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TAKING STOCK: INDEPENDENT VIEWS ON TARP'S EFFECTIVENESS

HEARING

CONGRESSIONAL OVERSIGHT PANEL

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

NOVEMBER 19, 2009

Printed for the use of the Congressional Oversight Panel

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CONGRESSIONAL OVERSIGHT PANEL

PANEL MEMBERS

ELIZABETH WARREN, *Chair*

REPRESENTATIVE JEB HENSARLING

PAUL ATKINS

RICHARD H. NEIMAN

DAMON SILVERS

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TAKING STOCK: INDEPENDENT VIEWS ON TARP'S EFFECTIVENESS

THURSDAY, NOVEMBER 19, 2009

U.S. CONGRESS,
CONGRESSIONAL OVERSIGHT PANEL,
Washington, DC.

The Panel met, pursuant to the notice, at 9:36 a.m. in Room SD–138, Dirksen Senate Office Building, Elizabeth Warren, Chair of the Panel, presiding.

Present: Elizabeth Warren [presiding], Paul S. Atkins, Damon Silvers, Dean Baker, Charles Calomiris, Simon Johnson, Alex Pollock, and Mark Zandi.

OPENING STATEMENT OF ELIZABETH WARREN, CHAIR, CONGRESSIONAL OVERSIGHT PANEL

Chair WARREN. This hearing will come to order. Good morning. I'm Elizabeth Warren. I'm the chair of the Congressional Oversight Panel. I am calling to order this hearing on the effectiveness of TARP.

This will be the Panel's 14th public hearing, but not its last, so I welcome you all here.

Last fall, with the country in the midst of a crisis, Secretary Paulson appealed to Congress for the emergency authorization of $700 billion to restore confidence in the system and to rescue the economy from what he said would be a catastrophic collapse in the financial sector.

Today, more than a year later, many conclude that the Troubled Assets Relief Program succeeded in achieving this fundamental objective. But, TARP was not designed merely to rescue large banks; the broader, long-term goals were aimed at strengthening the overall economy and dealing with the alarming number of mortgage foreclosures.

The problems are unmistakable. Uncertainty persists about the stability of our financial institutions and whether they can survive without the benefit of government guarantees. One in nine mortgage holders is in default or foreclosure. Unemployment is at 10.2 percent. More than 100,000 families are declaring bankruptcy every month.

TARP has also failed to check the culture of excessive risktaking that brought on this crisis while it has created price distortions and moral hazard that plague meaningful efforts at recovery.

The rules of the financial road, the inadequate and wrongheaded regulations and laws that headed us into this crisis, remain unchanged. In the midst of these uncertainties, Secretary Geithner

will make the decision whether to extend TARP; indeed, he will make that decision, presumably, in the next few weeks. Our December oversight report will contribute to this debate by assessing the overall performance of the program in its first 14 months and by highlighting some of the critical policy choices that have not yet been resolved.

Today, we are fortunate to have a very distinguished panel of five leading experts in the field of finance and economics on hand to discuss what TARP has achieved and where it may have fallen short, as well as the state of the financial sector and the progress of the economic recovery. We are honored to be joined by Dr. Dean Baker, the codirector of the Center for Economic and Policy Research; by Dr. Charles Calomiris, the Henry Kaufman Professor of Financial Institutions at Columbia Business School, and a member of the American Enterprise Institute's Shadow Financial Regulatory Commission, and codirector of the American Enterprise Institute's Project on Financial Deregulation; Dr. Simon Johnson, the Ronald A. Kurtz Professor of Entrepreneurship at the MIT Sloan School of Management, and a senior fellow at the Peterson Institute for International Economics; Dr. Alex Pollock, a resident fellow of the American Enterprise Institute, and former president and CEO of the Federal Home Loan Bank of Chicago; and Dr. Mark Zandi, a cofounder and chief economist at Moody's Economy.com.

I want to thank you all for joining us here today.

Before we proceed with your testimony, allow me first to offer my colleagues on the Panel a chance to make their opening remarks.

[The prepared statement of Chair Warren follows:]

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CONGRESSIONAL OVERSIGHT PANEL

Opening Statement of Elizabeth Warren

Taking Stock: Independent Views on TARP's Effectiveness

November 19, 2009

Good morning and welcome to this hearing of the Congressional Oversight Panel. My name is Elizabeth Warren and I am the chair of the Panel. This is the 14th public hearing of the Panel. It will not be the last.

Last fall, in the midst of a huge crisis, then-Treasury Secretary Henry Paulson appealed to Congress for an emergency authorization of $700 billion to restore confidence in the system and to rescue the economy from the wreckage of what he said would be a catastrophic collapse of the financial sector. Today, more than a year later, many conclude that the Troubled Asset Relief Program succeeded in preventing the collapse of the financial sector, but the success of TARP in achieving its broader, long-term goals remains an open question.

Uncertainty persists about the stability of our financial institutions and whether they can survive without the benefit of government assistance. The home foreclosure crisis continues largely unabated, delaying a real recovery in the housing market and the larger economy. Unemployment is now at 10.2 percent. More than 100,000 families are filing for bankruptcy each month. TARP has failed to check the kind of excessive risk-taking that brought on the crisis, while it has injected an unprecedented level of pricing distortions and moral hazard into the market place. And the rules of the financial road—the inadequate and wrong-headed regulations and laws that headed us straight into this crisis—remain unchanged.

In the midst of these uncertainties, Secretary Geithner must decide whether or not to exercise his authority to extend TARP beyond its scheduled expiration at the end of this year. The Panel's December oversight report will contribute to a public debate about this decision by assessing the overall performance of the program in its first 14 months and by highlighting some of the critical policy choices that have not yet been resolved.

Today, we are fortunate to have a very distinguished panel of five leading experts in the fields of finance and economics on hand to discuss what TARP has achieved and where it may have fallen short, as well as the state of the financial sector and the progress of the economic recovery.

We are honored to be joined by:

- Dean Baker, the co-director of the Center for Economic and Policy Research;
- Charles Calomiris, the Henry Kaufman Professor of Financial Institutions at Columbia Business School and a member of the American Enterprise Institute's Shadow Financial Regulatory Commission and co-director of the American Enterprise Institute's Project on Financial Deregulation;
- Simon Johnson, the Ronald A. Kurtz Professor of Entrepreneurship at the MIT Sloan School of Management and a Senior Fellow at the Peterson Institute for International Economics;
- Alex Pollock, a resident fellow at the American Enterprise Institute and a former president and CEO of the Federal Home Loan Bank of Chicago;

  and

- Mark Zandi, a cofounder and chief economist at Moody's Economy.com.

Thank you all for joining us today. Before we proceed with your testimony, allow me to first offer my colleague on the Panel an opportunity to make opening remarks at this time.

Chair WARREN. Panelist Atkins.

STATEMENT OF PAUL S. ATKINS, MEMBER, CONGRESSIONAL OVERSIGHT PANEL

Mr. ATKINS. Well, thank you very much, Madam Chairman.

And thank you all very much for joining us here today. I really look forward to hearing what you all have to say.

As Elizabeth just said, today's topic, I think, is very important and timely. TARP is now more than a year old, and much has changed in that year, and much for the better. Is that a coincidence due to other factors, or is it due, in some part, to TARP? There are still problems, of course, in the marketplace for financial products and financial services, including thinly traded markets in once very liquid securities, too much government influence and interference in corporate direction and affairs, and outright failures of TARP recipients, which raises questions, I think, about Treasury's credit analysis in the first place, since TARP funds were originally supposed to go only to strong institutions.

So, has TARP been a success? Our discussion today, I hope, will shed some light on that question. In many ways, we can only see part of the picture, because we are—I think, are still too close to the event, and TARP itself seems not to be at an end.

EESA, the statute that gave the Treasury Department the power to establish TARP, I think is a poorly drafted statute with many internal inconsistencies and ambiguities. That probably is embarrassing for the drafters and those who approved it, but it is rather understandable, given everything that was going on at the time, including a financial crisis and a national election campaign. In fact, I think the underlying premise of EESA, that Treasury would acquire assets, did not really materialize, of course, except in one small program, the Public-Private Investment Partnership, which has not really even gotten off the ground and probably is unlikely to do so in any meaningful way. So, thus, Treasury's implementation, I think, is an issue that must be considered in the context of its statutory authority.

