SESSION 5

Beyond the Exit: Banks and Central Banks

Dimitri B. Papdimitriou: Good morning. Welcome to day three of the 19th Annual Hyman P. Minsky Conference.

This morning's session includes three distinguished members who actually represent the Federal Reserve, the private sector, and, in a former incarnation, the Treasury, and also the academy. The moderator will be Deborah Solomon. I think you know who she is. She has been writing … columns in *The Wall Street Journal*. So, Deborah.

Deborah Solomon: Thanks. I want to introduce the three distinguished panelists that we have here: Peter Fisher, who is the vice chairman and head of BlackRock's Fixed Income portfolio. BlackRock obviously has been in the news quite a bit lately…. The Fed has become a big client of BlackRock's recently, but he's no stranger to the policy world. He was the former undersecretary at Treasury under President George W. Bush, and he spent 15 years at the Federal Reserve.

Kevin Warsh, who doesn't look old enough to be a Fed governor, but is. He was appointed in 2006. He is also a former NEC official, and he was in the room during some of the most intense debates I think that the Fed has had in decades.

But the person who could probably attest to that most is Richard Sylla, who is a historian of financial institutions. He's the Henry Kaufman Professor of History of Financial Institutions at NYU. He's also a research associate at NBER and has written numerous books, including *The American Capital Market* and *The State, the Financial System, and Economic Modernization*.

So instead of my talking, I will let the panelists give their introductions, and then hopefully we'll have a rich debate and discussion…. We'll start with Mr. Fisher.

Peter Fisher: I'm just going to sit here. Forgive me for the informality. I'm more comfortable sitting. I've been told that when I stand up at a lectern I bob and weave back and forth, and I make the audience seasick. So let me sit down.

I want to talk about two aspects of this idea of "Beyond the Exit," and where we need to go in the relationship between banks and central banks. At the risk of sounding much too simple, we need to get back to a world in which we focus on the stability of bank balance sheets and the stability of central bank balance sheets, and the relationship between the two.

It's worth being clear that we've had a colossal failure of bank supervision in all aspects—the legal regime, the regulatory regime, the behavior of the supervisors and the regulators and bank management. You can't get in this big a muddle without everybody owning a piece of it. But when we think about the need to get back to the stability of bank balance sheets, I think we've got to peel back an ideology that the regulatory and central bank world developed of excessive reliance on the idea of a self-policing mechanism in the form of risk-based capital.

It didn't work. It's a neat idea that we can have risk-based capital and that will do the heavy lifting for us at keeping bank balance sheets stable. So it sounds like a plausible idea that while the more risk the bank has, the more capital they should have to hold. Isn't that nice? And then we don't have to really do all that grubby business of seeing if the loans are of good enough quality. But if we aren't good enough at designing the risk screen we're going to put that through, the system doesn't work, and we end up with false reliance on this self-policing idea. And I think that really is at the root of much of what went on—how we got off track.

Now, I say that clearly having been at the central bank for most of the years in which risk-based capital was developed, and I attended my share of meetings at which we went down that path. But it actually didn't work. It *doesn't* work. That isn't to say capital isn't important. Yes, capital is important. But the idea that we had a risk test, a driver's test that we were good enough at administering, that the thing could become self-policing, was illusory. It didn't work. And that allowed the entire supervisory community and central bank community to stop paying quite as much attention to the question of bank balance sheet quality. They thought this mechanism would work by itself.

So I think part of what we have to … get back to, beyond the exit, is a world in which, putting aside all the regulatory debates, somebody gets up in the morning and applies what I call "brute force" supervision. Someone has to have an opinion about whether the balance sheet quality is there—whether the banks are lending money to people who won't pay them back.

The whole pretext for bank supervision long predates deposit insurance. It's because we know bankers will be tempted to chase the apparently wider net interest margins without properly accounting for the probability of default. We know this. It's been true for hundreds of years. And someone's got to get up in the morning and have an opinion about whether the bankers are doing this or not. I think that's the supervision we have to get back to. Forget about who does it.

We have to apply the same to insurance and options writing. Are the writers of options, of insurance, collecting premiums and not holding enough reserves? It's the same subject. Are they chasing an illusion without reserving enough against it? So it takes place in options land, in derivatives land, in insurance land. Brute force supervision has to be applied. That's why insurance regulators the world over, if they can't understand something, prohibit the insurance company from writing that policy. They just say *no*, because they can't do the brute force.

We've also had a failure, very simply, of lending limits—lending and concentration limits. The entire edifice of SIVs and conduits was all about just not getting that basic building block of good banking and good bank supervision. Both the bank management and the supervisor own that. The concentration limits weren't applied, whether it's to the trading book or the lending book. Otherwise we couldn't possibly have had the colossal failure we had in SIVs and conduits. We also [failed] to police the boundary between banks and nonbanks.

So we've got to back there. Forget about whether the FDIC is going to do it, or the Fed's going to do it, or what kind of council we have, or what bill they pass. If we don't get back to this form of brute force supervision, we're just going to be lost. And if we rely on this risk-based-capital ideology, we're going to get lost again.

Now, that's about the stability of bank balance sheets. The reason central banks care about the stability of bank balance sheets is because that's where the money comes from. Money comes from bank balance sheets, whether they're real banks or near banks doesn't really matter. And it's not just about inflation. We've had a generation of central bankers who kind of missed the boat that it was just about inflation, not about the stability of bank balance sheets in its own right. As a place that money comes from, we have to worry about that. For a hundred years, from 1830 to 1930, central bank policymakers knew we were worried about instability in bank balance sheets in its own right—the era of wildcat banking.

That's one theme. And then quickly I want to talk about the stability and the relationship between the central bank balance sheet and bank balance sheets. The Fed can't go home again—we can't go back to where we were. I love Paul Krugman's piece—I think it's from this morning, or was it yesterday?—using the fireman metaphor. He was talking about politics and whether the supervisors are like firemen. They are like firemen. In the 19th century in America and the UK, the fire department would only put out the fire at your house if you'd paid your insurance policy. That didn't work. It turned out the city burned down if you didn't put out the fire at the houses [whose owners] hadn't paid their insurance company. And that's the bluff the Fed has tried to run in one way or another for 50 years, that we're not going to lend to you unless we get to supervise you.

