier institutions, where balance sheet distress and collapse

may be because of burst bubbles and balance sheets financing easily for a time through capital markets were a distinguishing characteristic.

I would submit that the paper and the discussion are very interesting, but you don't have what really is an essential ingredient of what has made this episode so unique, and I would hope that you pay some attention to it in whatever rewriting you do.

Mr. Crockett: Two questions, one narrower and one broader.

Steve, isn't it more conceptually correct to look at the loss of output as the gap—the area below the line, so to speak—before you return to trend, rather than before you return to the pre-crisis level of output? That may explain why faster-growth economies seem to recover faster, because their underlying trend of growth is so much faster that they can return to pre-crisis level quite quickly but yet still have quite a big margin to make up to return to trend growth.

The second question is much broader and not really addressed in your paper. In looking at the costs of financial crises, the counterfactual—which is no financial crisis—is implicitly assumed to have no costs. Of course, the crisis is provoked by financial imbalances that have built up that result, presumably, in misallocation of resources, overestimated growth before the crisis, and if you simply took away the crisis but you left the pre-crisis conditions of imbalances, it seems to me that that would have a negative impact on long-term growth too. For a fuller picture, we need to—particularly of your final question, which is the long-term impact—have an assessment of to what extent are the costs of a financial crisis somewhat at least offset by the cleansing effect that such a crisis has in getting rid of unsustainable imbalances.

Mr. Gurría: From the paper one gets the impression that, given the apparent uniqueness of each crisis, it is not very clear what lessons should be drawn from this one. However, I believe there are several things that stand out. For example, the fact that this crisis resulted in a collapse of global trade makes it rather interesting and also that it happened virtually in all the world's major economies.

The paper doesn't propose a linkage to external conditions. Actually, they are left on the side as if they were not relevant. In previous

crises there was always someone or something that would help countries get out of their problems. Sometimes currency devaluation, but in this particular case, with everybody in the same situation, it did not seem like that would be helpful. Notably, you make a statement which is rather important. You say, “We are going to go back to pre-crisis GDP in 2010 for the main crisis-affected economies.”

We see very frankly that this may not hold. We see a negative impact on investment due to, among other things, the increase in the price of capital, lending, etc., and the availability or, rather, non-availability of capital and, secondly, because of the unemployment impact, which may actually affect and delay the return to “normality.” Yes, you are going to have growth. The question is, Are you going to return to the pre-crisis status in 2010? We doubt this is going to be the case. We actually think that you may have medium- and long-term impacts on potential output of some consideration. The paper is too sanguine, too optimistic. I don’t see very clearly the reasons for such optimism.

Mr. Cecchetti: Let me start with Mark Gertler’s excellent discussion. Because I agree with everything that he said, I will simply emphasize a few points.

First, it is clear that asset-price booms associated with credit booms, or increases in leverage, are the ones that we should worry the most about. There is now substantial accumulated evidence that, if you just have an equity boom and bust, it doesn’t really do that much damage. But, if there is a credit boom that coincides with the equity boom, it creates a real problem.

I also agree with Mark that, among the many causes of the crisis, there has been a huge regulatory failure. I actually think that in going forward, while historians will be interested in the discussion about whether or not interest rate policy was too lax leading up to crisis, that’s not going to be the focus of their attention. Instead, speaking for myself, I can say that I don’t want to live in a world where a crisis like the one we are still living through can happen just because somebody keeps their interest rate too low for a year or two. That is not a world that we want to be in. We want to be in a world where we have

systems set up that don't allow for collapses that can result from what are even now debatable policy mistakes.

Allen Sinai is surely right that we are missing substantial amounts of information on the financial system, broadly construed. So, he could have accused me of the typical economist problem of studying what I can see, not what is important.

All I can say is that the dataset we use in this paper was a substantial amount of work to create, and is, I believe, the best you are going to do right now. That said, Allen is right—one of the big lessons of the crisis is, in fact, that we need more data on a variety of things. The question is, What is the best way to collect those data? We at the Bank for International Settlements are very much involved in trying to figure that out.

Andrew Crockett's comments are actually related to each other. Andrew, you are absolutely right that it would be nice to know how long it takes to get back to where the output trend would have been had there been no crisis. That is, it would be more appropriate in some sense to measure the cost of a crisis by the integral of the loss until a country returns to trend. But, as you point out in your second comment, what is the trend to which you are going to return? The problem that you point out, and with which I agree, is that the measured trend is likely to have been too high going into the crisis. There is going to be measured growth that wasn't for real. This is the case generally when you see asset-price booms because they tend to be in the areas where there is high-productivity growth, and so there is a lot of excitement and overinvestment. So the boom artificially drives up measured GDP. I agree with you that there are cleansing effects associated with the bust that follows. But this makes it difficult to know what the trend is to which the economy is returning. We thought about this, and we made this choice based on the fact that we could support it as a measure. But you're certainly right.