So, to assess the success of a program, one must consider its goals, its implementation, the conclusion, and any fallout that results from the implementation, including unintended consequences, bad precedent, and including, in this case, of course, moral hazard and costs. Of course, the benefits have to be weighed, as well.

As the goals, TARP is a program that Congress hoped would stabilize the financial system. The mortgage foreclosure provisions are an adjunct to that mission. So, did TARP stop the bleeding? Did it help to stop the panic in the liquidity crisis? It probably was a contributing factor, but TARP is not a fiscal stimulus program or a means to change the regulatory structure of financial institutions. Those targets were undertaken by the new administration and a new Congress through other statutes.

So, I think we cannot debate the success of TARP without focusing on how it ends. It's one thing to get an airplane into the air—you need speed and heft and enough runway to make course adjustments, depending on the crosswinds and unexpected turbulence—it's another thing to bring the airplane safely to the ground.

The crisis is over, but we still see Treasury doling out billions of dollars to TARP—of TARP funds to firms large and small, from GMAC to banks with, say, a million or two—a hundred million or two in deposits. These are hardly institutions that are too big to fail, since their failure would not rock the financial system today.

So, what's the rationale for doing these transactions? Treasury has not articulated one, and it's not even apparent that Treasury has any plan or decisionmaking standards for doing so. Treasury certainly has not made anything manifest to this Panel yet.

So, how will the program end? What will it look like next year if the Treasury Secretary extends it beyond the end of this year? We have another hearing coming up about that in the future.

So, I look forward to our discussion today and to the insights that you all have to give us.

Thank you very much.

[The prepared statement of Mr. Atkins follows:]

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CONGRESSIONAL OVERSIGHT PANEL

Opening Statement of Paul Atkins

Taking Stock: Independent Views on TARP's Effectiveness

November 19, 2009

Thank you, Madame Chairman. I appreciate very much the attendance of the five distinguished witnesses that we have today. I look forward to hearing their views.

Today's topic is very important and timely. TARP is now more than one year old. Much has changed in that year, and much for the better. Is that a coincidence, or is it due in some part to TARP, or is it due mainly to other factors? There are still problems in the marketplace for financial products and financial services, including thinly traded markets in once very liquid securities, too much government influence and interference in corporate direction and affairs, and outright failures of TARP recipients, which raises questions about Treasury's credit analysis since TARP funds originally were supposed to go only to "strong" institutions.

Has TARP been a success? Our discussion today I hope will shed some light on this question. In many ways, we can only see part of the picture, because we are too close to the event and TARP itself is an ongoing program. The Emergency Economic Stabilization Act (EESA), the statute that gave the Treasury Department the power to establish TARP, is a poorly drafted statute, with many internal inconsistencies and ambiguities. That probably is embarrassing for the drafters and those who approved it, but it is rather understandable given everything that was going on at the time, including a financial crisis and a national election campaign. Still, it does put $700 billion of taxpayer resources at risk.

To assess the success of a program, one must consider its goals, its implementation, the conclusion, and any fall out that results from the implementation, including unintended consequences, bad precedent (such as moral hazard), and costs. Of course, benefits must be weighed as well.

As to goals, TARP is a program that Congress hoped would stabilize the financial system. The mortgage foreclosure provisions are an adjunct to this mission. Did TARP stop the bleeding? Did it help to stop the panic in a liquidity crisis? It probably was a contributing factor. But, TARP is not a fiscal stimulus program or a means to change the regulatory structure of financial institutions. Those targets were undertaken by the new administration and a new Congress through other statutes.

The implementation has also been problematic. In fact, the underlying premise of EESA, that Treasury would acquire assets, did not really materialize except in one program – the Public-Private Investment Partnership, which has not really gotten off the ground and is probably

unlikely to do so in any meaningful way. Thus, Treasury's implementation is an issue that must be considered in the context of its statutory authority.

We cannot debate the success of TARP without focusing on how it ends. It is one thing to get an airplane into the air – you need speed, heft, and enough runway to make adjustments depending on the cross winds and unexpected turbulence. It is another thing to bring the airplane safely to the ground. The crisis is over, but we still see Treasury doling out billions of dollars of TARP funds to firms large and small – from GMAC to banks with only a $100 million or so in deposits. These are hardly institutions too big to fail, since their failure would not rock the financial system today. What is the rationale for doing these transactions? Treasury has not articulated one, and it is not even apparent that Treasury has any plan or decision making standards for doing so. Treasury certainly has not made anything manifest to this panel. How will the program end? What will it look like next year if the Treasury Secretary extends it beyond the end of the year?

These are among the questions that I trust that we will cover this morning. I look forward to our discussion.

Chair WARREN. Thank you.

The Chair recognizes the Deputy Chair, Damon Silvers.

STATEMENT OF DAMON SILVERS, DEPUTY CHAIR, CONGRESSIONAL OVERSIGHT PANEL

Mr. SILVERS. Yes, thank you, Madam Chair, and good morning.

First, I want to express my appreciation to our staff for organizing this hearing with such a stellar panel. I also want to particularly recognize my friends, Alex Pollock and Dean Baker, who, like all of you, have contributed so thoughtfully to the intellectual discussion around the impact of TARP and the nature of the financial crisis.

The question of the economic impact of TARP is complex. I think you heard a little bit of that complexity from my fellow panelist, Commissioner Atkins.

TARP has been accompanied by other major interventions in the economy, in the context of trying to contain and manage the financial and economic crisis, both in the form of the stimulus package and massive interventions in the credit markets by the Federal Reserve. In that context, it is often difficult to isolate the impact of TARP distinctly within that landscape. I'm particularly interested in this hearing trying to do that, trying to isolate the impact of TARP, and then, secondly, trying to understand the—what the impact of TARP is in a larger economic sense.

This Panel, in its February report, did a valuation of the initial TARP investments in the Capital Purchase Program, the SSFI, and the TIP. At the time we did so, we recognized that a financial valuation is not the end of the story, that there was a much larger and more complex question of the economic impact of these actions. That question has been much harder to get our arms around than the question of whether or not, from a simple, sort of, transactional perspective, the public got a good deal. So, I hope this hearing will address that.

Now, I'm particularly concerned, in that context, about the question of TARP's impact on the availability of credit for the real economy. This was the subject of some—indirectly, of some—of remarks this week by Chairman Bernanke, who noted that we have a continuing problem of credit availability in the business sector which he attributed to the weakness of our banks.

In this context, I simply do not think it is a relevant question whether we would have been better off had there been no TARP. I think that, if I'm not mistaken, each of your testimony makes clear that each of you believes that some sort of significant government action on a large scale was necessary last October. I think what we should focus on, rather, is whether or not the way that we have managed the financial crisis, the way in which TARP has been structured and implemented, was and is fair to the American public, and secondly, whether it has really repaired our financial system or simply bought time, at the risk of exposing us to a Japanese-style lost decade.

These questions have been addressed at some length in the written testimony you all have submitted, and very thoughtfully. And I commend all of you. I—it was an education. And I look forward to the hearing this morning.

Thank you.
[The prepared statement of Mr. Silvers follows:]

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CONGRESSIONAL OVERSIGHT PANEL

Opening Statement of Damon Silvers

Taking Stock: Independent Views on TARP's Effectiveness

November 19, 2009

Good morning. First I want to express my appreciation to our staff for organizing this hearing with such a stellar panel. I want to recognize my friends Dean Baker and Alex Pollock, who like all of our witnesses today have written so thoughtfully about the economic impact of TARP.

The question of the economic impact of TARP is complex. TARP has been accompanied by other major interventions both in the form of the Obama administration's stimulus program and massive interventions in the credit markets by the Federal Reserve. I hope this hearing will help us focus on the distinct impact of TARP itself.

I am particularly concerned about the question of TARP's impact on the availability of credit for the real economy. In this context I simply do not think it is a relevant question whether we would be better off had there been no TARP. I think we should focus on whether the way we have managed the financial crisis is fair to the American public and whether it has really repaired our financial system or simply bought time at the risk of exposing us to a Japanese style lost decade.

I look forward very much to hearing from our witnesses.

Chair WARREN. Thank you, Deputy Chair Silvers.

I also should note that Richard Neiman, Superintendent of Banks for the State of New York, is unable to be with us. A last-minute call on his duties, by the Governor of New York, meant that he could not join us this morning. And he sends his apologies. Also, Congressman Hensarling had hoped to be with us, but he is in markup with the House Financial Services this morning. So, you're down to the skeleton crew, here.