Most other countries in the world don't play that game. It's a very odd vestige of Glass-Steagall, that we have the Glass-Steagall argument at the discount window. We've got to stop this. In most other countries, there's broad access to the central bank's discount window for anyone who's managing an active and liquid balance sheet, because you can't run the bluff. It's baloney. You're not going to do it.

So the discipline, it turns out, we learned through the crisis isn't about who the Fed lends to; it's against what. *Who* wasn't the binding constraint, because in a crisis you've got to put the fire out. *Against what* turned out to be the binding constraint. Lehmann Brothers comes to mind.

So that's where we get a binding constraint in regulating the behavior of the Fed against who it's going to lend to where we can get control over moral hazard. Is it recourse lending? Is it nonrecourse lending? Should you be able to take an all-assets pledge or not? Years and years ago, 1985 or '86, when the Bank of New York's computers went down, the New York Fed took an all-asset pledge. Because their computers were down, no one got very upset about it. The Fed takes an all-asset pledge from AIG, and everyone gets upset about it. Well, that's a policy judgment about what the central bank should be lending against.

I think we've got to deal with this and the political bluff that Gramm-Leach-Bliley will allow universal banking to go ahead but the Fed won't lend to you unless it can supervise you. Again, that bluff is a political matter. It turns out not to work.

So I think we need to imagine a world in which the discount window is not a political tool. It's there for a broad range of institutions to have access to in a crisis and we have some discipline around the collateral definition.

Now, we're always going to have a section 13(3). We're going to have that loophole; I wouldn't want to redesign the Federal Reserve Act without it. But we have a problem now. It's been used very aggressively, and the Fed can't go home again in the sense of ignoring that we've sort of gone through that loophole, and now we've used it a lot. One of the big challenges—I'll just end on this note—is that *when* the exit is over is when we in the marketplace don't have the threat of unlimited balance sheet expansion hanging over us. That's my definition of when the exit is over. Beyond the exit, there'll be a theory of the optimal size of the central bank's balance sheet that's been re-created, and we'll know we don't run the risk that either the Fed or the Bank of England will wake up some morning and say, "Well, we don't like the state of things. We're going back to unlimited balance sheet expansion." I understand why we did it in the crisis—it was the right thing to do. But that's the trickiest part of the exit, and I don't know how we get there. I'll end on that note….

Kevin M. Warsh: Let me respond to a few of the points that Peter raised. But maybe before I do that, let me just try to frame a little bit of the discussion around the topic of "Beyond the Exit."

I won't predominantly be talking about the economy; I'll be talking about banks and central banks, and their relationship. But I think the economy maybe shows us a little bit of an example, a little bit of an analogy. Right now I would say we are in the throes of a cyclical recovery, and that matters—the force of it, the duration of it, matters; the nature of the recovery matters. But in some ways what matters much more is the economy over the horizon, the economy a couple of years out. What's the trend, the growth rate, of the economy that emerges after the cyclical recovery has run its course?

What's the unemployment rate, or the natural rate of unemployment, once the cyclical recovery has run its course?

So I begin with the economy because I think the economy is in some ways what banks and central banks are trying to understand. We're trying to take signs from the economy. We're also trying to give direction *to* the economy *about* the economy. We're trying to learn from banks, but we're also trying to understand the role that banks will play in this new financial architecture.

I think what I will do is break up the stages of where we are.… [First], the boom, and much has been described about the boom in the 2000s, the boom in the 1990s, and others. The second stage—much has been discussed about it—is the panic. I've described it previously as the Panic of 2008, as a better way to think about what transpired during those darkest days of about an 18-month period. What stage are we in now? I would say we are, in different forms, in an exit stage. I wouldn't say all policymakers everywhere around the world are in the exit stage. I wouldn't say all policymakers in the U.S. are convinced that we're in the exit stage—and here I'm not just referring to central banks, but [to] fiscal authorities and others.

When I talk about exit, I don't think *exit* is an inappropriate four-letter word. I think exit is an important, useful discussion to be had. I think where the central bank has done a reasonable job here in the U.S. is really for quite some time [in] exploring the exit, describing the exit from the liquidity facilities, differentiating that from the exit from our core monetary policy functions. And I think fiscal authorities would do themselves a good service by also beginning a robust discussion on exit, and that that, all things being equal, would be confidence inducing to the financial markets.

The hard part, and maybe the central part of the discussion of this panel, is what's next. I was tempted to call what's next the new beginning, but let me share a judgment that Peter had, which is, you can't start with a blank slate. There is no new beginning. There is no blank sheet of paper where we say, okay, from this moment forward the central bank will act in this clear and unambiguous way, because markets understand how central bankers, both in the U.S. and around the world, have acted, and they've taken some learned behavior from it. Some of that learned behavior is useful; some of it's probably not useful. But as we think about this next stage, as we think about what I'd more fairly call the epilogue, we have to recognize that these behaviors have been formed, and to unlearn those behaviors, for markets to unlearn them, for people on the front lines of real businesses, large and small, to unlearn them, they would have to see a dramatic change in tone and in substance. I think the judgments made in these earlier stages, both in the boom, the panic, and in this discussion of the phase we're now in, the exit, they have in some ways limited choices that are available in the epilogue. They have changed the decision matrix, and I think policymakers are smart to recognize that.

Peter raised the question about whether we can go home again; that is, can central banks go back to a narrower role, a more circumscribed role? I would say personally that that would be great if we could; but that's not an easy path. It could still well be an aspiration, but I don't think we should fool ourselves into thinking that we can simply turn the page.

Can banks? Can banks go back to the world before the panic? I don't think they can. And I think in some ways the question that's before this panel, but even more broadly, before policymakers, is really whether banks and central banks, in Peter's words, can go home again. And I'd make a couple of distinctions: Is the world for banks in this epilogue different, whether the banks are large or small? Is the difference whether they have retail deposits, or does it only matter whether they're in financial services? Does it matter whether they're primary dealers or others? I think those are in some ways some of the questions that we've got to discuss, both in the hallways of central banks and in the hallways of financial markets.

