

General Discussion: Rethinking Capital Regulation

Chair: Stanley Fischer

Mr. Liikanen: Thank you very much for a very innovative paper. First a comment and then a question.

This comment comes actually from Raghu's paper delivered here three years ago in 2005 titled, "Has Financial Development Made the World Riskier?" His reply was "Yes." All the critics here said, "No."

So I don't dare to criticize your paper, Raghu. That's all. But I want to put a question on the present paper. We are discussing very much in Europe and other areas about multinational banking institutions. How would this apply in the multinational case, where banks operate, let's say, in four to five countries? Why is it such a concrete question? We have now in Europe banks, for instance, which are not systemically important in the home country, but are systemically important in the host country. The cross-border solution is quite critical to us. Have you had any thoughts on that issue?

Mr. Calomiris: I want to applaud the paper and say that I think it may be a good idea. I just want to offer three quick comments to get your reactions about possible refinements or problems you may want to address.

First, it is interesting to ask, How is the financial system going to react if this becomes a reality? I can think of two obvious reactions

that are undesirable. The first reaction is a substantial increase in the correlation of risk in the banking system. Why? Because now all banks have a very strong incentive to write deeply out of the money S&P 500 puts. So the amount of systemic risk goes up when you insure systemic risk. That is an important potential problem.

The second problem is that we are collateralizing this insurance—mono-line insurance companies might provide this insurance—and we are going to collateralize it with Treasury bonds. That will encourage them to provide other kinds of credit enhancement to the banks more aggressively on an uncollateralized basis, so they can asset strip to get back to where they wanted to get to in the combined exposure they have to the banks. So you collateralize this exposure, but then you create more uncollateralized exposure that basically undoes it.

Third, as I read your paper, you seem to be saying that we might as well give up on the ability to enforce traditional capital regulation based on accounting concepts. This seems to require further discussion.

Mr. Blinder: I liked this proposal very much ... I think. That is what is leading to my question.

The first point I want to make takes up right where Charlie left off. In the presentation of the paper, there is a lot of prose that sounds like and says raising capital has a lot of downsides and is not such a good idea. But the proposal does raise capital requirements. That is just a stylistic question. I don't think you are wrong about that. I think you are right about that, but there is a bit of a tone, as Charlie said, that raising capital is not a good idea. The paper is really about raising capital in a somewhat different way.

Now here is the question. A recent year's piece of Wall Street wisdom you all know is that in a crisis all correlations go to one. So this is what I am wondering about. This is an insurance policy that will pay off only in very bad states of the world when the portfolios of just about everybody are taking a hit. This is part of the question. Can you find a class of people who are actually enjoying these bad times? Because if you can't, and I don't think you can, it seems to me the insurance premium on this is going to be extremely high because you are making people pay at times when they don't want to pay. I

am wondering about that vice as against, for example, the ingenious suggestion we just heard from Mr. Rochet or Flannery's idea of these convertible bonds, which are basically forcing people to acquire stock when it's cheap.

Mr. Sperling: My question is for the authors, and it is about the insurers. My question is—as you are thinking about your proposal actually succeeding—whether you are at all worried you might create a new class of too-big-to-fail, too-interrelated-to-fail institutions? You talk about will people do this? Now you're immediate answer will be, “Yes, but we have this lockbox”—but that lockbox is highly essential to your model that you are not creating too-big-to-fail insurers. Even if you do have this lockbox, presumably there would be a couple of institutions—Fannie Capital Reinsurance whatever—and they would become very good at this, and they would rely on being paid to roll over. I wonder whether you think, if this developed, if the companies insuring the capital requirements were to go under, whether you would find yourself in another different too-big-to-fail regulatory issue?

Mr. Holmström: Yes, two comments. One going back to the incentive problem that you talked about: It's fairly easy to blame because incentives are always in a tautological sense the cause.