I would like to ask each of you for opening remarks. I'm going to ask that you hold the remarks to 5 minutes, and I'll try to be strict about that if anyone goes over, in the reminder that your written remarks will become part of the record, in any case, and we want to be sure to save enough time that we can have a thoughtful question-and-answer.

So, I'd like to start with you, Dr. Baker, if I could, please.

STATEMENT OF DEAN BAKER, CO-DIRECTOR, CENTER FOR ECONOMIC AND POLICY RESEARCH

Dr. BAKER. Thank you very much for inviting me to speak here today.

What I'll say is, I think that the TARP has been somewhat successful. Certainly, the TARP, together with other actions that have taken, have prevented the collapse of the financial system, something we should all be thankful for. I will say, I think that's somewhat of a low bar, in the sense that there were other measures, and basically, with the pretty much unlimited resources of the Fed, that should have been expected, in any case.

But, the more important point I'll say is that I think the TARP ended up—ends up being largely counterproductive, in the sense that it really abused public faith, and I think we pay a big price for that. And I'll give two specific points, that, first, I think it misrepresented the urgency. We had—I should say, the proponents of the TARP at the time misrepresented the urgency at the time the TARP was passed, and, perhaps more importantly, they oversold the benefits that—there were claims made, specifically, that would extend credit to businesses, we'd, in fact, prevent a recession, that we would save homeowners from foreclosure. They clearly have not happened, and the fact that those claims were used to help sell the TARP to Congress undermines faith in government.

Okay, well, getting to the first point, the success—I mean, again, just realistically, the TARP was—even if all the money were allocated, which, of course, we know it was not—was $700 billion. The Fed lent over 2 trillion, at the peak, on its various special lending facilities. In addition, we had the FDIC loan programs, loan guarantee programs, we had the guarantee of money market funds. All of these were very, very important. The TARP plays a role in that, there's no doubt about it; but, to isolate the TARP and say that the TARP was essential—well, all of these programs were important. Had we not had the TARP, could you have gotten around it? Perhaps. It certainly contributed. You know, I don't think there's any point in denying that.

In terms of how we went about doing this, I would say that obviously there was a lot of mishandling. Keep in mind, Troubled Asset Relief Program. We haven't combined troubled assets. We saw that

Secretary Paulson—after he had the approval of Congress, the bill was signed into law, he waited a period of time and decided the best thing to do was inject capital directly into banks. I think, a right choice. But, the point was, that was not was originally proposed.

The second point that he did—and I think this was a very serious mistake that I don't think there's been a full reckoning—was, he made a decision that he wanted to keep the bank situation secret, so he insisted that all the major banks had to take TARP money, whether they needed it or not. I think that was a very serious error. And I think that was corrected, to a large extent, with the stress tests that were produced in March. Many problems that I and others have raised with those stressed tests, but I think it was very valuable in having more transparency, and I think the markets actually responded to that.

So, I think that there were some very, very major errors, in the early handling of the TARP, that I think it's important to come to grips with, just as a matter of record and for future reference.

Now, in terms of undermining public faith, I think this is a very important issue, because obviously the government's going to continue to play a central role in guiding us out of this downturn, which is likely to be very long-lasting. And the events around the TARP certainly had the effect of undermining confidence in government. And just to very quickly mention a few:

The selling of the TARP—to my mind, the best argument was the claim that the commercial paper markets were shutting down. That means the economy will shut down, because so many major corporations are dependent on commercial paper for meeting the payroll and paying other bills.

Now, President Bernanke, after the TARP was passed, announced the creation of a special facility to directly buy commercial paper from nonfinancial corporations. My guess is, if Members of Congress had known that the Federal Reserve Board had that power and was prepared to exercise it, they might have put more thought into what the TARP looked like. I don't think that's a good practice, to deceive Congress, to deceive the public.

Other aspects of TARP—we were told that money would be used to keep homeowners in their home. Clearly that was not the case. There was no provision made that if banks took TARP money, they were obligated to modify mortgages. That may have been a reasonable decision, but there was a selling of TARP as though that would do that.

We were also told that TARP money would—that it would be tied to executive compensation. There were claims we'd have no excess compensation, golden parachutes. We know that, again, was not the case. Was that appropriate? Arguably, yes; arguably, no. But, the point was, it was sold that way, and people now see that you have the executives of these banks going with large bonuses. That, again, undermines confidence.

Thirdly, the claim that somehow this would extend credit to small firms that were starved for credit at the time. Again, that was—there were no provisions in the TARP that would ensure that. Again, I think that's not necessarily the fault of the banks; I think, realistically, given the severity of the downturn, it's not

surprising to me that small businesses are having a very hard time getting credit. You could tell the same story in the last recession, or certainly the 1990–91 recession. That's what happens in recessions. But, again, it's a case of overselling the TARP.

So, just to quickly sum up, I'd say that we have a real problem. This was not a well-thought-out, well-conducted program. Some of that is understandable, given the rush. But, again, I think we should make a point of trying to be honest with the public, even in the situation where there is some urgency. I think this was a mis-sold program.

[The prepared statement of Dr. Baker follows:]

Testimony of Dean Baker
Before the Congressional Oversight Panel for Troubled Asset Relief Program
November 19, 2009

Thank you, Chairwoman Warren for inviting me to share my views on the success of the Troubled Asset Relief Program (TARP) to date and its impact on the broader economy. My name is Dean Baker and I am the co-director of the Center for Economic and Policy Research (CEPR). I am an economist and I have been writing about issues related to finance since 1992.

There are many factors that make it difficult to assess the effectiveness of the TARP, the most important one being the fact that the TARP was carried through in conjunction with rescue efforts by the Federal Deposit Insurance Corporation (FDIC) and the Federal Reserve Board. The money made available to the financial system through these alternative mechanisms was considerably larger than the amount made available through the TARP. Furthermore, there is no publicly available information on the terms or the beneficiaries of the loans issued through the Fed's special lending facilities.

For this reason, there is no easy way to determine the importance of TARP funds in stabilizing the financial system. Clearly, the TARP did play a role in stopping the panic that was driving financial markets lass year. Together with the other structures put in place, the TARP did succeed in restoring stability to the financial system.

However, keeping the financial system operating is a rather low bar. There is little doubt that the Federal Reserve Board, with its virtually unlimited ability to print money, can prevent a financial collapse. The relevant question is whether the TARP, along with the other programs put in place, restored stability in a way that best served the real economy and also can be viewed as fair by the American people. By these criteria, the TARP does not score very well.

At the point when Treasury Secretary Paulson requested TARP funds from Congress, most of the major banks were on the edge of collapse. They all had large amounts of bad debt on their books, most of which stemmed either directly or indirectly from the collapsing housing bubble. The immediate cause of the panic was the disappearance of the government's implicit "too big to fail" guarantee after the bankruptcy of Lehman. Since investors knew that all the banks could have enough bad debt to be insolvent, they were unwilling to trust their money to the banks, even for short periods of time, without demanding extraordinary risk premiums. At this point, the system could not be stabilized without large-scale interventions from the government, such as the TARP, the FDIC's emergency loan guarantee program and the Fed's special lending facilities.

While the economy clearly benefited from preventing the outright collapse of the financial system, this could have been carried through in ways that led to more broad-based benefits to society and also directly transformed the financial system, instead of restoring and reinforcing its existing structure. This point is crucial, since the country is paying an enormous price for its dysfunctional financial system. The downturn is likely

to lead to a loss of close to 40 percent of GDP (about $6 trillion) in total. If a government social program ever led to such disastrous losses, there would be a very serious accounting and undoubtedly major changes to ensure that such a disaster never occurs again. There is little reason at this point to believe that serious reforms will occur.

In terms of broader economic goals, the TARP was approved with promises to ensure that homeowners would be allowed to stay in their homes and also that executive compensation in the bailed out banks would be restrained. It has failed miserably in both areas.

Foreclosures have proceeded at a rate of close to 2 million a year in the period since the TARP was passed and most projections show this pace continuing through 2010 and into 2011. Banks were not required to modify mortgages as a condition of getting TARP money or other special assistance. As a result, few banks made serious efforts to offer loans terms in ways that provided a serious alternative to foreclosure. Only a tiny fraction of delinquent mortgages were modified in the half year following the TARP and even in these cases, many homeowners subsequently re-defaulted, since they were still unable to meet the payments on their loans.