Let me say a couple of words about the financial architecture: I think the conference the last couple of days has done a very admirable job in trying to frame what's going on in Washington and on Wall Street more broadly. There is a preoccupation, I'm afraid, that once whatever is called "comprehensive fundamental regulatory reform" gets to the Rose Garden and gets signed, that everything will be clear. It won't. I think that financial *architecture* is the way to think about what's in front of us, as opposed to financial *regulation*. So the way I think of the financial architecture is, you have a set of laws and rules and regulations, and also a set of responses by policymakers. Those impact financial markets and impact financial market participants. Financial markets participants' actions also impact us. And in some ways, why would I say that the old financial architecture has fallen but the new financial architecture hasn't really found its form? Why would I say, as I do, that I think the financial architecture is in flux? It's because markets are looking to Washington, Washington's looking to markets, and each is waiting for the other to anchor. And I don't think that anchoring has happened. I think in some ways the challenge for us at the Federal Reserve as policymakers is to try to gauge what's going on, given that the financial architecture remains in flux. When we look at financial markets and financial market behavior, at the credit markets, at real businesses, can we understand as clearly as we want what … their actions … signal for the real economy? I don't think we can take those signals as literally as we would if this financial architecture were in its final form.

So let me end with a few questions about the new financial architecture that, I must admit, I think are worth struggling with just a bit:

What will that financial architecture look like? I'd say there are two fundamental questions: 1) Will banks be special? Will being a banking organization be special? Or 2) is it more relevant whether the organization is simply in financial services, or in the world of commerce? Within that realm in financial services or in banking, … is the more relevant question than whether it's a bank, [or] is it big? Is the more relevant question, will it be perceived to be interconnected? Those are the sorts of questions that we have to wrestle with when we think about after the exit and the role of banks and financial firms. And I think in some ways the answers to those questions will tell us a lot about what the economy will be on the other side. Because if we end up in a world where there are fewer larger financial firms that are perceived to be so big and so interconnected that they take almost a quasi–public utilities status, I think we could then end up with a bifurcated banking system, a bifurcated system of financial services. And that has real implications for the real economy.

As a final sort of framing question for this panel, will central banks be special? Will the role that central banks take, will their public purposes be more akin to the role of central banks in recent history, where we stick to our knitting in the conduct of monetary policy? In addition, we have supervisory responsibilities, but we aren't the first firemen that would arrive on the scene. Are we the ultimate rescuer, or are we just the first responder? Are central banks going to maintain their key independence? Are they going to maintain their distance and independence from a political process, or will they be perceived by markets as just another one of those political actors in Washington?

I think in some ways the crisis has asked that question. The regulatory reform bill circulating in Congress [is] thinking about answers, but I don't think any of that has been resolved.

Let me end by saying that I think that the role of central banks necessarily blurs in crises. Both in recent crises in the U.S. and [in] the long arc of history, we've seen roles blur. Fiscal policy and liquidity policy tend to blur in financial crises. But when we get to this final stage, this epilogue—when we get to the point where we're after the exit—it strikes me as more important than ever that, even though central banks can't immediately go home again, we do all we can to stay foursquare on the right side of that line. We try to be lenders of last resort. We try to focus our monetary policy on the long-term interests of the real economy. And we let the fiscal authorities and their fiscal agents at the Department of the Treasury be the ultimate rescuers, make the tough political judgments, and I hope that the reform legislation empowers them to do that and really allows the central bank to, as best as is practicable, go back to the … important but circumscribed role of central banks as we get into the next phase.

Richard Sylla: … I want to thank the Levy Institute for inviting me to come. I have a few slides, but they're kind of relevant to the issues Peter talked about balance sheets being something we should be concerned about, and Kevin talked about exit strategies. I'm going to take a little longer view, though.

My original title for this was "Threats to Central Bank Independence." Then things that happened between the time I made that title and the time I came here made me wonder whether there might not even be a threat to the central bank.

Now, I'm a big fan of central banks. I teach financial history, financial crises, and I've made rough calculations that when the U.S. had a central bank, it had a crisis on average once every 20 to 25 years. But when it didn't have a central bank, it had a crisis more like once every decade or so—once every 10 years. So central banks seem to me to pass the test of history. But the U.S. has a kind of checkered history regarding central banks. I call the Fed the Third Bank of the United States, meaning there were First and Second Banks of the United States. They were central banks, and we got rid of them.

If you go back to 1832, Andrew Jackson … said, "It's to be regretted that the rich and powerful too often bend the axe of government to their selfish purposes. Many of our rich men have not been content with equal protection and equal benefits, but have besought us to make them richer by acts of Congress." After saying that, Jackson vetoed Congress's bill to recharter the Bank of the United States.

Fast forward to 2009: Ron Paul says, "In the United States the Central Bank is the Federal Reserve, the instrument by which our money and credit are constantly manipulated for the benefit of a privileged class. We could stop the Fed bailout of its friends on Wall Street." Ron Paul, Andrew Jackson—a long time apart, but they're kind of saying the same thing. Well, should we take Ron Paul seriously? I'm really talking about a small probability, but not a zero probability, that we should pay a little bit of attention to that.

Congress … created central banks in 1791 and 1816. Congress abolished the first central bank in 1811, and then Jackson vetoed the bill. Now, when these central banks disappear, I kind of studied what happened. What were the arguments? How did we happen to get rid of our first two central banks? And, interestingly enough, it was a combination of principal and interest—but not the usual banker's principle, the one with *le* at the end. The principals brought up were, the Banks of the United States were not necessary and proper. Hamilton used the "necessary and proper" clause of the Constitution to justify the first central bank, because the Constitution doesn't mention the word "bank" or anything about banks or central banks.

And so … the opposition, the enemies of the bank, said, "Well, you know, it's not really necessary or proper, and they always were unconstitutional, and when we get a chance we'll get rid of them." The interests—and this is the more interesting thing; if you go back and study how the First and Second Banks of the United States disappeared, and you go into the politics of it, you see that from the point of view of the banks of the country, if you got rid of the central bank you would get rid of a regulator, you would get rid of a large competitor, and you would likely garner the federal government's banking business. It seemed like a win-win-win all the way. If you want to understand how we happened to get rid of central banks, a lot of people saw that it was in their interests to get rid of the central banks, and bankers in various states put pressures on their representatives in Congress to get rid of the First and Second Banks of the United States. So it was a combination of principal and interest.

When we created the Fed, we tried to solve one problem by making sure that the Fed was really a central bank, and it wasn't out there competing with the other banks with a nationwide branch system like the First and Second Banks of the United States were. The First and Second Banks were regulating the banks—they kind of stumbled into that—but they were also competing with the banks. The Fed solved that problem, supposedly, by not competing with the banks of the country. But the Fed regulates banks. It has the federal government's banking business: it doesn't compete.