On Angel Gurría's comment about our being overly optimistic, I agree that it is very optimistic to think that there would be recovery by the end of next year or even early 2011 in the core eight affected economies. I want to point out the recovery we predicted, as Andrew

points out, is a recovery in only a very limited sense. It is not a recovery to the pre-crisis trend. It is a recovery to the pre-crisis level. But we think even that is optimistic.

Mr. Liikanen: I continue from your last point. You say here that this time it's different. Secondly, there is not much regularity between earlier episodes. Isn't it quite problematic to make forecasts for recovery from this different crisis on the basis of the earlier episodes?

Mr. Redrado: Steve helped produce a very thorough econometric analysis. Let me say that there are a lot of variables. Three variables in my view are not captured there, and I'd like him to comment.

First is currency substitution. In particular, what we are seeing now in Eastern Europe and what we have seen in other banking crises, euroization, and the fact that we don't look at specific capital requirements for banks that are acting there, and I'm looking forward to the work that we could do. Clearly, currency substitution, euroization, at this point has had a significant impact in particular in the banking sector in Europe.

Second is timing of the policy response that in my view is as important as the quality of the policy response.

Third is the external conditions in which the recovery happens. In particular, high commodity prices and low interest rates have been a key element to show a V-shaped recovery in most emerging economies.

My last point is that, in your sample, Steve, you take most emerging economies to extrapolate the length and the costs of the crisis. In particular, emerging economies have double-dip or triple-dip crises, and therefore it is difficult to extrapolate the length and cost of these crises to the current one.

Mr. Poterba: The comment is just on the structure of some of the very interesting regression analysis that is produced here. The essence of this model is that each variable has its own effect and there aren't interactions between the different potential variables that are being studied. For example, the level of government debt and the level of the fiscal deficit have additive impact. One might imagine a world in which the fiscal deficit is more problematic when government debt

is higher. Or, on the policy side, one sees an asset management company has an effect, regardless of whether there was a bank holiday or bank mergers. Those have their own independent effects.

A natural way to potentially expand this would simply be to look, maybe using the clustering-type technology, which is used in the paper, to see if there are patterns or interactions among some of these variables and whether, when you look at those multiple policies being turned on simultaneously, that picks up something that the policies themselves interact in a nontrivial way.

Mr. Ortiz: My comments follow Martin Redrado's remarks a little bit.

The first is about policy actions. Obviously, the initial conditions are fundamental to measure essentially what the costs of the different crises are, but then I don't know if you attempted to model some policy responses within the sample as to whether they made a difference between the recovery times—for example, if there was an International Monetary Fund program in the case of emerging markets.

The second comment has to do with the current crisis. In your sample, all the crises were self-generated. The epicenter of the crisis was in the country that you chose. This episode is very interesting because the whole world has been affected and the impact on emerging markets in different regions and within regions has been very different. That has attended also on initial conditions, budget deficits, level of reserves, and so on. I was wondering if some of the conclusions that you think applied to self-generated crises also apply to contagion situations.

This is very different also from the Asian crisis, or the literature on the Asian contagion, because that was an asset collapse. Anyway, this is an idea for future research.

Mr. Gallagher: Steve, I was hoping you could address a couple of issues that weren't explicitly addressed in your paper. One is the extent to which countries used fiscal stimulus. Did you find that that affected the length, depth, or cumulative output loss of the crisis? You look at it indirectly with your variable on the pre-crisis debt-to-GDP ratio,

but it seems to me there is some scope for different policy reactions within that.

Second, did you look at trends in inflation during the crisis and then after output hit its pre-crisis level in linking any of your explanatory variables to differences in that?

Mr. Ingves: In the study, you conclude that it takes many years to get back to the pre-crisis growth path. That is one way of trying to measure the cost to society of these things happening. That means that going forward it should pay to study why it takes time.

At least two issues among many come to my mind. One is that, when these things happen, it leads to a very sizable recalculation of asset prices. At the same time, when things go wrong, it also leads to a very sizable redistribution of ownership titles. If you combine these two, both of them affect economic activity. But how they do so is worthwhile taking a close look at.

To do that, one really needs to get down to the micro level, looking at individual institutions—banks and companies—and then combine that knowledge with the macro policies that are being conducted during this time period. Going forward, it could have good value to look at that combination, making it easier to understand why it is that in some cases it takes only a few years to get out of the mess, while in other cases it takes many, many years with a very large cost to society because nothing really happens in the economy.