As a result of the Obama administration's Making Home Affordable program, which directly uses TARP money as an incentive to lenders and servicers to modify loans, more than 20 percent of delinquent mortgages are now being considered for trial modifications. While this is a substantial improvement, this figure still means that the vast majority of homeowners are not getting modifications. Furthermore, it will be important to track the number of trial modifications that result in permanent modifications that allow people to remain in their homesas homeowners.

It would also be desirable to have reliable data on the extent to which modifications have reduced monthly housing costs and debt burdens. One of the factors perpetuating the downturn is the falloff in consumption. This decline is driven in large part by the debt burden that many homeowners now must bear as a result of purchasing homes at bubble-inflated prices. Insofar as modifications relieve this debt burden and/or reduce monthly mortgage payments, they will be freeing up money for consumption, which will be a boost to the economy.

It would have been possible to couple the TARP with a requirement that mortgages be modified according to some rule, or alternatively to temporarily alter rules on foreclosures, for example by allowing bankruptcy cramdown or granting homeowners the right to stay in their homes as renters. Such measures would not only have provided housing security to tens of millions of homeowners, they also would have gone far toward relieving the debt burden that is a main cause of the recession.

Tens of millions of homeowners are now either underwater in their mortgages or have very little equity, due to the plunge in home prices. These homeowners will be very reluctant to spend, given their extraordinary debt burden. If they could have their mortgage debt reduced either through a modification, or by a foreclosure that allowed

them to stay in their homes as renters, they would be better able to follow a more normal consumption path. The current levels of household debt are likely to leave consumption excessively constrained for several years to come. The failure to address this issue – when it would have been very easy to set conditions on banks receiving TARP money and other special assistance -- has increased the length and severity of the downturn.

The other major failing of the TARP was its failure to impose conditions that required the reform of the financial structure itself. The financial structure has become hugely bloated in recent decades, accounting for more than 30 percent of all corporate profits in the years leading up to the crisis. In addition, the top executives in financial firms paid themselves hugely outsized salaries. In addition to being a direct drain on the economy, these outsized salaries set benchmarks for executives in other sectors and even for officers in universities and other non-profit organizations.

The assistance provided in a time of crisis through TARP and other special programs provided an opportunity to impose binding restrictions on financial firms that would permanently alter their pay structures. Instead, the restrictions put in place in the legislation were virtually toothless. It is not clear that any executive has seen his or her pay reduced as a direct result of the TARP restrictions.

It is important to recognize that imposing pay restrictions as a condition of receiving TARP money and other special assistance is not interference with the market. Giving these banks money is interference with the market. The market's assessment at this moment of crisis was that these firms were bankrupt, which would have left most of their executives unemployed. The government chose to over-ride the market by giving the banks the money they needed to survive. The government could have imposed whatever conditions it chose for receiving this money.

The failure to impose serious restrictions on the banks both undermined public confidence in government and also left the conditions in place for further crises. It is very difficult to justify such an extraordinary grant of government largesse without any quid pro quo. This is especially difficult at a time when much of the country is either unemployed or facing the threat of unemployment and/or at risk of losing their home.

The crisis itself led to further concentration in the financial sector, with the largest banks all having been encouraged to buy up bankrupt competitors. As a result, the largest banks now enjoy fairly explicit "too big to fail" protection. There also has been almost nothing done to restrain the speculative practices of the major banks. Goldman Sachs, in particular, stands out by virtue of the fact that it is still acting as an investment bank (arguably, it can better be described as a hedge fund), even though it is now operating under the protective umbrella of the Federal Reserve Board and the FDIC. There does not appear to be any effort to restrain its speculative activity.

It would be useful to assess various measures of concentration in the period before and after the crisis to determine the extent to which the crisis has altered the structure of the industry. Given the mergers of several large banks, there can be little doubt that the

largest banks control a larger share of assets and deposits than was the case before the crisis. There has undoubtedly also been greater concentration in mortgage issuance, credit card debt, and other areas of banking operation. The FDIC and the Fed have data that should allow for quarterly updates on a wide variety of measures of the concentration of the financial industry.

Rather than shrinking, it appears that the financial sector has actually grown larger relative to the economy as a result of the downturn. In 2007, the financial sector's share of private sector GDP averaged 17.5 percent. This had risen to 17.8 percent in the second quarter of 2009, the most recent quarter for which data are available.[1] Similarly, the financial sector's share of corporate profits has far surpassed its pre-crisis peak. In 2005, the peak pre-crisis year, the financial sector accounted for 23.5 percent of corporate profits. In the second quarter of 2009, the share was up to 30.9 percent.[2]

In the last few months, several major banks have announced plans to make large bonus payments to their top executives and top performers. It would be helpful to have reliable data on the total amount of money that is being distributed among high earners at TARP recipients. This could take the form of a measure of the total compensation given to either some specific number of highest paid employees (e.g. the top 50) or the value of the compensation to employers who earn above a certain threshold (e.g. $500,000). At this point, I do not know of any reliable basis for assessing the share of income in the sectors going to the highest earners, but the large bonuses announced by some institutions certainly suggest that it could be increasing.

One area in which the financial industry may have wrongly been blamed is a failure to make loans. In the months immediately following the collapse of Lehman Brothers, the financial system was not operating normally and loans of all types were difficult to secure. However, as a result of the actions by the Fed and the TARP, the system is operating more normally. Larger corporations have no difficulty issuing commercial paper and even long-term bonds at reasonable spreads against Treasury bonds. Mortgage finance appears largely normal as a result of the actions of Fannie Mae and Freddie Mac, as well as the FHA. The fact that there is no unusual gap between mortgage applications and mortgage issuance indicates that homebuyers are not facing any unusual difficulty in securing loans.

The one sector that clearly is having difficulty securing credit is the small business sector. While this is an impediment to recovery, this sort of credit tightening is typical of a recession. The complaints from business owners over being denied credit are not qualitatively different than the complaints that were made in 1990-91 recession. Lenders will tighten credit to business during a downturn simply because otherwise healthy businesses are much riskier prospects during a recession. There is no reason to believe that the tightening of credit during this downturn is any greater than what should be

[1] Bureau of Economic Analysis, National Income and Product Accounts, Table 6.1D, line 15 divided by line 1, available at http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N.
[2] Bureau of Economic Analysis, National Income and Product Accounts, Table 1.14, (line 8 minus line 24) divided by line 8, available at http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N

expected given the severity of the recession. To press banks to make more loans in this context would be to insist that they make loans on which they expect to lose money. This would be questionable economic policy.

The housing bubble and the bubble in non-residential real estate that followed in its wake led to enormous overbuilding in both sectors. As a result, demand in these sectors has fallen off by an amount that is close to 4 percentage points of GDP (about $560 billion). The loss of $6 trillion in housing bubble wealth has led to a falloff in annual consumption of close to $400 billion. There is no easy mechanism by which the economy can replace close to $1 trillion in annual demand. (The stimulus led to an increase of approximately $150 billion a year in demand, after deducting cutbacks by state and local governments.) Under these circumstances, it is not surprising that the country would see a severe slump and high unemployment. While the financial sector may bear much of the blame for supporting the growth of a dangerous bubble, the economic wreckage that the country is seeing now is a predictable result of the collapse of the bubble and little would be changed if the financial sector had not been seriously impacted by the crisis.

Chair WARREN. Thank you very much, Dr. Baker.

Dr. Calomiris.

STATEMENT OF CHARLES CALOMIRIS, HENRY KAUFMAN PROFESSOR OF FINANCIAL INSTITUTIONS, COLUMBIA BUSINESS SCHOOL

Dr. CALOMIRIS. Thank you, Professor Warren.

I'm going to skip the questions that I heard from the three of you, because—I hope we'll have time for them; I'd love to talk about them, but I've got my own things I want to get in.

I will start by saying I agree with what Mr. Baker said, that we're not going to be able to sort out very easily TARP from TALF—and credit guarantees, more generally. What I think we can do—what I think I can do, as someone who's devoted a couple of decades to the study of resolution policies by people, by governments throughout the last couple hundred years, is evaluate the design of TARP and whether it made sense; and not just whether we can snipe at it retrospectively, but whether they should have known better ex ante, and whether we can articulate principles that will guide the mistakes that were made, going forward—that is, that will prevent us from repeating it. Because, to me, there were big mistakes. The design was very poorly done. And the thing that's more striking is that they should have known better.

