

General Discussion: Central Banks and Financial Crises

Chair: Stanley Fischer

Mr. Fischer: We all quote Bagehot selectively and forget he operated in a fixed exchange rate environment. Willem says the U.S. has to get the current account adjusted and at the same time should be running higher interest rate policies. The dollar must be an essential part of any of that adjustment, and higher U.S. interest rates don't help in that regard. The Bagehot rules don't translate exactly to a system where the exchange rate is flexible.

Secondly, about Mundell's Principle of Effective Market Classification. One of the first things that we learned in micro is about constrained optimization. Sometimes you have one constraint and two objectives, and you have to trade off between them. That's micro. In macro and in the Mundell Principle—incidentally I learned of it as being Tinbergen's Principle—rhetoric tends towards the view that you need as many instruments as targets, and that tradeoffs somehow are not allowed. We all frequently say, "Well, the Fed's only got one instrument. It has to fix the inflation rate." There may be reasons of political economy to say that, but it's not true in general that you can't optimize unless you have as many instruments as targets.

Mr. Barnes: In criticizing the Fed for being too sensitive to perceived downside risks in the economy, Willem asserted it's easier for a central bank to respond to a sharp downturn in activity than to

respond to embedded inflation expectations. That may be true a lot of the time, but it is not clear to me it is true in the context of a post-credit boom when you have high risk of negative feedback loops. I would argue the experience of Japan suggests it can be very difficult to get out of an economic downturn in that kind of environment.

Mr. Makin: I very much enjoyed all three presentations. I wanted to very quickly ask the question regarding the little boy with his finger in the dike.

First, is the little boy the Fed, the Treasury, or some other institution? Secondly, I think you said, "He keeps his finger in the dike until help arrives and everybody is better off."

What if it takes a really long time for help to arrive in the sense he stuck his finger in the dike and a big wave came along called a recession? What would he do then? Those become critical issues. Finally, in order to influence the answer, I would suggest the bad wall construction was probably the fault of the commercial banks and the people. Silly to be living on the flood plain are the real estate speculators. Maybe with that richer texture, you could comment.

Mr. Frenkel: At this conference, we have discussed issues on housing, financial markets, regulation, incentives, moral hazard, etc., but we have discussed very little the macro picture. That is also the way I see Willem's paper.

Three years ago at this conference, we said the current account deficit of the United States is too big, it is not sustainable, and it must decline. The U.S. dollar is too strong, it is not sustainable, and it must decline. The housing market boom is not sustainable; prices must decline. The Chinese currency, along with other Asian currencies, is too weak; they must rise. Some even said interest rates may be too low and pushing us into more risky activities, so we must think about risk management.

Here we are three years later and all of these things have happened. We may have had too much of these good things. There are a lot of spillover effects, negative things or whatever. But what we have had is a massive adjustment that was called for, needed, and recognized.

Within this context, the question is, How come all of these disruptions have not yet caused a deeper impact on the U.S. real output? There the answer is the foreign sector. We have had a fantastic cushion coming from the foreign sector. In fact, if you look at U.S. growth, you see all the negative contributions that came from the housing shrinkage were offset by the positive contribution that came from exports. That positive contribution was induced among others by the declining dollar and all of the things we knew had to happen.

In fact, we are in a new paradigm in which last year 70 percent of world growth came from emerging markets and only 30 percent from the advanced economies. Within this context, when the dust settles and the financial crisis is behind us, and the lessons are learned, let's remember one thing. This cushion of the foreign sector is essential for the era of globalization.

All of these calls for protectionism that are surfacing in Washington and elsewhere, including the U.S. election debate, would be a disaster. The only reason why the United States is not in a recession today, in spite of the fact there is a significant slowdown, is the foreign sector. We can talk about extinguishing fires and all of these other things, but we need to remember the macro system must produce current account deficits and imbalances that do not create incentives for protectionism. Let's bring the discussion back to the macro issues.

Mr. Mishkin: When I read this paper, I said this paper has a lot of bombs, but maybe a better way to characterize it is there are a lot of unguided missiles that have been shot off now in this context. I only want to deal with one of them, which is the issue of the risk management precautionary principle approach.

Willem is even stronger in his statement because he just called it "bogus" in the paper, but actually calls it "bogus science" in his presentation. His reasoning here is the only reason you would use a precautionary principle, or this risk management approach, which many know I advocated, is because of potential for irreversibility in terms of something bad happening.