Mr. Cecchetti: There were several questions about external conditions, and I forgot to respond to that. Fortunately, I was reminded.

The only way we could handle that would be to see whether or not there were a number of other countries that were in a crisis simultaneously. There is an attempt to look at that. It doesn't seem to matter much in this context of what we were looking at here.

The issue, then, of contagion versus self-generated is related to that. It is a problem, and the undercurrent of a number of these comments is that, if you have a worldwide crisis, a worldwide crisis is somewhat different. If one person falls into the pool, there are people to help pull you out. If you all fall in, then there is nobody left. That is also

related to the point about the global trade collapse, and not everyone can export their way out of a global crisis, as we've seen.

Martin had a number of suggestions for things to look at, which we can have a look at, but we had not looked at.

Jim Poterba's point is exactly right, which is that the patterns of interactions are something we could study a bit more. Every time I write a paper like this, I feel like there should be some sort of social norm where you are obligated to report how many regressions you ran. It should have a footnote that says, "In order to obtain this result, I ran x regressions." This one would look pretty bad, I can tell you.

I am certainly sensitive to your view that I should have run more regressions. Then you would have to decide how to count the cluster analysis and the failed principle components analysis that we did. All of these are pseudo-regressions.

The point about trends in inflation: Our remit was to look at the real economy. So, we didn't look at inflation trends, but it would be extremely interesting to do an analysis like that.

Then the point about trying to dig deeper into why it is that it takes longer on a country-by-country basis for some people to recover than others: That's absolutely right that we don't know. We don't know enough in this for the broad cross-section of countries about the institutional frameworks that existed for things like ownership rights and a variety of other things that I am sure have very dramatic effects. That is for further research.

Ms. Romer: While I understand the motivation for the paper and certainly realize that measurement without theory has a very distinguished pedigree, I do think it is important to say that sometimes what you get are spurious results. I have two worries. First, it is incredibly important to think about the quality of both your left-hand-side and right-hand-side variables. I worry very much about the sample of countries. I don't think the idea that Côte d'Ivoire and Ghana tell us about the effects of a financial crisis in a country like the United States is very plausible.

I also worry very much—and this goes to what Mark said—about the lack of variables on the severity of the financial crisis. I agree with Mark’s argument for using distress variables, such as credit spreads and things like that, to give us a sense of how severe this crisis was in the various countries.

Second, as careful as the authors are to say, “Oh, we are not making causal statements,” of course at some level they are. It is inherent. In fact, if they aren’t, then this exercise isn’t very interesting. The authors clearly understand that the coefficient on something like bank nationalization shows that bank nationalization is a sign that a crisis was especially severe, and doesn’t tell us the effect of nationalization. But the same thing is true of something like, Was there a currency crisis? Or what was your deficit-to-GDP ratio before the crisis? These are almost surely telling you much more about the country than about the effects of those particular variables.

I want to end up in a place very much where Mark is, arguing for targeted case studies to figure out the countries that are perhaps more like the countries being affected today, and looking at them in much more detail. I guess I’m making a plea for theory, for figuring out what variables you actually think do matter and are legitimate to put on the right-hand side; for trying to deal with the tremendous omitted variable bias that we have; and for actually looking for linkages, as Mark suggested, between a distress variable and different types of spending.

Mr. Goldstein: Of the econometric results of the paper, the one that surprised me the most was the failure to find significance for external conditions. This just seems not believable to me. If you are in the crisis and much of the rest of the world is in a crisis, you can’t export much. If you are thinking about when the United States gets out, it makes a big difference if we are coming out early and the rest of the world is still depressed, we are not going to be able to export so much. If we are all coming out at roughly the same time, then we can all export to each other. And the same dynamic that produced the big dip in trade is going to help on the upside. Isn’t that right?

Mr. Cecchetti: On Christy Romer’s comments, I obviously agree that it’s tough going to do this and that you deal with data you have.

We may or may not think Ghana and the Côte d'Ivoire have much to do with what's going on right now, but we can have a look.

I will say a lot of measures you would naturally go to to see about the severity of the crisis—you mentioned credit spreads—you are not going to find a lot of that. In some of these cases, you might be able to get sovereign credit spreads, but in a lot of these cases you are not even going to have those.

I am very sensitive to the quality of the data as well. All I can say is that we did the best we could, and I'll be unapologetic about that.

As for Morris Goldstein's comment, we looked; we had growth in the rest of the world, we had whether or not there were crises elsewhere, and I was as surprised as you are. But it is not there.