Let me be more specific. The mistakes were foreseeable, in the sense that we've had, over the past 30 years, an unprecedented amount of experience with financial crises and their resolution. And yet, the Fed, the Treasury, and Congress did not avail themselves of that experience when managing the crisis; rather, they invented new, untested, and, I would say, logically, inferior mechanisms.

So, I think we do have a contribution that we can make, as economists who have specialized in this, in being able to say, "Wait a minute. This wasn't such a smart thing in the first place."

Government loans and guarantees, of course, have already been very costly. Fannie and Freddie alone are going to cost the U.S. taxpayer upwards of 350 billion just on the subprime loans that were made during the crisis. And if you go forward from there and you add FHA's new lending, so-called mitigation that's not real mitigation, what you're looking at is pushing, maybe, beyond half a trillion dollars, and that's not counting all the other stuff.

And then, of course, as you all pointed out, the incentive consequences are also huge.

Have I already surpassed my time? Oh, thanks.

Chair WARREN. No. You have nearly——

Dr. CALOMIRIS. So——

Chair WARREN [continuing]. 3 minutes. It's counting down.

Dr. CALOMIRIS. Thanks.

So, the central question I want to talk about is, Was assistance done the right way? And I talk about, in my long paper, what the criteria are. First of all, you should only provide assistance in response to truly systemic risk. So, for example, we didn't do that. Yes, we were facing systemic risk when we enacted TARP, but GMAC came back for second-round funding. There's no systemic

risk; that's pure politics. So, TARP was set up in a way that was open to abuse, and it's being abused.

Second, assistance should be selective. Well, it was selective, in some irrational ways, maybe, between choosing AIG and not choosing Lehman, but then it was a sort of convoy mentality in the approach taken to the commercial banks. So, the principle of selectivity, that we know from our past experience, wasn't applied.

And third, the taxpayers' position should be senior.

Now, I want to emphasize—and I go through this in depth in my paper—that there are different kinds of mechanisms that need to be used, depending on how severe a crisis is: discount window lending, preferred—as you get more severe, preferred stock lending; then different things you might call "bailouts"—guarantees on assets and then outright rescues of firms. I'm not saying that those mechanisms shouldn't be used, but the point is, we have vast experience with how to do this right, and we didn't. And the key underlying principle, in addition to picking the right moment and being selective about which institutions, is to always put the taxpayer in a senior loss-sharing position. That's incentive-compatible, it can always be done, no matter how severe the crisis, no matter which mechanism you're choosing, and we didn't do it. And it's partly because of bad thinking and partly, perhaps, because of politics; I'm not sure.

I want to briefly talk about mortgage mitigation. The same principles of being very rare in your use of it, being selective in how you apply mortgage mitigation, and using the principle of seniority in the taxpayers' exposure, could have been, and should have been, applied to mortgage foreclosure mitigation. We should have targeted it properly. I proposed, starting in about March of 2008, approaches for doing this. Actually, I was inspired by the successful plan that Mexico implemented in the late 1990s, called the Punto Final program. And there are rational ways to do that. We never did it. We didn't do enough of it early, and now we're doing an across-the-boards approach that's not working and wasting money on mitigation that's not realistic.

Chair WARREN. Now, Dr. Calomiris——

Dr. CALOMIRIS. We're out of——

Chair WARREN [continuing]. We're out of time.

Dr. CALOMIRIS. Let—okay.

Chair WARREN. Okay. We will——

Dr. CALOMIRIS. So, I—I'll just wait for more opportunity.

Chair WARREN. And you—and I promise, you will have them.

Dr. CALOMIRIS. Thanks.

[The prepared statement of Dr. Calomiris follows:]

Principles That Should Have Guided TARP

Statement of

Charles W. Calomiris

Before the Congressional Oversight Panel

November 19, 2009

I. Introduction

Government assistance programs in response to the recent financial crisis were bold and unprecedented. But were they wise and effective? In my judgment, TARP and other interventions were not designed properly, and consequently assistance programs have resulted in less benefit to the economy than they should have (in particular, have resulted in insufficient mitigation of the credit crunch) and they have cost more than they should have (in the form of excessive taxpayer bearing of current losses, and unnecessary moral-hazard incentive costs going forward). What is most disturbing to me is that these mistakes were foreseeable by anyone with knowledge of, or experience in, managing financial crises – and the past thirty years of world financial history have seen an unprecedented number of severe financial crises (see Calomiris, Klingebiel, and Laeven, 2005, for a review) – and yet the Fed, the Treasury, and Congress did not avail themselves of that experience in managing the crisis. Rather, they invented new, untested approaches to intervention that were inferior to successful approaches that had been used previously.

The problem was not a lack of action, per se. The number and boldness of policy actions has been striking. Policy was aggressive even prior to the three incarnations of TARP (the September 2008 campaign to implement the first, quickly abandoned comprehensive TARP plan for massive purchases of financial assets, the switch toward an equity investment strategy in November 2008, and the failed subsequent attempt to reinstitute the asset purchase program in 2009 using subsidized debt finance). From an early date, the terms of Fed lending, and collateral requirements were quite flexible. Primary dealers and Fannie and Freddie were granted access to the discount window, not just depository banks. A major Wall Street investment bank and the world's largest insurance company were bailed out by the combined efforts of the Fed and

Treasury. And Fannie Mae and Freddie Mac were rescued, as well, and then subsequently placed in conservatorship, as the initial effort to keep them afloat with verbal reassurances proved inadequate. Ultimately, assistance went even farther than TARP plus all of that, extending deposit insurance to larger accounts, guaranteeing other debts of banks and money market mutual funds, providing TALF assistance through Fed purchases of securitized debts, and offering new mortgage finance to high-risk borrowers through FHA, Fannie and Freddie.

Not surprisingly, many people find all this a bit worrying. Government loans, guarantees and investments in troubled financial institutions (which even include potential capital infusions into the GSEs), not to mention government purchases of assets (as originally contemplated under the TARP plan, and as executed under the TALF plan) have resulted in huge losses to taxpayers (Fannie and Freddie and FHA subprime lending will account for the lion's share of these losses, as *they alone will approach half a trillion dollars*) and remaining risks of future loss. They also have changed the risk-taking behavior of financial institutions going forward. If financial institutions know that the government is there to share losses, risk-taking becomes a one-sided bet, and so more risk is preferred to less. There is substantial evidence from financial history – including the behavior of troubled financial institutions during the current crisis itself – that this "moral-hazard" problem can give rise to hugely loss-making, high-risk investments that are both socially wasteful and an unfair burden on taxpayers (see Calomiris 2009a for a review).

The bearing of loss by taxpayers and the presence of moral-hazard cost does not necessarily mean that government assistance is ill-advised. If assistance were provided only when the systemic consequences of not providing assistance were truly large, then taxpayers (qua businesses and workers) could benefit on net from it, despite its costs. Furthermore, if assistance were only provided at times of truly high systemic risk, that will limit moral-hazard

costs, since firms seeking assistance would not be able to depend on receiving it. Finally, if assistance were structured to encourage private sources of funds to accompany taxpayer assistance, and to require private sources of funding to bear risk of loss, those favorable design features would limit the financial costs to taxpayers, and limit the moral-hazard consequences of assistance.

The central questions, therefore, in evaluating government assistance programs are: (1) was assistance provided only to address truly systemic risks, and (2) was assistance designed properly to maximize the effectiveness and minimize its moral-hazard costs? Unfortunately, the answers to both questions are no.

In my testimony, I will first place the recent assistance decisions in context by briefly reviewing the academic literature on the role of the government assistance to financial institutions as it has evolved in recent years, including both theoretical contributions and empirical evidence from the history of interventions, and then contrast the ideal policy based on theory and experience with the interventions actually employed by the government in the recent crisis.

The proper purpose of government assistance programs for financial institutions is to overcome problems of systemic illiquidity crises associated with asymmetric information, which can lead to avoidable, "bad equilibria" (i.e., avoidable financial meltdowns). In my view, there is no question that the recent crisis qualified as a state of the world in which government assistance to financial institutions was warranted. As Schwarz [2009] shows, most of the declines in risky asset prices during the crisis reflected endogenous responses to market illiquidity risk, rather than exogenous changes in physical loss expectations. Much of the bad equilibrium was avoidable, if

the scramble for liquidity, and the price declines and credit collapses it caused, could have been short-circuited by effective intervention.