He goes to the literature on environmental risk to discuss this. I wish he had actually read some of the literature on optimal monetary

policy because it might have been very helpful in this context. Indeed, the literature on optimal monetary policy does point out when you have nonlinearities, where you can get an adverse feedback loop, in particular the literature I am referring to—which has been very well articulated—is on the zero lower bound interest rate literature. In fact, it argues what you need to do is act more aggressively in order to deal with the potential for a nonlinear feedback loop. On that context, the issue of science here does have something to say, and we do have literature on optimal monetary policy that I think is important to recognize in terms of thinking about this.

One other thing is that Mr. Yamaguchi mentioned the Adrian-Shin paper. I didn't make a comment on that before, but one little comment here. What that paper does—which is very important—shows there is another transmission mechanism of monetary policy. That was very important. It indicates you should take a look at that in terms of assessing what the appropriate stance of monetary policy should be.

It does not argue you have to go and lean against the wind in terms of asset price bubbles. We should be very clear in terms of what the contribution of the paper was. In this case, I am agreeing with Willem, just so we even it up.

Mr. Trichet: I thought the session was particularly stimulating. Alan, you said it was not Willem's habit to pull punches. Well, I think we had a demonstration because we had our own punches, too.

I would like to make two points. The first point is to see in which universe the various central banks are placed. For us, things are very clear. We have—as I have often said—one needle in our compass. We don't have to engage in any arbitrage between various goals. We have a single goal, which is to deliver price stability in the medium term.

It is true that at the very beginning of the turmoil and turbulences in mid-2007, we thought it was very important to make this point as clearly as possible. It was nothing new there, of course, because it was only a repetition of what we had always said. It was understood quite correctly that we had one needle in our compass, and we were very clear in saying that we then would strictly separate between what was

needed for monetary policy to deliver price stability in the medium term and what was needed to handle the operational framework in a period of very high tensions in the money market.

My second point relates to the remark by Willem or Peter before, namely that the ECB did pretty well in the circumstances of turmoil in terms of the handling of the operational framework.

After further reflection, and taking due account of the very special natural environment of Jackson Hole that is full of biodiversity, it seems to me that the notion to consider regarding the origin of our operational framework is diversity. We had to merge a lot of various frameworks in order to have our system operate from the very start of the euro. Three elements stand out: first, in contrast to the Bank of England or the Fed, we accepted private paper from the very beginning in our operational framework, which was a tradition in at least three countries, including Germany, Austria, France, and others.

Second, we could refinance over three months because again it was a tradition which had been a useful experience in a number of countries, again including Germany. And third, we had a framework with a very large number of counterparties, which appears to have been, in the circumstances, extraordinarily useful because we could provide liquidity directly to a very broad set of banks and did not need to rely on a few banks to onlend liquidity received from the central bank.

All this, I would say, was the legacy of the start of the euro. It permitted us to go through the full period without changing our operational framework. Of course, we continuously reviewed this framework, as we have done in the past before the turmoil as well.

Again, I believe that the diversity of the origin of our operational framework, due to the fact we had to merge a large number of traditions and a large number of experiences, proved very valuable.

That being said, we have exactly the same problems as all other central banks. We still are in a market correction. For a long time, I hesitated to mention the word “crisis” myself and preferred to label it “a market correction of great magnitude with episodes of a high level of

volatility and turbulences.” I remained with this characterization until, I would say, Bear Stearns. Now I am prepared to speak of a crisis.

Let me conclude by saying how useful I find interactions like this one. We need a lot of collegial wisdom to continue to handle the situation, and I will count on our continuous exchange of experiences and views.

Mr. Sinai: Of the many, many points in this interesting paper, there are two I want to comment on. One is in support of Professor Buiter, and the other is not.

One is on core inflation, and the other is on the asset bubbles and whether central banks should intervene earlier. On this last one, I don't really see how the consequences of asset bubbles are in current existing policy approaches, looking back over the last few bubbles we have had, either in the policy framework at the time and policy rates or in financial markets.

For example, the U.S. housing boom-bust cycle and housing price-asset bubble bursting. It is a bust and I would argue that we are in the midst, and still are, of an asset-price bubble bursting. We also have a credit and debt bubble, and those prices and those securities that represent that have been bursting and declining as well. We see that all around us all the time.

I don't think that was in the approaches of any central bank a year or two ago—the consequences of what we see today and of what is showing up in terms of the impacts. Similarly so, the dot-com stock market bubble's bursting—and some people call the general U.S. stock market bubble bursting in 2000-01—that wasn't in the existing approach to monetary policy, and its consequences surely affected the future distribution of outcomes.