There is some anecdotal evidence on headquarters of institutions being liable rather than their traders. Allegedly the UBS board and top management kicked off a campaign to get traders into lucrative by risky derivatives. In the Scandinavian crisis, it is interesting that banks that were decentralized and let their loan managers decide on the loans largely on their own, those banks actually did pretty well, whereas banks where the center decided on the loan-to-value ratio as a way of controlling lending, those banks really got into trouble. That is true both in Finland and Sweden. So that indicates that the problem is not the rogue traders necessarily. I am not saying there isn't that problem, too, but I would urge people to look carefully at the incentives before they jump to conclusions about the underlying problem.

Then a comment on your insurance scheme: It may be a good scheme if the problem is to redistribute a fixed amount of

collateral or Treasuries within the private sector. But what if there aren't enough Treasuries? Then government has a role in supplying additional Treasuries.

Government and private sector insurance are not competing schemes; they are complementary.

I also want to emphasize that the government's ability to inject Treasuries ex post saves a lot on the deadweight cost of taxation. The lockbox of Treasuries that you need in your scheme incurs needlessly high deadweight costs of taxation. With private insurance, you have to determine contingencies in advance, but you can't forecast what contingencies will happen. You may think it's some crisis of the sort we see now, but if it is a very different crisis, we need ex post judgment and intervention, and only government can provide that.

Mr. Carney: I join the others in complimenting the paper and the idea. I want to address this, though, by picking up on Peter Fisher's point on consolidation in the industry and think about how your proposal might influence consolidation. One of the things, certainly at the margin, is capital is going to flow to the relatively stronger institutions. Or, to put it another way, strong institutions will also get capital with this scheme.

That raises a couple of issues that always can be addressed. On the one hand—for the stronger institutions right now—part of the reason why their share prices are holding up is because they are not going to issue additional capital. So there is this dilution issue with the proposal. Do you have to add to this idea an ability to have the option to flow through the capital proceeds to the shareholders on a tax-efficient basis, so you don't get an overhang for stronger institutions? Point one.

Point two: You mentioned consolidation, but obviously when there is consolidation in the industry, it is almost exclusively done on an equity basis—to achieve a tax-free rollover. Here you would have to do consolidation for cash.

The last point: One thing we haven't had a chance to address is there are some real accounting issues right now that are preventing

consolidation in the sector. As we think going forward, some of these issues may need to be addressed in order to get us out of it.

Mr. Lindsey: I would like to inject an ideological heterodox note here. When I hear all your talk about the various agency problems and also the difference between endogenous and exogenous risk, why don't we default to what we've historically always defaulted to, which is some combination of nationalization and monetization? After all, who has better information than the government and regulator? When we think about endogenous versus exogenous risk, let's face it, all the exogenous risk, as you described, or much of it has to do with public policy. I hate to ask the question I've just asked, but you haven't convinced me yet that we shouldn't default back to good old Uncle Sam.

Mr. Meltzer: Like everyone else, I think this is a very interesting paper. It's one of several papers here like the paper by Charles Calomiris and many others that at least try to think about the problem of the incentives that are created by the regulation. That is something very different from what lawyers usually do. They don't think about the incentives, and therefore set up what I call the first law of regulation. They regulate, and the markets circumvent.

We have a system where we're always going to be subject to problems because financial institutions borrow short and lend long—and they're subject to unforeseen permanent shocks, which are hard or impossible to anticipate in most cases. So we've gone from a system which worked very well—I am going to talk about that—to a system which in my opinion cannot survive. We neglect in our discussion, of course, one of the reasons why we've shifted from that system. It is called the Congress, or more generally, the members who are much more interested in redistribution than in efficiency.

We had a system which was relatively efficient and worked for a hundred years, and that was the British system that became famous as Bagehot's rule. But Bagehot didn't criticize the Bank of England for not using his rule. He criticized them for not announcing it in advance. He was an early rational expectationist. He said the Bank of England should announce the rule and, if they did, there would

be fewer crises. That rule worked very well in Britain for a hundred years. The reason we don't have it is because today Congress and regulators are much more concerned about redistribution than they are about efficiency. Bagehot's rule said, "Let them fail."