Now, balance sheets. This is what the Fed balance sheet looked like in 2007, before the crisis really advanced very far. [On] the kind of normal central bank balance sheet, if you study it, basically … you have a lot of government securities on the assets side, and on the right-hand side you have high-powered money, Federal Reserve notes and the reserve deposits of the banks. If you just take those two, Treasury securities on the left-hand side, the Federal Reserve notes and the bank reserves on the right-hand side—what [Milton] Friedman called the high-powered money—then you've got almost all of the Fed's balance sheet.

And then this happened in 2008: the Fed balance sheet changed very dramatically. We'll probably talk about some of the ways in which it changed. The numbers sort of make it look like this.… Over on the right-hand side you have still a lot of Federal Reserve notes. Now, the bank's reserves have gone up from, I think it was $38 billion on the 2007 balance sheet, to $1.25 trillion on the [January] 2010 balance sheet; and so that's a dramatic change. And then [there are] things you didn't see in the 2007 balance sheet. You see federal agency debt, mortgage-backed securities, term auction credit and loans, net portfolio holdings, and preferred interest. They have little footnotes. You come down to the bottom on the footnotes, you see "Maiden Lane I, II, III LLCs, TALF LLC," "AIA Aurora LLC, ALICO Holdings LLC"—the Fed has portfolio holdings. It's got its own companies….

Bagehot's rules … Kevin said, can we get back to that old-fashioned central banking? Walter Bagehot's rules were, if you want to stay the panic, the advances should, if possible, stay the panic, and for this purpose there are two rules: first, that these [advances] should only be made at very high rates of interest; and second, that the rate at which these advances should be made … should be made on all good banking securities, as largely as the public asks for them. If it's known that the Bank of England is freely advancing on what in ordinary times is reckoned as good security, what is then commonly pledged and easily convertible, the alarm of the solvent merchants and bankers will be stayed. So [Bagehot's rules are] usually summarized as, the central bank in a panic should lend freely, but at a penalty rate. Bagehot didn't say "penalty rate"; he just said "a very high rate."

Well, skating on thin ice: instead of lending to the market, as Bagehot would have said, on good collateral at very high rates, the Fed recently lent what some of us might consider dodgy collateral, at very low rates, and not to the market but to particular firms. As the crisis wanes, the assets on the Fed balance sheet are probably going to make it vulnerable to the charge that it's actually competing with the private sector. It is competing with the private sector. And then we might ask the question, should an independent central bank channel capital to particular sectors of the economy, to federal agencies and whatever they do, to the banking sector, to housing, insurance, maybe even autos indirectly, and to particular firms, Bear Stearns folded into JPMorgan Chase, AIG? Is this allocation of capital to particular sectors of the economy, is that really part of the central bank's mandate?

Well, I raise these questions, and they're related to what my two distinguished panelists have already said. Is this somehow playing into the hands of somebody like Ron Paul? He's already got his audits in a watered-down fashion into the House bill that was passed in December. But if you read his book … You know, I didn't take it seriously [at first]. I heard "Ron Paul," and like most people, thought, *Ron Paul, haha*. Paul yesterday said that President Palin will appoint Paul secretary of the treasury. But the reason I took it seriously is because I was talking to a group here in New York City, and this was a group of accountants that work in what's called the Society for Insurance Financial Management. It's accountants who work with insurance firms. And I gave the talk, and somehow the topic of Ron Paul came up, and somebody jumped up in the middle of the talk and said, "Have you read Ron Paul's book? It's really good. He's absolutely right. We've got to get rid of the Fed." Now, this was not a tea party in Arizona. This was a group of accountants advising insurance companies right here on the island of Manhattan.… I hadn't read Ron Paul's book up to that time. So I got a hold of it. It's not very good—he says the same things over and over—but he makes it very clear in the book that the so-called audits in this bill are just one of the first steps. He maps out a process by which we're going to restrict the Fed more and more until finally we'll get rid of it.

So, parallels: Jackson lost in 1824 to Adams, even though he got more votes. And he was damn angry. He won in 1828, and he got rid of the central bank. Well, here I'm saying, a la Paul Krugman, Palin lost in 2008. She's damn angry. But Kevin raised the question of what's next. I guess we'll get around to talking about that now. Thank you.

DS: I guess I wanted to start with a question for Kevin, since, Peter, you brought this up: He said that he doesn't think there really will be an exit until this threat of an unlimited balance sheet expansion is lifted. Can that happen, and how will he get there? Is there a way to a moment when the markets don't think the Fed at any moment could use its balance sheet?

KW: So, first, I'm thrilled to be at the panel after those last couple of presentations. I thought I'd come to the Fed Roast. *[laughter]*

RS: No, I'm on your side.

KW: I'd say on the question of exit and when markets will think the exit is real, I'm afraid the answer really depends on what exit means. I think we have at the Fed determined and made pretty useful decisions to exit the liquidity facilities. By that definition, the exit is really upon us. And I think to the point that was raised in the PowerPoint about whether the Fed is a competitor of private banks, I think the real, best way to understand that is when financial firm balance sheets shrunk in the panic that coincided with the Federal Reserve's balance sheet expanding. So think of the Federal Reserve balance sheet in that context, as a shock absorber.

What does that mean in the context of exit? When … private financial firm balance sheets grow, then the Federal Reserve balance sheet can shrink. I think the improvements that we've seen in financial markets, the recapitalization that we've seen in the U.S. of large financial firms, are encouraging signs. I don't think that markets are waiting for all pieces of the exit to be complete before trying to figure out their place in the new financial architecture. I think that the progress that's been made on exit across some but not all of our facilities is a trend that I'd like to see continue; but it has to continue in a way [that] is understandable by financial markets, understandable by real businesses, and is credible and predictable.

I think people are comfortable with the central bank talking about exit. They understand the deliberations are still within the FOMC, and still within the Board of Governors, and so long as we can adequately and, I think, concretely explain what we're doing, why we're doing it, and what the triggers for it are, then I think the exit can be complete in a way that both the real economy succeeds, as well as financial institutions continue to find their footing.