For an issue of not leaning against the wind and not acting preemptively in an insipient bubble, these two examples in the recent history convince me we ought to seriously consider alternatives to waiting, to waiting until after a bubble bursts—that is, what you call the Greenspan-Bernanke way—and what I just heard Rick Mishkin continue to support. Of the choices available, there is a lot to be

said for finding methods to intervene earlier when you have insipient bubbles. That would be true for all central banks, and we have an awful lot of them.

There was sentiment here last year, I think Jacob Frenkel and Stan Fischer, increasing sentiment in the central bank community to think about intervening before a bubble bursts. So, I don't agree with you at all on that one.

On the issue of core inflation, I really do agree with you in terms of central banks and what they should focus on. The case of the U.S. core versus headline inflation rate is an example. Core inflation in the United States provides the lowest possible reading on inflation of all possible readings—that is the core consumption deflator. If you follow that one you are going to get the lowest reading on inflation of all the possible measures that exist on inflation. This means that you are going to run a lower interest rate regime, if you focus on that as the key inflation barometer. We did run a very low interest rate regime based on that for quite a long time, and we see the consequences of that today in what's going on in the highly leveraged events off the housing boom and bust.

Second, Alan, you showed us three charts. The third one, to me, is the most relevant because crude oil prices on average have been rising now for seven years, so it's hardly a temporary spike or a transitory spike. I think we would all agree it's part of a global demand-supply situation.

Finally, in taking those charts and making conclusions that core inflation will be a good predictor of headline inflation may have been true in the past, but given the changed structure of inflation and the global component of it this time, the econometrics of the backward-looking approach that is implicit in looking at those charts and drawing conclusions are subject to some concern.

Mr. Hatzius: I'd like to address Willem's assertion the Fed eased far too much, given the inflation risks. From a forward-looking perspective, which I think is the perspective that matters, the Fed's influence on inflation primarily works via its ability to generate slack in the economy. Even with the 325 basis points of cumulative easing, the economy is already generating very significant amounts of slack and

that is most clearly visible in the increase in the unemployment rate, from 4.4 percent early last year to 5.7 percent now.

Most forecasters expect the unemployment rate to increase further to somewhere between 6 and 7 percent over the next six to 12 months. That would resemble the levels we saw at the end of the last two recessions. In other words, we are already generating the very disinflationary forces that higher interest rates are supposed to generate, despite 325 basis points of monetary easing.

My question to Willem is, What is wrong with that analysis in your view? Is it that you disagree with the basic view of how Fed policy affects inflation—namely, by generating slack? Or is it that you think the sustainable level of output has fallen so sharply that a 6 to 7 percent unemployment rate will be insufficient to combat inflationary pressures? Or is it that you think these expectations of a 6 or 7 percent unemployment rate are simply wrong and the economy is going to bounce back in a fairly major way?

Mr. Harris: I wanted to underscore the idea that we can't make this simple comparison between European and U.S. monetary policy—Willem said in the paper there are rather similar circumstances in Europe and the United States. However, the U.S. economy has gone into this downturn much faster than Europe. The shocks to the U.S. economy are greater. We know the economy would have been in even worse shape if the Fed hadn't eased interest rates, and we also know it is not over. It is not over in the United States, and it is not over in Europe.

It may turn out that what happens is that Europe just lags the Fed in terms of rate cuts going forward. I don't understand the idea there are rather similar circumstances in Europe and the United States.

I have the same question as Jan Hatzius. With the unemployment rate headed well above 6 percent, what level of the unemployment rate would restore the Fed's credibility here?

Mr. Kashyap: There is a sentence in your paper I encountered on the airplane, so I did not have the Internet to check this. It says, "Ben Bernanke, Don Kohn, Frederic Mishkin, Randall Kroszner,

and Charles Plosser all have made statements to the effect that credit, mortgage equity withdrawal, or collateral channel through which house prices affect consumer demand is on top of the normal (pure) wealth effect.”

