

## General Discussion: Has Financial Development Made the World Riskier?

---

*Chair: Malcolm D. Knight*

**Mr. Summers:** I speak as a repentant, brief Tobin tax advocate, and someone who has learned a great deal about the subject, like Don Kohn, from Alan Greenspan, and someone who finds the basic, slightly lead-eyed premise of this paper to be largely misguided. I want to use an analogy, not unlike the one Hyun Song Shin did, but to a rather different conclusion.

One can think of the history of transportation over the last two centuries as reflecting a gradual and determined move away from arm's length transactions. People once supplied their own power. Then, they started carrying on transportation using tools that they owned. Then, they increasingly relied on tools that other people owned that were provided by intermediaries.

In that process, the volume of transportation activity increased very substantially. Over time, people became almost entirely complacent about the safety of the transportation arrangements on which they relied. Large sectors of the economy came to be organized in reliance on the capacity of planes to fly and trains to move. The degree of dependence on individual hubs—like O'Hare Airport—increased substantially. The worst accidents came to be substantially greater conflagrations than they had ever been in an earlier era.

Yet, we all would say almost certainly that something very positive and overwhelmingly positive has taken place through this process. Something that is overwhelmingly positive for individuals is that the number of people who die in transportation-related episodes is substantially smaller than it was in an earlier era.

The best single way to think about the process of financial innovation is as representing a similar process of movement across spaces, spanned not by physical space, but by different states of nature. It seems to me that the overwhelming preponderance of what has taken place has been positive. It is probably true that—as we didn't use to have transportation safety regulation and we do now—an evolving system does require an evolving regulatory response.

But it seems to me that one needs to be very careful about stressing the negative aspects of the evolution, relative to the positive aspects of the evolution. I was going to make the same point that Don Kohn made about the Japanese financial system and the Scandinavian financial system standing out for the magnitude of damage done and the reliance on vanilla banking, relative to other activities.

Something similar could be said about the history of U.S. business cycles. The history of the business cycles prior to 1970 would place very substantial reliance on problems that came out of the financial sector and the regulation of the financial sector.

I was surprised by the tone of the recommendation around the incentives because it seems that if you take what is the central, most plausible area of concern that is suggested by what takes place in the paper, it is the notion that speculation involves negative feedback over a certain range, then positive feedback once you get outside of that corridor, and that process is very substantially exacerbated by hedge fund phenomena. Indeed, if one looks at the Shleifer-Vishny paper that Mr. Rajan refers to, hedge funds and the behavior induced by hedge funds and hedge fund liquidations are the central example. Yet, hedge funds would be the primary example we have of a financial institution where those who were running it did in fact have, as

Raghu Rajan recognized in his comment on long-term capital management, very substantial wealth that was involved.

While I think the paper is right to warn us of the possibility of positive feedback and the dangers that it can bring about in financial markets, the tendency toward restriction that runs through the tone of the presentation seems to me to be quite problematic. It seems to me to support a wide variety of misguided policy impulses in many countries.

I would say as a final example of what has come out of the discussion for the 1987 crisis is that if those who wish to protect their assets had bought explicit puts rather than portfolio insurance, the situation would have been substantially more stable. That also argues for the benefits of more open and free financial markets, rather than for the concerns they bring.

**Mr. Fraga:** I'm a former regulator and now a hedge fund manager. Unlike Mr. Shin and Mr. Summers who talked about bridges, trucks, and planes, I am going to talk about banks and hedge funds. I will be brief because a lot of what I wanted to say Don Kohn covered in magnificent fashion. I also should say at the outset that I was very stimulated by this paper. It is very rich and insightful. Being a reader of many of your papers, I think one more revision with a little more structure or perhaps a framework would be the final touch needed on what is an otherwise stimulating piece.

My first remark is slightly academic. We are moving toward more complete markets. Presumably, this is a good thing. I do see from my vantage point at the ground level that risk is going where it belongs. What we see in the hedge fund industry now is really several different things. It is, in fact, a good innovation because small investors don't like banks to take a lot of risk. So, traders and banks move out to hedge funds and they are there met by more sophisticated investors.