PF: On two points: first, not to hang on Kevin or the Fed, I actually meant to be suggesting that this question of when the threat of unlimited balance sheets expansion goes away is really going to be in the heads of the market. Neither the Bank of England nor the Fed have found themselves in a position to say, "Well, we're promising now never to do it again." We wouldn't believe them if they said that. So we shouldn't be waiting for them to say that. So it really is going to be in our heads when we get comfortable with the idea that's not going to happen again; or, if it happens again, that we would vaguely understand the circumstances.

If I could go back a little bit to all the assets rolling up on the Fed's balance sheet, I think it's just a shame more people don't understand just the basic math of a major financial crisis. We go back to the end of 2007, the beginning of 2008, and the first response of a delevering crisis in the financial sector is naturally for the central banks to try to ease policy and provide facilities. But as a little secret—I just want you all to say this to yourself quietly under your breath three times—you cannot delever by borrowing money. It just doesn't work. So the financial sector starts to delever by borrowing money from the central bank, and you can't get there.

So phase two is, well, if you can't get there by the central banks, not just the Fed, but the Bank of England, the ECB, trying to slow down the pace of delevering by lending—because that doesn't get you there—well, the next phase was trying to speed it up. Let's raise capital and write down losses. That sort of feels good, except you speed it up too fast, you get March of 2008, you get September of 2008—that doesn't feel very good. So if you can't slow it down and you can't speed it up, the only thing that's left to do is transfer the assets to the government's balance sheet one way or another. There just isn't anything mathematically available to do. You delever the financial sector by transferring assets to either the central bank or the central government's balance sheet.

So we can wave our hands and say we like TARP, we don't like TARP, we like Maiden Lane, we don't like Maiden Lane; but it's math. It's over. The financial sector's trying to delever. You've got to move the assets somewhere. You can't slow it down, you can't speed it up—somebody's got to catch them. Obviously, the Ron Pauls or the Andrew Jacksons don't like it. But, tough: it's math.

DS: Richard, do you think that the Fed's actions have hurt its independence?

RS: I think there's a threat. A lot of the stuff we're talking about is the economics of balance sheet expansion: private balance sheets go down, government sector balance sheets go up. We all understand that. But I think what I'm getting at is that there are political ramifications of these actions.… I raised the issue, is the Fed a competitor of the private sector financial institutions? Well, in the crisis it increased its balance sheet for the reasons Peter just mentioned. But I'm saying, as long as those assets stay on the balance sheet, there will be a possibility that somebody like Ron Paul, or people who don't like the Fed or [who] think the Fed is being too political will say, look, the evidence is right there. They're allocating capital, they're competing, they're buying mortgage-backed securities just like the private institutions are. So politically it makes the Fed vulnerable, and I think maybe we could all agree that the sooner the Fed could exit those things, the better it would be. But I think the longer it stays there, the political risks go up, so that they do become a threat to Fed independence. Some of us think that Ron Paul's audits are a threat to Fed independence; but that's just the first step of a plan. Somewhere late in his book he says, we do this, and then we do this, and then we do this, and pretty soon the Fed is very different from what we think it is.

DS: On that note, I don't think anybody expects central banks to be abolished anytime soon, although who knows what 2012 will hold. But there does seem to be a movement toward more openness on the part of the Fed and making more of its actions public. Is that a threat to the Fed's independence? I'm curious for all of your thoughts. And what is the deleterious effect, if any, of having more public overview of monetary policy decisions? Does it turn it into a political arm of the government? What is the threat to its independence?

KW: Maybe I'll start and ask my colleagues to join in. First, I think Richard is right in making sure that we recall that this is the U.S.'s third experiment with a central bank, and it's an imperfect experiment. It is the nature of what we're doing. We're approaching our 100th anniversary at the Fed, and we are continuing to learn and continuing to both understand roles, understand responsibilities, and, in so doing, teaching markets and the rest of the political class.

In terms of transparency, my own view is, the more that our balance sheet has expanded, the more that we have gone to—as was described by some,—to the edge of our authority. Even though I really do maintain that we stayed within it, I think that does put a special obligation on us to be more transparent, to describe what we're doing, to provide more understanding of what the details of that balance sheet are in a more real-time and understandable basis. I think we've made some remarkable progress in doing that.

Now, some Fed critics say, "Well, you must do more." I think for some, I take them on their word in that there [are] reasonable calls for more transparency; there are reasonable calls to make sure that the transactions that we're doing with counterparties are fair [and] have good controls associated with them. So if an audit means that, I would say we're all for it.

If an audit, though, is a euphemism for ending the central bank, then I think we obviously grow less comfortable. And I think in some ways the real challenge is that we at the central bank, having done some extraordinary things, need to also provide some extraordinary information, which we have done or are in the process of doing. We have a monthly, detailed set of all of our accounts, which we distribute, and I would say even going back to the days when Peter was running the open-market desk, the level of disclosure would be shocking [compared] to a period of 10 years ago. And I think that's necessary and appropriate.

As a final point, I would say that the political judgments about the Fed's continuing role, that is up to the Congress. I think we at the Fed would be running a grave risk if we thought that the responsibilities we were granted were somehow ours forever. We've been given a privilege, but it's a revocable privilege; and while we must be independent, must make our judgments independent of whether it's an even-numbered year or not—and I'm very confident we will—we need to recognize that if Congress changes the rules, that's really their responsibility.

As I think about independence, I would define it maybe more narrowly than some. Where we must be independent is in the conduct of monetary policy. But we shouldn't be given any special deference in our regulation. If Congress and others think that the Fed didn't do what it should have done in supervision during the last 10 years, we shouldn't say, "Well, we're independent, so you ought not challenge us on that." I think outside the core conduct of monetary policy, a different set of expectations [is] owed….

RS: I think that transparency is probably a good thing…. I think Mr. Bernanke was asked—possibly by Ron Paul—about who was getting the money and when the balance sheet expanded, and I think [Bernanke] said, "Well, it would be counterproductive to say." There's good reason for that. In the 1930s, the Reconstruction Finance Corporation was created in 1932 to lend money to banks in trouble, to railroads in trouble, eventually to state governments in trouble, and farmers in trouble. In the summer of 1932, the speaker of the House—I think it was [John Nance] Garner—said that the RFC needs to publish a list of all the banks that got aid. So that list was put out—it was published in the newspapers—and anyone who saw their bank was on the list immediately ran and took their money out of the bank. So I think when Bernanke said it would be counterproductive in the middle of the crisis to say we shouldn't be [listing] everybody we're dealing with now, that he was right. But it sounded to some people [like] a kind of arrogance: "We created a trillion dollars and allocated it how we wanted. We're not going to tell you how we did it." So there are economic reasons for not telling things, there are maybe political reasons for telling them—it's a kind of tricky thing to handle.