I don't remember all of those speeches, but I have read the Mishkin one pretty recently. There is a long passage in it directly contradicting this statement. If you are going to have these really tough comments, you need to have footnotes where you quote them verbatim. You can't say he essentially said this. For instance, in Rick's paper there are a couple of pages where he has this analogy that going to the ATM may Granger-cause spending even if it is only an intermediate step between your income and spending. In the same way, mortgage equity withdrawal may only be an intermediate step between greater household wealth and higher consumer spending. Maybe there is some other part of his story that I forgot, but it just doesn't seem to be fair because this is Fed publication and people will assume that it must have been fact checked—I doubt people are going to go back to read the speeches themselves. If you are going to say something like that, given you are already at 140 pages, what's the cost of going 170 pages and documenting it so that we could see?

[Note: Following the symposium, the author added an extended footnote as requested by Professor Kashyap.]

Mr. Muehring: The panel certainly lived up to its billing. I particularly wanted to note Mr. Yamaguchi's heartfelt commentary, which was something to think about on the way home.

I wanted to ask a question that goes to the one theme that seems to run throughout this conference, namely, is the central role of asset-based repo financing in the current crisis that Peter Fisher mentioned? It was also in the Shin paper, and several of the others, and can be seen in the liquidity hoarding by banks, who wouldn't accept somebody else's collateral and vice versa and thus this central critical importance of the haircuts in this crisis.

One is to ask, so, one, do the panelists think there is a way to restrain the leverage generated through the repo financing during the upswing? And, two, if they could make just a general comment on

the merits of the various term facilities the central banks—the Fed in particular—have created, do they see limits in what can be achieved through the term liquidity facilities and how do they envision the future place of the facilities if the central banks are required to be market makers of last resort going forward?

Mr. Weber: I only have a comment on one section of the paper, which deals with the collateral framework: Willem and I have discussed this in the past. He appears to have the misperception that the price or value of an illiquid asset is zero. This is why he believes that there is a subsidy implied in our collateral framework. But here are the facts.

We value illiquid assets at transaction prices, and it could be the price of a distressed sales or a value taken from indices, such as the ABX index that was discussed yesterday. In addition, we then take a haircut from that price and we are in the legal position to issue margin calls and ask for a submission of additional collateral to cover the value of the repo.

In the euro system, for example, the Bundesbank has banks pledge a pool of assets to the repo window, which is usually used between 10 to 50 percent. To cover the value of the outstanding repos, the entire pool is pledged to the central bank, and we can seize all that collateral to cover the amount due. Thus, I disagree with the statement that there is an implicit subsidy implied because the repo is well-covered due to these institutional provisions.

Let me make a second point. If you have a pool of collateral pledged and the use of that pool moves between 10 to 50 percent in normal times to a much higher use of collateral, it is a very good indication that banks need more backup liquidity, in the sense of central bank liquidity, and the bank may be in distress. Thus, the endogenous increase in the percentage use of the pool for us is a very good early indicator of potential liquidity problems of that bank in refinancing in the market because, as a consequence, it switches from market liquidity to repo liquidity.

To sum up, Willem, some of the allegations you make do not really hold up.

Mr. Buiter: First of all, I want to address the culturally sensitive issue—which is the little boy with his finger in the dike. That story was, of course, written by an American. No Dutchman would have written it because it is based on a wrong model. That hole in the dike that you can plug with your finger, you can leave alone quietly. It will not cause a flood. There was no threat.

It is also good to know that, despite the length of the paper, some people want to lengthen it. All I can say is, it's only this long because I didn't have time to write a shorter paper.

Very briefly, my point is not that circumstances weren't unusual and exigent and difficult for central banks, but even at the time the choices were made there was knowledge and other choices that could have been made. They are options available that would have been superior to the methods chosen.

One of them obviously is the way in which—take the Fed as an example—the PDCF and TCLF securities are priced. That is just crazy. You don't let borrowers (or the agent of the borrowers) determine the value of the collateral they offer you especially if it is illiquid. There are other options.

In the case of Bear Stearns, one wonders why exigent and unusual circumstances weren't invoked to allow it to borrow directly at the discount window. There are options that were open. In the case of the Bank of England, of course, the list of why did they wait so long, for the first few months when there was no lender of last resort. The facility accepts ad hoc ones when there turned out to be no deposit insurance worth anything and there was no insolvency regime for banks. It is quite extraordinary. So there were options that should have been used at the time.

On risk management: I fully agree with Alan. You don't need risk management, or whatever it is, to justify cutting rates. However, risk management was used to provide justification for cutting rates and especially the nonlinearities' irreversibility soft or light version of risk management. We all have our nonlinearities. You can put it at zero for the normal interest rates. Gross investment can't be negative either. But that is not a nonlinearity. That bias goes the other way.