Failure in the modern world would mean that we wipe out the equity owners and we wipe out the management, as we did on a couple of occasions—for example, Continental Illinois Bank—and lend freely to those people who have a problem. Anna Schwartz showed, as they say, that this worked very well in the U.K. for over a hundred years. That was certainly a system which was a multinational system. They were lending all over the world. They got into the famous Bering crisis because of Argentina's default and so on. But they managed to survive through those crises without great problems of the kind that we now have.

Who will claim the current system is doing better? Not I. I close with this reminder, especially for the authors. In the 1920s, if you went to a bank, the thing that stood out for you most was on the window. It said "capital and surplus" and it listed what those were. By the 1950s, those were gone, and what it said was "member of FDIC."

Franklin Roosevelt recognized that FDIC would create a moral hazard problem. That is why he opposed it. Of course, these rules—like the FDIC and others—may have very good properties, but they have created many of the risks we have. In order to respond to those risks, the best thing we can do is go back to Bagehot's rule—that is, let them fail, but clean up the secondary consequences.

Mr. Redrado: I have been thinking about the implementation capacity of your insurance proposal. In particular, how to make it operational in the international arena, especially when you look at international banks that could suffer losses in one country and shift it to another or move operations from regulated to less-regulated places. What I wonder is: What kind of counterparty have you thought about? When I think about how to implement such a proposal, it seems to me you could give a role to multilateral entities, in particular, the BIS, where most of the central banks have a portion of their own reserves. It could be a conduit to be a counterparty for an

international situation. Moreover, in rethinking the role of the IMF—let me recall that you and I have talked about the possibility of irrelevance of the IMF. I wonder if you have thought that international financial institutions could have a role in being the counterparty of this insurance scheme.

Mr. Crockett: I like the insurance proposal quite a lot, but as you recognize, of course, there are lots of details that need to be looked at. One of them that I don't think has been mentioned yet is the valuation of the claims the insurer would get in the event it was activated. It is very difficult to value a franchise in the circumstances of a financial crisis, if the insurer is constrained automatically to put in the amount, which of course is in the lockbox and then transferred.

Mr. Rosengren: The idea of contingent capital is very interesting, and it is a good idea. You framed the proposal in terms of insurance. It would seem like a simpler structure would be using options, so that if you had long-dated, out-of-the-money puts on a portfolio of financial stocks, it would seem to be much easier to implement. It would eliminate some of the counterparty concerns and implementation concerns that people raised. You could set the capital relative to the strike price, rather than the premium you paid at initiation. You could imagine a situation where it would have many of the characteristics that you want, but get around some of the implementation problems that people have discussed.

Mr. Bullard: I liked this paper. There are many nice market-oriented ideas. I think the idea of fire-sale asset prices is not so good. The idea of rationalizing government intervention based on the existence of times of large classes of assets trading below fundamentals somehow does not strike me as sound. It links up to this idea of, How is this trigger going to work when, as previous speakers have said, it is very difficult to value the firm in the middle of a crisis? What is the role of market to market in this scheme?

Mr. Stein: Thanks very much. There are a lot of terrific comments and we'll try to get to a subset of them. First to Jean-Charles, who raised this question of, Do you want to have the private sector do

this, in which case you rely on the lockbox as opposed to having the government do it?

A couple of issues. I don't think the 100 percent lockboxing is expensive or socially costly, if there is not a general equilibrium shortage of Treasury securities. Now you can earn the interest on them. There is nothing dissipative happening. It is only if there is some kind of a general equilibrium shortage. So that is one reason. If you thought there was an equilibrium shortage, you might be drawn to having the government do it.

The other reason, as Bengt alluded to, to have the government do it, would be, Our thing relies on defining a trigger *ex ante*. We have to specify what the bad state looks like. It is bank losses greater than \$200 billion.

The government can do it like pornography. They can just recognize it when they see it, which is an advantage. They can condition on more information.