PF: First, I think that the Federal Reserve's sticky wicket over the last couple of years has been the aggressive use of section 13(3), which is there in the statute for them to use in extraordinary circumstances without, frankly, enough genuflecting back to Congress;

they knew it was special, and we're sorry. Obviously, Chairman Bernanke's tried to express this. But this is a political dialogue that just was hard to get right. I don't have an answer; I don't know what speech he should have given. But it obviously needed more. So that's my first thought.

My second thought is—for years I worked at the Fed, so you've got to be careful here, you can discount as you like—there's a big difference between transparency and nudity. Just think about that for a minute. I mean, there's a lot of stuff you just don't really care to see. While I was working at the Fed with the whole issue about the transcripts coming out—the transcripts are a much less helpful guide than the minutes. I know: I was in those meetings, watching paint dry. Watching a transcript of paint dry doesn't help you understand the policy process as well as someone writing it down.

And also—put aside the crisis and obviously the change of behavior makes a bit difference—I think it really is a political football. The Fed is the most accountable agency of the federal government on its core-mission monetary policy. So put aside the recent crisis and imagine yourself five or six years ago. Get into a taxicab in any airport in America, and ask the cab driver, "How do you think the Fed's doing?" The odds are, he's got an opinion. He reads the newspaper every day. You say, "How do you think Greenspan's doing?" … Could you jump in a taxicab in, you know, Oklahoma City, and ask the cab driver, "How do you think the secretary of health and human services is doing? How do you think the undersecretary of the army is doing?" They've got no idea. But the Fed, because of the basic simplicity of the accountability for monetary policy, inflation, those things, someone who follows the newspapers can have an opinion about how the Fed's doing. That's a level of transparency that just doesn't exist anywhere else in Washington. There's no amount of disclosure in the *Federal Register* that's going to get you there.

So yes, there should be more disclosure of the assets and … yes, there needs to be a certain amount of genuflecting back to Congress that they're the source of political power—and they really are. So yes, that's right. But on the core question of their accountability, in the normal of ebb and flow, ex–extraordinary circumstances, this is the most accountable organ of government we have.

DS: I'll throw this open to all of you, but I guess I'm curious, given all of the sturm und drang over whether the Fed should keep its supervisory powers—Peter, you talked about having "brute force" supervision, but you didn't really say whether it should be the Fed, the FDIC, or some new entity. Who do you all think should be doing supervising, and does it hurt the Fed to not have supervisory powers? Does it hurt its ability to conduct monetary policy?

KW: Why don't I go first and let these guys take shots after. So Peter, I think, at the beginning of this said what I think is most important: There's a preoccupation in Washington on these *who* questions. There's a preoccupation on questions of institutional design. If we could only design these agencies just right, the implication seems to be, bad things won't happen.

Well, we ran an experiment. If you look at the institutional design of central banks and bank supervisors around the world, look at major financial centers, even if you look at what you think governments' dispositions were toward regulation generally—[there were] marked differences across major financial centers during the boom, and the results were shockingly similar. So I wouldn't be overly preoccupied with these questions of institutional design. There is not an organizational chart that has the answer.

Having said that, I'd give a few principles. My favorite principle is, there should be one throat to choke. There should be clear responsibility and clear accountability for roles that are taken on, and ambiguity with respect to roles and responsibilities is unhelpful. It was said about Fannie and Freddie that during much of the last generation that they were in great shape because of the constructive ambiguity around the government support. Well, that turned out to be neither constructive nor ambiguous, and I would say the same, broadly, with respect to supervision and central banking.

So on the narrow question, Deborah, of the role of the Fed in supervision, I think we find it to be an incredibly useful source of information—not just in times of crisis, but in ordinary times—to understand what's going on in the real economy. And I think that that is something that's very important. I'd underscore it this way: if the Federal Reserve were left only with the largest, and in the phrase of the moment, most systemically significant institutions, only those that are most interconnected, I would be worried that we would be missing real banks that are connected to real businesses in many parts of the country. So I would be, along the principles I described, quite uncomfortable with a process where the Federal Reserve was only regulating big institutions in New York, which I think would feed what Richard talked about in his presentation, that somehow the Federal Reserve was looking out for New York and not looking out for Main Street. I think if we stay in the business of supervision, the business of supervision [should involve] institutions [both] large and small, so we get a real understanding of the cross-section of what's going on across the economy….

PF: Let me [approach] your hypothetical another way. Actually, Ernie Patrikis, who was on a panel here yesterday, taught me to be very clear about the distinction between regulation and supervision. The old Bundesbank didn't have a whit of written authority over the regulation of German banks, and they were the exclusive supervisor of every German bank. They actually ended up by being the supervisor of all the banks, having a pretty big say in the rules that ended up getting written in then Bonn.

So I think a role in *supervision*—hands-on, asset quality, back to my brute force, the asset quality of the bank's balance sheet—I think that's a good thing to have associated with the central bank.

I was not persuaded while I was at the Fed, I wasn't persuaded when I was at the Treasury, and I'm not persuaded now that the Fed is the right place to lodge the suite of powers associated with writing the rules, particularly when—now I'm making a political judgment—I don't think we're going to get to one regulatory agency in Washington. We're not going to get to one set of turf [rules], and I'd like to get to a more coherent rule-writing process. I'd like to get away from … the regulatory arbitrage.

So I hope what's in the bill now—and I'm going to try to be an optimist; maybe I'll live long enough to see it come back the way I want—is moving down the path toward a rational rule-writing process in which the arbitrage across different forms of financial intermediation [is limited]. Hands-on supervision can stay with those close to real concern for asset quality, provided the Fed demonstrates that concern for asset quality and we get away from this risk-based-capital idea that the supervisors can wear white coats and do fancy computer stuff, and be like lab technicians. That's not what we need from supervision. That would be the sort of end state I'd like to see.