So the notion that plausible systemically important nonlinearities would create a bias in favor of putting extraordinary weight on preventing a shock collapse of output rather than safeguarding it against high and rising inflation is not at all obvious to me. If the arguments aren't really strong, one shouldn't arbitrage the words from serious science into social science.

Alan selectively ended his quote on the core inflation at a point it would have contradicted what he said: "Core inflation is relevant to the price stability leg of the Fed's mandate to the extent that it is a superior predictor of future headline inflation, over the horizon the Fed can influence headline inflation." And then it goes on: "a better predictor not only than headline inflation itself, but than any readily available set of predictors."

So whether or not core inflation is a better predictor of headline inflation, headline inflation itself is neither here nor there. It's the best or necessary condition for being relevant, not as a sufficient condition.

That anybody should use univariant predictors for future inflation to formulate policy is a mystery to me. So, I just find that framework doesn't make any sense.

On core inflation, the key message is to statisticians especially: "Get a life!"

Get away from the monitor. Get away from the keyboard. Open the window. See whether there might be a structural break in the global economy that is not in the data—2.5 billion Chinese and Indians entering the world economy systematically raising the relative price of non-core goods and services to core goods and services is not something that has been happening on a regular basis in samples that are at our disposal. You have to be very creative and intelligent, not bound by whatever time series your research assistant happens to have loaded into your machine.

Can the central bank get timely information about liquidity and solvency of individual institutions without being supervisor and regulator? That is a key question. If there is a way of getting the information, without the regulatory and supervisory powers, which make

an interesting subject for capture, then we are in the game. In the United Kingdom—it was supposed to work this way with the Bank of England—tagging along was the FSA. It didn't work. There are institutional obstacles to the free, unconstrained, and timely flow of relative information. So, this is a deep problem.

I would think, if the central bank were not subject to capture, then I would prefer the interest rate decision be with the central bank. It is only when the central bank has to perform market maker and lender-of-last-resort functions is there is a serious risk of the official policy rate being captured, as I think it was in the U.S. That would be reason for moving it out. It is the second-best argument of institutional design.

On the quotes, I cited all the papers that I quoted. They are in there. I have the individual quotes, if you want them. I can certainly put them in, but especially your representation of the Mishkin paper, which I assume is the Mishkin paper I cited at length in the paper, is a total misrepresentation of that paper. There are two sets of simulations. One is just a regular wealth effect and the other is part of the wealth effect or financial assets. It is doubled to allow for a credit channel effect. There is very clearly in that particular paper a liquidity effect, a credit channel, or collateral effect on top of the standard wealth effect. I will append the paper, if that makes you happy.

Mr. Blinder: I wanted to square something Jean-Claude Trichet said and then just react to a couple of questions.

The legal mandates of the ECB and the Federal Reserve are different. It follows from that, that even if the circumstances were identical, you would expect different decisions out of the ECB governing counsel and the Federal Reserve. I wanted to underscore that.

Secondly, about the little Dutch boy: Willem is correct. It is an American tale, but I can tell him that, if I ever see a leak in the Lincoln Tunnel, I call the cops.

John Makin asked if it was the Fed or whoever was supposed to put the finger in the dike. Yes, it was the Fed because the Fed can and did act fast. Waiting for help? Yes, the Fed could have used more

help from the U.S. Treasury, for example, and over a longer time lag from the U.S. Congress, which it is going to get—grudgingly and slowly—and I might say from the industry. Let's leave it at that.

John asked the question, If there were a recession, then what would happen? If I can paraphrase Andrew Mellon, this is my answer. Liquefy labor, liquefy stocks, liquefy the farmers, liquefy real estate. It will purge the recession out of the system. People will have work and live a better life.

Finally, on core versus headline inflation: I really want to disagree with Allen Sinai and implicitly again with Willem. At the end of this, I am going to propose a bet with 150 witnesses.

Core inflation is only below headline inflation when energy is rising fast. When energy is rising slowly, it is above. Over very long periods of time, there is no trend difference between the two. Now there was between 2002 and 2008, I think. It looks like it's over, but who really knows if it's over?

But I do want to cite the theorem that no relative price can go to infinity. So, we know Chart 3 that I sketched just can't go on forever, no matter whether there is China, India, or what. It just cannot happen.

The concrete bet that I would propose to either Willem or Allen is that over the next 12 months—and you can pick the inflation rate (I don't care if it's PC or CPI)—the headline will be below the core. If you'll give me even odds on that, I'll put up \$100 against each of you.