But to be effective assistance must be designed properly. The design of proper assistance should not only (1) use government funds only at times of truly systemic risk (when normal market solutions to the scarcity of credit and bank equity capital are not feasible); but also (2) use funds only in ways that help to identify and support institutions that are worth preserving, while letting other institutions fail; and (3) ensure that *assistance programs employ contracting structures that place taxpayers in a senior position with respect to absorbing the risk of loss, and encourage a rational process of selectivity in the use of taxpayers' funds.*

Obviously, even a superficial examination of government assistance shows that these three criteria were not met. The bailout of GMAC, twice, shows that the presence of systemic risk was not a condition for doling out assistance; automobile industry-related assistance reflected political motivations that had nothing to do with mitigating the financial crisis. No one could argue with a straight face that GMAC was a systemically important institution. Furthermore, more generally, assistance was not selective in any rational sense. Bailouts of nonbank financial institutions were selective for hard-to-discern reasons (i.e., excluding Lehman but including AIG). Bailouts of large banks were not at all selective; Secretary Paulson twisted the arms of banks that did not desire assistance in the Fall of 2008 to participate in the TARP program, and permitted deeply insolvent institutions to participate in TARP, with the intent of avoiding differential treatment.

Section II reviews the theory and history that underlies the principles I advocate for assistance, and distinguishes what would have made sense from what was actually done. Section

III provides additional details on how I believe a more coherent and principled approach would have differed from the policies actually pursued. Section IV concludes.

II. Principles to Guide Government Assistance to Banks: Rarity, Selectivity, and Seniority

The central points of this review can be summarized in three sets of conclusions, which are elaborated in the discussion:

(1) Assistance should be offered only under *rare* circumstances. The purpose of assistance is not to prevent the failure of one or a few institutions, per se; assistance is only warranted when asymmetric information about the incidence of losses in the financial system leads to a general breakdown in financial market buying and selling, resulting in a liquidity crisis, which makes it impossible or excessively difficult for otherwise solvent borrowers to roll over their debts, or for banks to prove their solvency to the market in order to access needed capital to shore up their positions.

(2) The design of assistance is crucial to maximizing its effectiveness and minimizing its social costs; particularly the allocation of the risk of loss between the private sector and the government is crucial to the successful design of assistance. Assistance should be *selective*, targeted toward institutions worth saving, not basket cases. Government should take a *senior* position in loss sharing; in discount window lending that is ensured through collateralization of loans; in preferred stock purchases, seniority is ensured through the adequacy of common equity; in other assistance programs, it is achieved through the structure of guarantees (e.g., their out-of-the-moneyness).

(3) The assistance toolkit must be *diverse.* The proper structure of assistance depends on the severity of the systemic crisis being addressed; discount window lending may be sufficient

for dealing with liquidity crises that are not very severe, bank preferred stock purchases by the government may make sense for more severe shocks, and other mechanisms (organized rescues of failed institutions, or guarantees attached to liabilities or assets) may be the only effective tools to employ when the crisis is even more severe. No matter which of the tools is employed, the other principles (*rarity, selectivity, and seniority*) can and should be adhered to.

Is Assistance Ever Justified?

The debate about the potential benefits of assistance has revolved around the question of how important asymmetric information and adverse selection are during episodes of financial shocks. In the 1980s and early 1990s, several prominent economists argued that it might be desirable to abolish the discount window, on the theory that central banks should only manage the aggregate amount of liquidity in the system (via open market operations), and leave it to the financial system to (efficiently) determine the proper allocation of credit (see the reviews in Calomiris 1994 and 2009a). Proponents of abolishing the discount window recognized that in days of yore it served a purpose, but argued that in the modern era of an efficiently operating fed funds market, and other efficient private markets for lending among financial institutions, there was no point in Fed lending to banks.

Other economists challenged that view. Calomiris [1994] referred to the Fed's use of the discount window during the Penn Central crisis as an example of how asymmetric-information costs can cause erstwhile efficient markets to shut down, giving a role to the Fed in preserving market liquidity through specifically targeted assistance. During the Penn Central episode, which was in some ways similar to the recent turmoil, albeit on a much smaller scale, the market lost confidence in the screening apparatus of the rating agencies for determining access to the commercial paper market. That market essentially shut down, and many borrowers faced

significantly increased liquidity risk as they were unable to roll over their outstanding commercial paper. By targeting assistance to commercial paper issuers, via pass-through discount window lending channeled through banks, the Fed targeted a temporarily dysfunctional part of the financial system for assistance, and prevented commercial paper borrowers from having to cut their investments and engage in a counterproductive scramble for liquidity.

As the recent turmoil illustrates, despite the ongoing technological improvements and sophistication of our financial system, asymmetric-information problems can disrupt the operation of normally efficient markets. Short-term debt instruments (like asset backed commercial paper and repos and interbank loans) may not roll over during a liquidity crisis, securitization conduits may be unable to find new funding, and banks that have suffered uncertain losses from their asset holdings may find it impossible or very costly to raise equity to restore their capital position, all of which result in a severe contraction of the supply of credit.

Bank losses per se should not motivate government assistance. If losses are large for some banks, but there is no confusion about their incidence in the market, then solvent banks can raise capital to replace the contraction of loan supply by insolvent ones; although the process may be a bit bumpy as borrowers adjust from one bank to another, these minor interruptions do not warrant rescuing failed banks, and doing so undermines market discipline of risk by creating moral hazard. As Allan Meltzer has put it, "capitalism without failure is like religion without sin." But Meltzer also recognizes that when markets fail to function there is a role for government to prevent the bad equilibrium of a liquidity crisis from occurring.

Diversity, Selectivity, and Seniority

The discount window is one mechanism for providing assistance to banks, and it remains an important component of the Fed's toolkit. But, as I will show, the discount window, by itself,

is inadequate for dealing with the most severe crises produced by the most severe asymmetric-information shocks.

How should discount window assistance be structured? Specifically, on what terms (how long a maturity, and at what interest rate), and against what kind of collateral should discount window loans be made? Should nonbanks be permitted access to the window? When are discount window loans inadequate, and what sorts of other interventions are sometimes warranted? How should those interventions be designed?

Bagehot [1873] famously argued that the lender of last resort should lend freely at a high rate on good (but not riskless) collateral. But the devil is in the details. The lender of last resort should lend at a higher than normal rate to avoid abuse of access to the window, but the rate should not be too high, lest assistance be ineffectual. The term of the loan should be long enough to relieve pressure in the market; too short a term forces borrowers to bear imminent rollover risk, which does little to assuage the flight to liquidity. It makes little sense for the lender of last resort to exclude systemically important financial institutions from receiving assistance.

An effective lender of last resort should not be too picky about collateral when providing discount window loans. Lending against collateral assets that are of higher average quality (lower risk) than the borrower's overall asset portfolio may do harm rather than good. If a lender of last resort lends against very high-quality collateral, that effectively subordinates depositors of the bank, and thereby increases the risk of depositor loss, which could counterproductively prompt deposit withdrawals.

Indeed, Mason [2001] shows that this was precisely the problem with the first attempts of the Reconstruction Finance Corporation to provide assistance to banks during the Depression, and that this limitation underlay the switch to a preferred stock purchase program in 1933.

Indeed, that experience shows the limitations of using the discount window to deal with crises that are so severe that a large fraction of the banking system finds it difficult to offer enough collateral of reasonable quality when borrowing from a secured lending. Furthermore, when the entire banking system is suffering a severe cash flow squeeze, adding to banks' interest burdens with discount window loans can raise the probability of financial distress. The 1933 switch to preferred stock investments (which were junior claims relative to deposits, and which, as non-debt instruments, cannot trigger financial distress as the result of the failure to make coupon payments) made RFC assistance much more effective than discount window lending.

Calomiris and Mason [2004] also show, however, that preferred stock assistance is not always successful. It was successfully administered by the RFC in the US during the Depression, in contrast to Japanese preferred stock assistance in 1999, because it was allocated and designed carefully. The RFC identified worthwhile banks in which to invest (and avoided investing in deeply insolvent ones, which were allowed to shut down), and it required private investors to match preferred stock investments with the accumulation of common stock equity. In contrast, Japanese assistance was given to all banks, and the assistance allowed common stock dividend payments by banks receiving preferred stock.

After initially insisting that the government use asset purchases to provide assistance to banks, the Treasury switched to a preferred stock assistance program in November 2008. Unfortunately, it imitated the defects of the Japanese "convoy" model, permitted common stock dividends to be paid, and included other features (warrants) that discouraged banks receiving assistance from issuing common equity.