RS: I don't really know what the right answer is to this problem, but at the Levy conference we've heard some talks, usually by Federal Reserve Bank presidents, saying the Fed should have an expanded authority, not a reduced authority. And President Bullard yesterday said [that] the Fed only regulates part of the banking system, … and that's only one-third of the financial sector. There's this big two-thirds out there that's not even subject to almost anybody's regulation…. So, the point was that the Fed should really have expanded powers to regulate or supervise all of these banking and nonbank financial institutions to do the job right.

Then there's the other extreme. There seems to be the way we're moving, that you're going to cut down the Fed's powers to supervise the banks they're supervising now and just let it deal with the 25 companies that have over $50 billion, or something like that, in assets. I think that strikes me as a part of Ron Paul's scheme, actually, to identify the Fed and Wall Street….

What I missed in Mr. Bullard's talk—where he was saying the Fed does the job of regulating [or] supervising banks but it can't do anything for those two-thirds that are outside the banking sector, the two-thirds of assets that are outside of banking—what I didn't hear him say was that (maybe Peter can confirm whether this is true) the Federal Reserve Bank in New York, all through the crisis, had 25 supervisors inside of Citibank, and Citibank got into trouble anyway. So how good a job is the Fed actually doing with the ones it is supervising? From my outside view, I have this notion that you have the slick MBAs that I teach working at the banks, and then there are these people who the Fed hires to supervise. I'm sure they're very professional and all that, but if they're just kind of sitting in Citibank day in and day out, they get kind of friendly with the MBAs, and maybe they don't blow the whistle when they should. I don't know. I don't know what the answer is.

PF: Actually, I was thinking of saying something in my first remarks here that I want to go back to. There are other dimensions of this problem that aren't being discussed. As Kevin says, when we focus on the who-struck-John, which agency is going to come out first in the pecking order and that's going to be the answer to the crisis, we miss the texture underneath that I think is really important. So take a step back.

The Canadians have come out of this pretty well. Everyone looks to Canada. They think—I think Kevin's point is a good one—yes, but there are other countries that have the same regulatory central bank structure that didn't come out well. So it looks like it's not how you divide up the regulatory authority. Well, the brutal fact—I don't think I could get any Canadian friends to admit this—is [that] for 25 years the Canadians have understood that you want to run a managed oligopoly in banking. You're going to have very few banks; you're going to let them earn a lot of rents from having very few. You can't have too few because you don't need a certain kind of competition. That's how you make a banking system stable. It really works. And you don't see them give speeches about it, but that's how the Canadian banking system is stable—a managed oligopoly of a handful of big banks.

But we're not going to get there in the United States. We're just not going to get to the place where we don't have essentially free banking. Every state can charter as many little banks as they want. And so we don't have the luxury of thinking we can go to that kind of corner, that kind of solution.

The last point: the business of supervision, the hard part of supervision, it occurs to me after my years of [acquiring] scar tissue, isn't wearing the trench coats and looking at the computers. It's having the courage to look at a financial institution, go in, and find out where are they making more money than you expect. Right? Where are they making above-average returns? There are only three reasons they can make above-average returns. They can make them because they're really good and they've got some secret sauce and competitive advantage; or because they're lucky; or because they're doing something naughty. So two out of three of the reasons that they are making more money should frighten you as a manager or a supervisor, and all you have to do is go in and grab the P&L [statement], see all their profit centers, and see who's consistently making more money than looks like a reasonable return to capital, and find out why.

Now, it's hard for the supervisors to get up in these big organizations. But, again, back to my metaphor of brute force supervision: someone's got to go in and ask those questions. And when we divide up the landscape in Washington, as we're likely to do because of the other compromises we make—we're going to have lots of banks, lots of different chartering organizations—it's very hard to find someone with that [kind of] street cred who's going to come in and say, "What are you doing? How are you making money here? Why are you making above-average returns over and over again? Oh, it turns out all your divisions are exposed to mortgages; they're not just here in the mortgage division. Everyone else got into the act." And that's the hard part. There's no secret sauce there other than just, again, brute force.

KW: Deborah, let me reply to a few points that my colleagues made.

First, managed oligopolies in the U.S. banking system would be bad for the U.S. economy. I think it is contrary to the long history of economic growth, and I'm sure Peter agrees with that. I worry that we end up not by decision, but by default, in a system where we do have a few large enterprises that are in the business of banking in a system that is less than competitive. It doesn't bother me to have enterprises that are small, medium, and large; but the small ones should be able to grow up and compete with the big ones. And if the big ones make bad decisions, they should be able to fall and become far, far smaller.

Second, I think back to the discussion we had about powers, powers that are being discussed in Washington, and granting them to the central bank. Powers are important, but I would say the panic showed that powers can be exercised in crisis. So my own instinct is that most authorities around the world weren't lacking in powers. Where some of the lacking was, was in [not] having a perfect crystal ball as to what would happen. I think in some ways the big challenge isn't what are the powers of a central bank going forward in this final phase, in this exit, and in the epilogue; it's where is the will and where are the guts. As I've been known to say around the office, you think we're unpopular now. *[laughter]* So I think the period in front of us will require us to have guts, will require us to call it the way we see it, and to have really more than power, but the will to make some tough choices.

I think the other discussion we've had up here is about, yeah, regulators need to have more authority. A regulatory power needs to be more centralized, or less. I think theory and the preoccupation with regulation is understandable. Regulators didn't do as good a job as we'd all want regulators to do. So we end up saying [that] regulators need to be reconstructed and reformed. I'll agree with that.

But I'd say a second thing, which is complementary, [and that] is, market discipline also fell. During the boom, as we've seen in all booms in economic history, complacency finds its way into financial markets. So, rather than putting the sole burden on regulators now to make sure bad things don't happen, I would say regulators need help, and they need help from market participants to help us police what's going on in financial firms, and that's impossible if we have institutions that are too big to fail. So markets need to do their part, too, and the rules that come out of Washington not only should make regulators, but they should [also] make markets and market discipline, I think, a more useful and complementary tool.

And then, finally, Peter talked about street cred. I think the thing that is special about the Federal Reserve and central banks that I've seen around the world is we have an unusual mix of talents from across a range of lawyers and market professionals and economists. We need to deploy those in a way to hit these problems. And I must say, I'm impressed by the institutional credibility that the Bernanke Fed found itself with when Chairman Bernanke and this group of governors came into office four years ago. The most important asset on our balance sheet is not up on the sheet that Richard showed you; it's our institutional credibility. That is nowhere on the balance sheet, but that is the biggest and most consequential asset we've got. So in the conduct of our responsibilities, everything should be done to make that institutional credibility more, not less. That means calling them the way we see them, and being as independent from political forces as possible.