First, we must look at distortions and look for ways to improve the system. I am not so sure that what Raghu Rajan mentions is a step in that direction. He says: "Investment managers get performance-based

compensation, and they have a tendency to conceal risks, especially tail risks...and that banks somehow were better.”

Banks in the old days were paid to grow their loan books. I can't think of a worse incentive, and that is the way they were compensated. A lot of the things we've seen have to do with that. Investment managers today, however risky their businesses may be, tend to care about their reputations and tend to have their money on the line. If you were to do a study, you would find there are substantial amounts of investment managers invested in their own funds. That is healthy and is being delivered by the market on its own. Also, banks are tricky because they don't mark to market their loans. It's not doable. Moreover, they have liabilities that trade at par, with deposit insurance. So, talk about moral hazard—there really is plenty of it in banking.

I also must say, as an investor, I have a pretty easy time looking at funds and figuring out what they are doing. It is nearly impossible to know what the large financial institutions we have in this planet are doing these days. I am being cautious here. I think it is impossible.

That is, in my view, probably an argument to say we may be better off than before. The fact that funds mark to market their portfolios every day means if people want to withdraw, there will be a natural protection against a run. People may give up on withdrawing after values decline, and anyway, if they do, it is their own loss. Moreover, these investors are more sophisticated—as I said, I run one of these institutions—and they really watch over what we are doing. This is quite healthy. In these days, we see endowments and other sophisticated long-term investors doing this job very efficiently.

Perhaps because of all this we see less of an impact of all these financial accidents on the real economy now than we did see in the 1980s when it took years to clear markets, for banks to start lending again, and for the economies to start moving.

Lastly, I should report to you that it seems also very clear that the terms that fund managers get these days are changing. The better fund managers are getting longer terms, and they still get paid in a very convex fashion. I would have a concern if we saw retail investors going into hedge funds. I should just make a note of that.

**Mr. Fischer:** This is a very interesting paper. It gives a sophisticated answer to the question a lot of people ask about financial innovations: whether they make the markets more efficient and more stable. I think the answer is they make the markets more efficient, they reduce the probability of a financial crisis, and they increase the extent of those crises that are likely to occur. That is my interpretation of what it says.

Then, the question is what to do about the extreme prices. There is improved internal risk management, which certainly is happening in all institutions. It is very complicated, particularly as instruments get more complex. Like Arminio Fraga, having been inside one of those machines, the need to mark to market inside banks is very clear.

Anybody who wants to take too much comfort from this should remember a lunchtime speech here by the then-CEO of Bankers Trust on how perfect their internal risk management systems were. The trouble is you never quite know. Secondly, you could argue that you could rely on market discipline, but that is really about internal risk management as well.

Then there is prudential supervision, which is extremely tough, because the size of the prudential supervision team is way smaller and the amount of information it has is way less than the internal risk managers have. What it can do is inspect systems, which is good. It certainly put the fear of hell into the institutions, which is probably the best thing it could do. When talking about that, you had better remember insurance companies because these risks are being spread more and more and ending up there. It is said—I have no direct knowledge of

it—that the quality of risk management in insurance companies is less and prudential supervision is less than in the banks.

Rajan emphasized that the residual risks are in the banks. I don't know if that is true, but what is true is that all the market risks end up affecting the banks. That is especially true in a non-Glass-Steagall world, which is the world we have now.

Finally, what to do about the lender of last resort. Rajan emphasized liquidity, and so did the discussants. That is what central banks can provide in a crisis, but you have to bear in mind the rule that the lender of last resort should lend to the market and not to specific institutions. This whole development is paradoxically reemphasizing the role of the central bank in the management of the system. If he is right, Raghu said the key problem is going to be liquidity. That is what central banks are about.

I have reflected a long time on the long-term capital management crisis. The thing that struck me most was the story of LTCM could have appeared in Clappin's book on 19th century crises. It is a very modern crisis, but the way it was resolved was almost identical to the way that crises always used to be resolved. The central bank was brought in and banged a few heads together. There was an argument about whether they should have done it, but in the end, that was how it was resolved.