Preferred stock purchases made much more sense than government asset purchases in the Fall of 2008. Pricing subprime instruments for purchase would have been very challenging, to

say the least, and fraught with potentially unfair and hard-to-defend judgments, and even risks of corruption. Furthermore, if the price were set too low, that could hurt selling institutions (by forcing extreme write-downs of assets sold, causing them to become undercapitalized for regulatory purposes); if it were set too high, that could harm taxpayers. Who would determine how much should be purchased from whom in order to achieve the desired systemic risk reduction?

In contrast, preferred stock assistance would leave asset valuation and liquidation decisions to the private sector, but would provide needed recapitalization assistance to banks in an incentive-compatible manner to facilitate banks' abilities to maintain and grow assets. If executed properly, it would limit taxpayers' loss exposure (and thus, limit the moral hazard of providing protection), and leave the tough decisions of managing assets, and deciding on how to allocate capital assistance, to the market.

In September 2008, I proposed a preferred stock purchase plan and argued that preferred stock assistance would work best if it were required to be matched by common stock issues underwritten by the private sector. Matching would ensure the proper targeting of assistance (if banks could not raise common stock even in the presence of a large subsidy from the government, they were likely deeply insolvent), and force private parties rather than taxpayers to bear first-tier losses (by creating a larger equity buffer junior to preferred stock). This arrangement protects taxpayers both by limiting who receives assistance, and by reducing the risk of taxpayer losses on banks receiving assistance (because preferred stock is senior to the old and new common stock).

I proposed heavily subsidized (low) coupons on the preferred stock. Initially, say for three years, there would be little or no dividend paid to the government on MPS. That subsidy

would increase the net worth of the recipient and facilitate raising additional capital via matching common stock.

The government's preferred stock program operated with opposite incentives. No large banks were excluded on grounds of insolvency. Indeed, the government did not restrict itself to preferred stock purchases; preferred shares were converted to common, and other guarantees of assets and liabilities were added as needed. The government charged high interest on preferred stock and required no common stock matching. Common dividends were allowed. Further discouraging the accumulation of common equity, Congress insisted on attaching warrants to government purchases of preferred stock, which were dilutive to new stock issues, and thus discourage new stock issues, which was counterproductive both from the standpoint of ending the credit crunch and from the standpoint of reducing taxpayers' exposures to loss. Congress insisted on adding warrants to preferred stock purchases in the TARP legislation in an attempt to imitate private agreements (like Warren Buffett's with Goldman Sachs), but public policy serves different purposes than private contracts; the goal of assistance is to help recapitalize banks and thereby promote lending and growth, and it is penny wise and pound foolish to insist on making a profit on the government investments in the banks if doing so reduces the effectiveness of assistance.

Even properly designed preferred stock assistance is sometimes inadequate for dealing with severe system-wide banking crises, where the size of illiquidity-induced bank insolvency is sufficiently large. A preferred stock injection is not ideal for banks with very little remaining equity (e.g., those with a substantial probability of not being able to survive if losses on toxic loans turn out to be on the high end of reasonable forecasts). For such a bank, even a government purchase of a significant amount of low-coupon preferred stock would not restore adequate

capital. Furthermore, under those circumstances, a preferred stock offering could encourage reckless risk taking by subordinating the claim of common stockholders to the new claim of preferred stock on the cash flows generated by the bank – a moral-hazard incentive problem formalized by Nobel Laureate Robert Merton and others in the 1970s.

Under those circumstances, it can be useful to employ a different approach. One option is a bailout. For example, in 1882, the Paris banks decided to bail out the Paris Bourse because they were so concerned about the ramifications of its failure for their own interests. Similarly, in 1890, the London clearing banks bailed out Barings, an investment bank, for the same reason. In both cases, the Bank of England and the Banque de France provided backstop protection to the consortia of banks that bailed out the nonbank financial institution.

Importantly, in these bailouts, the government took a senior position to the private market participants. Those participants, because of legitimate concerns about risks to themselves, were willing to take a first-tier loss position in the bailout. The central banks stood behind them (effectively, thereby ruling out the extreme bad equilibrium of a run on the one whole system). Both of these incentive-compatible rescues were successful, and without spending a dime of taxpayers' money. (For a discussion of the history of prior costly bailouts in England, through 1857, see Calomiris 2009c).

In a similar spirit, the Pew Trusts Task Force on Financial Reform, in which I am a member, will soon release its slate of proposals for regulatory reform. One of the those proposals is to create a hybrid bankruptcy reform/administrative resolution policy for nonbank financial institutions, where resolution policy, when invoked, applies haircuts to creditors (unlike the AIG bailout) and where resolution costs are borne by large institutions via an ex post assessment. In the US today, the FDICIA legislation of 1991 requires that any bailouts of uninsured depositors

or bank creditors must be paid for by a special assessment on surviving banks, as a pro rata share of their deposits. The goal of ex post assessments is not just to insulate taxpayers from losses, but to limit moral hazard by creating strong incentives for private parties to lobby against unnecessary bailouts.

All the appropriate policy interventions described thus far (proper discount window lending, proper preferred stock purchases, and proper bailouts) share an important central principle: *taxpayers take a senior position to the private sector in the allocation of losses.* This time-honored principle of central banking could have been applied in the recent bailouts of financial institutions through the structuring of preferred stock assistance. It could have been applied, for example, to the decision whether to bail out Citigroup via the invocation of the FDICIA special assessment requirement, if the government had not stepped in to perform the bailout under a new ad hoc authority. And, in the future, it could be applied to nonbank financial institution bailouts, as proposed by the Pew Trusts (for details on how this could be done, see Calomiris 2009d).

But the government took a different approach during the crisis, one that did not place taxpayers in a senior loss position, and one that did not exclude or include banks from protection based on their relative strength. These were consistent errors of policy throughout the crisis.

Another policy proposal that was on the table as the crisis became more severe in early 2009 would have done a much better job in meeting these criteria than the ad hoc blanket guarantees and equity investments that were used. Many economists, including Benn Steil, Ricardo Caballero, and myself, advocated (in somewhat different forms) the use of the government sale of put options to banks, that would effectively allow them to sell portfolios of distressed assets to the government (at pre-specified strike prices that were very out-of-the-

money relative to reasonable forecasts of future value) as a policy tool for dealing with the financial crisis. Secretary Geithner announced that this idea was under consideration by the Treasury, although ultimately he rejected it. In my view, this sort of structure would have been useful for many banks that were not appropriate candidates for preferred stock assistance.

My own version of this proposal focused on ways to craft it that would encourage private sector purchases of bank common stock, and that would also insulate taxpayers from exposure to loss, but that would succeed in eliminating the potential for extreme negative values of assets (a "bad equilibrium," financial-meltdown scenario). In my view, the offering of put options at deeply out-of-the-money strike prices would have immediately elevated risky asset prices throughout the economy, fostering solvency and reducing fear of asset price death spirals. And this approach could have met the criteria of selectivity (assistance could have been targeted to banks that were not basket cases, leaving the basket cases to be resolved by the FDIC), and seniority of taxpayer risk exposure, which all government assistance programs should meet.

According to my proposal, the government would have provided an explicit put option on some portfolios of subprime related securities and mortgages at very low (far out-of-the-money) value. Using this approach, the possibility of extreme loss from toxic assets can be almost eliminated without the government's having to actually price or buy toxic assets. For example, the government could offer to buy an existing pool for 30 cents on the dollar of face value for a period of three years. This limited government insurance protection against extreme downside loss on toxic assets bounds bank losses on toxic assets and would not require banks to actually transfer the toxic assets to the government. Indeed, there would be no advantage to transferring mortgages at this rock bottom price, since the government guarantee at 30% of face value would ensure that all mortgages have a market value of above 30 cents on the dollar.

Mortgage Foreclosure Mitigation

Thus far, I have focused on assistance programs to banks, but the same principles of rarity, selectivity, and seniority apply to foreclosure mitigation assistance. Long before the September 2008 crisis, it was apparent that an unprecedented wave of foreclosures was about to occur. In my view, some of these were unavoidable (many subprime borrowers had little hope of being able to stay in their homes under any reasonable adjustment of their mortgage principal and interest payments). Attempts to keep people in their homes who had no realistic long-term prospect of being able to keep their homes are counterproductive, as they lead to wasteful delays of the inevitable, with potentially large adverse effects on lenders, and misuse of scarce human resources that need to be deployed to arrange feasible renegotiations.