The reason we are drawn to the private option is in direct response to this question. We think there is a downside of having the government do it, which is with this discretion comes political economy concerns of all sorts. It's not that this might not be complementary, but to the extent you can go as far as you can with the private sector, that is a good thing.

Charlie Calomiris asked about herding. Will everybody want to take the same kind of risk? There is a logical argument here. It is a little more subtle than maybe people realize. It is not the standard moral hazard problem. You don't get paid back based on your own losses. So there is no expected return rationale for herding. There is only a second-moment rationale for herding that it might lower the variance of your portfolio. Something like that. Some of this is addressed with the trigger. If this option is sufficiently far out of the money and you do the same stupid thing as everybody—and instead of hitting a crisis—we just hit a very bad state, such that the trigger is not passed. You will bear all the burden of this. One virtue of this option structure is, if you set it sufficiently far out of the money,

there is a big deductible on the herding strategy as well. Just wanted to make that one point.

A point that both Charlie and Alan Blinder raised is, Are we giving up on capital regulation? No. If we said that, we've misspoke. The way I think about it is, We recognize there is going to be capital regulation. In fact, there is going to be a push to raise capital, and we want to make a form of capital that is cheaper. The specific mechanism is, What makes capital expensive is giving guys discretion in all states of the world raises agency costs. We want to give them cash only in a specific, smaller number of states of the world where the agency costs are lower because the social value of having banks do a lot of investment is higher.

To Alan's second point, the CAPM risk premium. You said, "Well, the insurer is on the wrong side of a contract which pays out in a very adverse state of the world."

That's going to have not only an unexpected return component to the pricing, but it should have a beta component. That absolutely must be right. Of course, this is true when you give somebody equity as well. There are those bad states. They are going to lose money in those bad states with unconditional capital.

You asked about the Flannery proposal. The Flannery proposal is similar to ours—for those of you who don't know it—but it is insurance that is firm-specific, so it will pay off whenever the individual bank does badly as opposed to the whole system doing badly.

That just pays off in more states of world. It pays off in the very bad systemic states of the world and it pays off in the firm-specific states. Since it's paying off in more states, it has to be more expensive. There is certainly an equilibrium cost to be borne here. I don't know if you get around it.

Last one I'll speak to—put options. Our thing is a put option. The strike price is, as we have envisioned it, bank earnings, rather than stock prices. There is a potential real problem with striking the option on stock prices because they are endogenous, and you worry about all kinds of feedback effects—manipulation and things. If

people think the banking sector is not going to be paid off, that will affect the prices. You like these things to be hooked to something that is hopefully a little bit more exogenous.

Mr. Kashyap: Let me start with Allan Meltzer's point. The Bagehot advice in these illiquid markets is very difficult to implement because there are multiple equilibria. Let's suppose we are not sure what the price is because a security is not trading and everybody is unsure what the price is going to be. If you don't lend, that removes buyers, pushes down the price, and something that could start out as a liquidity problem quickly becomes a solvency problem. In figuring out whether or not you want to mark to market and just make these decisions is much more difficult in practice than it was a hundred years ago. So as a practical matter, it is very difficult to decide how to apply Bagehot when you are looking at actual entities.

On the multinational question that came up several times, we struggled with a way to do that. The way we would imagine this is you will have a principal regulator. You will have to go to your principal regulator and convince them your operations across all markets are substantially insured. Whether the BIS would be the place the reporting goes to, so everybody knows what the operations are across markets, is a detail that is quite important to work out.

We are worried about this tradeoff between a bank getting in trouble in Vietnam and then exporting its problems into the United States. We would like to make sure the Vietnam stuff is insured there, the U.S. part is insured in the United States, and there is enough collective insurance.

Let me just close with saying two broad things. First of all, we view this as a complement to lots of other good existing proposals. Secondly, even if you don't buy into the proposal, we hope to change the discussion about capital regulation from simply trying to keep forcing them to hold capital and never thinking about why they don't want to hold it, to recognizing there are good reasons why they view capital as expensive. Attempting to design regulation so that you address those underlying frictions—whether using our solution or not—we think that is the single biggest point.