**Mr. Trichet:** First of all, I think the discussion has been absolutely stimulating and of extreme quality. I would echo what Stan Fischer just said. My first point is that we are, as central bankers, at the heart of these issues and threats. I would mention second that the Financial Stability Forum, in my opinion, chaired by Roger Ferguson, is certainly the place where one can have the best assessment of the situation. It is the only place, to my knowledge, where you are sure that every institution, and I would say every concept, is taken into consideration. There is no other place. All international institutions are there, all public authorities and the major marketplaces.

Third, herd behavior, in my opinion, remains of course a permanent threat. I like very much all the metaphors that have been used. I remember a meeting in Jackson Hole in 1997, where we were more or less discussing what became known as the Asian crisis. I have the very vivid memory of the private sector warning us—meaning the public authorities—that herd behavior was extremely likely to materialize. And it did. I realized two major conclusions on these episodes of turbulence that, I would say, are episodes of both risk turbulence and market turbulence. First, transparency is absolutely of the essence and is the best way to counter herd behavior, as has been proved—it seems to me—over the last period of time. There are areas where transparency does not exist. I am a little bit puzzled when Arminio Fraga says, “It is impossible to know what major institutions are presently doing.”

I don’t know whether I capture exactly what you said, but that, to me, is contrary to the major lesson we have been drawing from the dramatic events of the recent years. We have to work much more on that. Second, I would mention that the spread of codes of conduct and good practices has been a major advancement, drawing from the dramatic events I was mentioning. I trust that it is essential, and we still have a lot more to do in this domain.

**Mr. Sinai:** I have a comment and several questions for Raghu and Don Kohn. On the intermediation by what, Raghu, you call investment managers versus bank intermediation. I also have the sense that there is increased risk, perhaps ultimately systemic in the financial system innovations and changes that you described in your paper, despite mark to market discipline. It, in part, stems from the liquidity effects on economic activity, potentially inflation from the new intermediaries. I lack empirical evidence for that discomfort. So, I have a series of questions.

Are there any size measures—absolute or relative—of what institutions now do most of the intermediation and by how much? Is the traditional intermediation function, as we know it, of banks eventually

or already dwarfed by intermediaries such as investment banks, pension funds, venture funds, private equity funds (this is what makes me uncomfortable when I list this totality), buyout funds, hedge funds, and new not transparent, not well-supervised others that might evolve in the system? Again, what is the size of the new intermediation pool or lump? Do you have any estimates?

My second question is about monetary policy effectiveness. Monetary policy accommodation, as we know, is interest rates and the availability of funds or credit. With so much availability of funds, the animal spirits of the financial system, and the aggressive nature of the financial system, we may not get the same availability restriction as we used to get from rising interest rates. My next question is more directed at Don. Would there be extra upside inflation risk, given the animal spirits in the system and the availability of funds that come from all these intermediaries?

**Mr. Blinder:** I'd like to defend Raghu a little bit against the unrelenting attack he is getting here for not being a sufficiently good Chicago economist and just emphasize the sentence in his paper which says, "There is typically less downside and more upside risk from generating investment returns." This is very mildly said. The way a lot of these funds operate, you can become richer than Croesus on the upside, and on the downside you just get your salary. These are *extremely* convex returns.

I've wondered for years why this is so. You don't need to have public regulatory concerns to worry about it. Take the perspective from inside a big company. The traders don't own the capital. The traders are taking all this risk and putting the company's capital at enormous risk. I don't quite understand why the incentives are as they are.

I remember a discussion I had with—I won't name him—one of the principals of the LTCM, while it was riding high. He agreed with me that the skewed incentives are a problem. But they weren't solving it, obviously. So far, that is just an internal problem to the firm.