DS: Hanging over the discussion is this idea of "too big to fail." Peter, you mentioned that we need to get away from this idea of thinking things are going swimmingly at a bank because of capital levels and risk ratios. I guess I'm curious: does that mean we should have smaller banks? I know we have an economy where we need large institutions to finance large companies, but is there a rationale to having a somewhat smaller banking system so that you don't have managed oligarchies, but [rather] smaller banks that don't pose a systemic threat to the system?

PF: Well, we will, sooner or later, end up with a smaller banking system. In 1985, I think every 15 cents of total corporate profits was in the financial services industry. We got up to about 35 cents on the dollar. I think we're going back again. So, relative to the size of the economy, someday we won't have a financial services industry that large. I think that's going to be part of it.

DS: Also smaller institutions themselves.

PF: But if the opportunity set is smaller, we're likely to end up in … My little list at the front end of risk-based capital, my list of failures that we had to fix, one of them was concentration limits. We've allowed too much trading to take place. We can get back to better lending limits, better concentration limits. Let's be tougher on it. It used to be, 20 years ago, "too big to fail" meant too many deposits. Today, it means too complicated and big a trading book. So we can have smaller trading books—we can. We can still have a fabulous financial services industry, and just have better margin discipline, better counterparty limits—just get it all a little tougher. And frankly, a number of us who want to see more derivatives on exchangelike mechanisms versus central clearing parties—remember why we care about that. That's because we're confident there will be a disciplined counterparty margining arrangement that comes out of the clearinghouse. Because … that's the only way [the clearinghouse] can protect itself, and that itself will be a discipline on the volume of trading.

So I don't know that we have to go at it through let's-snip-up-the-institutions. I think that's not likely to work. I'm not a good enough engineer to think I know how to draw all the lines to shrink all the institutions, but if I think about it as a behavior set, how can I influence this ecosystem to get less risk of [institutions being] too interconnected to fail? Shrink the trading books.

RS: Your question about [whether] we need small banks: the United States is a country that's had a unique banking system with thousands, even tens of thousands, of banks, ranging from big ones to small ones. I think there's a real place for community bankers. We'll probably continue to have a system like that. By the way, in this business about Canada, managed oligopolies versus sort of free competition in banking, it seems to me at the conference we already heard there's a middle ground, and Paul Krugman talked about it yesterday. He said that you can have a system with, not managed oligopolies, but somehow where entry into banking is controlled. He almost said that the New Deal created a system where entry into banking was controlled, and you had a lot of small banks [and] a lot of big banks, and that was criticized later on for stifling competition. But Krugman, I think, was suggesting that that system, the 1930s system of rigid controls over entry, which lasted [through] the '40s, '50s, and '60s, may have been the source of stability. So it's not just a matter of going to a Canadian-type system of managed oligopoly. They have, what, five or six; we probably have 20 or 30. You can have 8,000 banks, but if you're controlling entry, creating value out of the bank franchise, maybe that's a stabler system. I don't know whether I agree with it, but there is a middle ground between free competition and managed oligopoly.

PF: If I could just be clear, of course I agree with what Kevin said. I'm not proposing the Canadian solution for our country. I don't like it; I don't think we're going to go there. But if you value stability of your banking system, and you want to put that value higher up the food chain, well you can get to that. You have to give up other things.

DS: We're going to open up for questions, unless, Kevin, do you want to comment?

KW: Two quick things: first, the action in 2010 on the real economy is not New York, and Washington, and other larger cities; it's with small banks serving small businesses everywhere across the country. So I think it is an incredible asset that we have this incredibly diversified banking system that puts us in far better stead in 2010 than being stuck with fewer institutions.

Second, I think for the larger institutions, if we can't be persuaded that they can be unwound in a way that is orderly, then we should not tolerate them in their current form. The open question is whether or not we can design a resolution system, a regulatory system, and, in my view at least as important, a system where market participants end up being good policemen of them, rather than relying on the government to do bold things on Sunday nights to rescue.

DS: We'll open up to questions from the audience.

Q: *[unintelligible]*

PF: First, "naughty" can mean too much leverage—it can mean lots of things. It doesn't have to mean criminal in my simple lexicon…. I think the main reason profits in the financial sector went up for 30 years, 25 years, is because we had a bull market in financial assets. We had 30 years of falling nominal rates. Financial asset values go up, and we end up with a financial system that focuses on the collateral. So rents go up—that's the lucky part, which doesn't make for a stable system…. The mix of naughty, of people who know they're being lucky and lever up—that's actually where I think a lot of it comes from. I don't have an ultimate answer to your question, but yes, I think we've got to care about what the split is: good, lucky, naughty….

Q: If you're not going to investigate and prosecute these people, what's going to keep this from happening again?

PF: I think there are some asset managers, of which I'd count BlackRock, who are trying to pursue the warranties we got on pools of securities. So someone may [be able to trace] some warranties up the food chain to the buyers of those securities [and prove] that they weren't liar loans—that the income was what the income was supposed to be. So we're trying to pursue that. It feels a little lonely. There are not a lot of others [doing that]….

DS: One more question. I think there's a microphone.

Q: I had a question for Professor Sylla. Thank you very much for enlightening us on the political history of central banks. But I'm wondering—and you've read Ron Paul's book; I haven't—I'm wondering if some of the anger at the Fed is precisely what was being discussed just now, that there might be a perception that the Fed bailed out foolish risks on Wall Street, and it's not only the Tea Party, but Andrew Haldane has this paper called "Banking on the State." Is it just that the financial sector got so large we must bail it out, and we're being held hostage, and that there is some genuine anger at that, and the existing reform proposals do not address that?

RS: Yes, I think your question almost summarizes some of the points I was making: that there is an anger about bailouts, certainly. Even the Republicans now—that's Krugman's newspaper column today—are using the claim that the financial reform bill, the Senate bill, is nothing but a bailout, [that it] institutionalizes bailouts. So everybody's against bailouts now, and I think it's perceived, as you pointed out, that the Fed's actions were actually bailing out the kind of bad boys, naughty boys, that we were talking about in the previous question.