What can make it a systemic problem is herding, which Raghu mentioned, or bigness, which is related to the discussion that Fraga raised, and so on. If you are very close to the capital—for example, if the trader is the capitalist—then you have internalized the problem. So, it may be that bigness has a lot to do with whatever systemic concerns we have. Thus, I'd draw a distinction between the giant organizations and the smaller hedge funds. Whether that thinking leads to a regulatory cure, I don't know. In other domains, we know, bigness has been dealt with in a regulatory way.

**Mr. Weber:** I enjoyed reading the paper. I had a few issues in the monetary policy section, which is very short. I would encourage you to elaborate a bit more on that. You said it is plain vanilla, and I think you should add some flavor there.

You mentioned three issues where there is a tradeoff between the monetary policy mandate and the financial supervisory mandate of central banks. You point out the constructive ambiguity issue, where there is the transparency issue in the measured pace policy. You also point out that staying further away from deflation to avoid having to resort to low policy rates is important. My guess is this has implications for the inflation target, and I encourage you also to elaborate a bit on that—how to deal with this tradeoff and what should govern this tradeoff.

Lastly, you say greater supervisory vigilance should be exercised in periods of low rates to contain asset price inflation. We more or less all agree with these issues. But what should govern these choices? The big issue really is how you implement this if a central bank has a dual mandate. Even if they have dual mandates, there have to be some priorities in the setting, and it may be state dependent. So, I encourage you to work a bit on that.

**Mr. Kohn:** The only response is to Allen's point about the effectiveness of monetary policy when availability constraints aren't present. I agree with the sense that there used to be a policy channel that ran through credit availability, especially when we had Regulation Q.

Everybody recognized that, as regulations came off, interest rates were going to have to vary over a wider range up and down. But there is no cost to that really, and there is a huge advantage to not having availability constraints. There is no reason why we can't change those interest rates sufficiently to accomplish our objective, except for the very rare occasion of the zero bound. I don't see the absence of a credit channel as impinging on monetary policy effectiveness.

**Mr. Rajan:** Let me start by rejecting the allegation that I really have nostalgia for the bank-dominated systems—absolutely not! I have written a whole book suggesting that we are really much better off in this market-dominated system. All I am arguing is that this creates new concerns. And every responsible regulator and supervisor has to address what these new concerns mean for his or her job. All I am doing is trying to suggest that we need to pay attention to this.

In addition, a number of people have raised the concern that we don't want to interfere with the markets. Again, that is absolutely right. We don't want to interfere in the natural risk taking of the markets. So, you want to apply market-friendly approaches. As Arminio Fraga said, a number of organizations already use this method of having their managers invest part of their compensation in it.

Larry Summers said something about the investigation prompting a wide variety of misguided policy impulses. That may well be true, but that is no reason to not point attention to the possible concerns that are raised. After all, it is our responsibility to do that.

Let me say, we have come a long way. But I do think we need to keep considering how we can make the system work better. Here I want to cite Chairman Greenspan for any changes in regulation: "Proceed cautiously. Facilitate and participate in prudent innovation. Allow markets to signal winners and losers among competing technologies and market structures. And, overall, as the medical profession is advised, do no harm."

I fully subscribe to this. Therefore, we should examine all possibilities and see whether they meet these tests, which I think are very important.

Summers talked about transportation. Well, we never examined the buggy whips to determine whether they were safe because there were two people riding in them. But since we have moved to airplanes, we have the FAA—as you’ve pointed out—doing a very good job. In the same way, as we get more concentration of risk, it does raise the issue of whether we should investigate more carefully.

I am not in any way saying, “Let’s go back to banks.” Let me stress that again. I am also not saying that banks are in any way better than hedge funds. All I am saying is that we need to pay more attention.

As far as the issue of transparency goes, I agree with Jean-Claude Trichet that transparency is very useful. But for some of these organizations is transparency enough? Do we actually know enough from knowing the immediate positions, so that we don’t have to know their strategies? If we do have to know their strategies, would that not become too complicated, given the limited resources with supervisors, in which case we might have to move eventually to incentives. If they have the right incentives, we wouldn’t worry. We need to figure out whether they, in fact, do have incentives. Fraga’s comment about restructuring the paper makes good sense.