Many economists, including myself, proposed approaches for speedily identifying relatively good candidates for mitigation, and offering government subsidies targeted to encourage agreement between debtors and creditors (my proposal was inspired by the "Punto Final" program that was highly successful in Mexico in the 1990s). This would have helped to slow the decline of home prices. Even more, it would have boosted consumer sentiment and avoided hundreds of thousands of unnecessary foreclosures (Calomiris 2009b).

III. What We Did, and What We Should Have Done

As Meltzer [2003] shows, the Fed has never clearly articulated a policy rule for its lender-of-last-resort interventions. Neither has the Treasury articulated a framework guiding its assistance policies. They employ *ad hoc* interventions, justified as they go along, which are inconsistent with one another and follow no clear set of discernible principles. Because assistance programs did not flow from previously articulated guiding principles (like selectivity,

diversity, and seniority), the rushed debates over TARP and other policies were undisciplined and prone to errors of logic (like the use of warrants in preferred stock assistance), and political manipulation (like the multiple bailouts of GMAC). As I showed in Section II, in theory, it is possible to justify within a consistent set of principles many of the kinds of assistance programs that were used, albeit in more carefully designed form, and as part of a more coherent sequence of policies (as the crisis worsened). Ironically, the vast experience with financial crisis around the world in the past three decades produced a treasure trove of examples of how to provide assistance badly or well. That experience, which confirmed lessons learned from many historical episodes, seems to have been either unknown or ignored by U.S. policy makers (Calomiris 2009c, Calomiris, Klingebiel, and Laeven 2005).

Our financial leaders and Congress owe us a detailed explanation of the various assistance packages that they have orchestrated, and more importantly, they must articulate a coherent set of principles to guide future policy, lest wasteful and risk-increasing rescues become a habit. Neither the Fed nor the Treasury under either the Bush or Obama Administrations has provided such a coherent vision in justifying their decisions regarding whether and how to assist Bear Stearns, Fannie Mae, Freddie Mac, Lehman, Citigroup, GMAC, or AIG, or their choices for structuring TARP (in its various incarnations), or TALF. What criteria did these firms meet to deserve assistance, and how will they exit from assistance? Neither the Fed nor the Treasury explained why the preferred stock TARP approach was appropriate after September 18, 2008, but not before, or why the subsequent, stillborn attempt to promote asset purchases in TARP (via subsidizing leverage for those asset purchases) would be effective or appropriate. Was intervention systemically necessary and pursued in a least-cost manner in head-spinning array of actions by the Fed and the Treasury?

Of course, one could respond to my criticisms by asking what I would have done differently. The remainder of this section is an attempt to answer that question in more detail.

In my view, the assistance provided to Bear Stearns was a tough call. It was defensible as an action to limit the risk of adverse systemic consequences of Bear Stearns' failure. Bear was a counterparty to many derivatives transactions, and a major repo issuer. A failure of Bear Stearns could have created substantial confusion regarding the net positions of derivatives market participants, and could have produced a major shock to the repo market and to money markets more generally. Assistance provided a means of orderly exit (the acquisition of Bear Stearns by JP Morgan Chase), and avoided what could have been substantial disruption in the repo market, derivative markets, and financial markets generally. Was the structure of assistance appropriate? In particular, was the $30 billion loss exposure accepted by the Fed and Treasury really necessary?

It is not clear (and hard to second-guess in retrospect) whether the Fed and the Treasury could have gotten a better deal in their negotiations with JP Morgan Chase. By all accounts, JP Morgan Chase enjoyed a windfall from the transaction, even after the renegotiation of the Bear Stearns stock price by Bear shareholders, which raised the acquisition price from $2 a share to $10, after the bailout. On the other hand, there were few if any alternative qualified bidders, so the Fed's (or Treasury's) ability to bargain was limited. Most importantly, Bear Stearns' stockholders suffered a huge loss (compared to their pre-acquisition stock price), and thus moral hazard was mitigated somewhat.

The promise of assistance to Fannie Mae and Freddie Mac that was given in July 2008 also seems defensible in the sense that their role in the mortgage market was too important to ignore, and their ability to continue accessing the bond market had become questionable. The

market wanted to know whether the long-anticipated implicit government backstop would, in fact, be forthcoming. Upon the announcement of the Fed and Treasury plan, the GSEs' access to debt markets was initially restored, even before key aspects of the plan for assistance had been approved by Congress. After the July intervention, however, concerns about the GSEs mounted and ultimately creditors demanded concrete injection of resources by the government, which was undertaken by placing the GSEs into conservatorships in September 2008. The government now has pledged to support the GSEs through preferred stock injections, as needed, to maintain the f low of mortgage credit and to support GSE obligations.

These preferred stock injections may be desirable as a short-term measure, but there are several aspects of the approach to the GSEs that are problematic. First, GSE fragility reflected longstanding incentive problems and excessive risk taking in anticipation of safety net protection. The GSEs made moral hazard a cornerstone of their business plan for decades. Critics of the GSEs argued that the government's implicit protection warranted greater regulation, or privatization, or winding down, of GSE operations (Wallison and Calomiris 2009). The GSEs and their defenders responded that there was no implicit protection, and therefore, no need to prevent abuse. In the meantime, they built up subprime mortgage exposures of more than $1.6 trillion on a paper-thin capital base. The short-term assistance program for the GSEs, even if legitimately motivated by systemic concerns, *should have been accompanied by a clearly enunciated, long-term proposal to wind down the GSEs, or fully and credibly privatize them* (and make them subject to a clearly specified receivership or conservatorship regime). The July assistance legislation and the September creation of the conservatorships does neither, and simply leaves the long-term future of the GSEs open – a surefire method to maximize campaign

contributions for influential members of Congress perhaps, but not a very helpful means of either stabilizing markets or providing a transition to proper market discipline.

What about the government's September 2008 decision not to intervene to rescue Lehman Brothers, and its opposite decision at the same time to rescue AIG? The decision not to rescue Lehman has been criticized as causing much of the late-September 2008 liquidity strains in the market. I think that criticism is overblown. The Lehman bankruptcy cannot be traced to any particular financial institution's failure. It no doubt contributed to risky asset declines, but there were many other things happening at the same time that also contributed to those declines, especially the specter of the Secretary of the Treasury and the Chairman of the Fed openly panicking in public. In any case, on a forward-looking basis, if appropriate reforms to bankruptcy and resolution policies toward nonbank financial institutions are introduced (Calomiris 2009d), *ad hoc* policy toward future Lehmans and AIGs can be avoided.

The bigger policy lesson with respect to Lehman is about what the Treasury did not do between March and September 2008. Lehman had been permitted to sit on its hands and not raise capital during that six-month period. It chose to do so because it believed that either its stock price would rise (making capital replacement cheaper in the future) or it would be bailed out. Letting Lehman get away with that behavior was perhaps the largest policy failure of the Treasury (and the SEC, who was Lehman's prudential regulator) in 2008.

As I have noted, the TARP legislation, and all the various incarnations of TARP, had significant shortcomings, which I have already argued were avoidable. What should have been done instead? As Senator Schumer proposed at the time, the better approach in September 2008 would have been combining an RFC-style bank preferred stock purchase program with a mortgage foreclosure mitigation initiative (to incentivize feasible renegotiations).

As I discussed in Section II, the preferred stock program could have been done in a way very similar to the 1933 RFC structure, which was also copied by the Finns in the early 1990s (Mason 2001, Englund and Vihriala 2003, Calomiris and Mason 2004b). The RFC was successful in limiting risk and political abuses of its preferred stock investments because it codified and followed clear practices specifically designed to limit those problems. Citigroup might not have qualified for assistance under a reasonable long-term valuation of its assets. If it had not, then an orderly transfer of the operations and assets of Citigroup into an FDIC-administered bank conservatorship and a bankruptcy for its non-bank affiliates would have occurred, while other banks were receiving massive injections of preferred stock, conditional on being able to match the preferred stock with new common stock, and tens of billions of dollars of assistance was being appropriated for efficient mortgage foreclosure mitigation.

I believe that if the measures I outlined here – capital raising by Lehman and other weak firms between March and September 2008, when $450 billion in capital was raised by other large financial institutions, selective and incentive-compatible preferred stock injections, foreclosure mitigation, and a clearer articulation of the future of the GSEs – had been implemented in 2008, the crisis would have been ended faster. If the crisis had continued to worsen, I would have then relied on selective use of out-of-the-money put options on risky assets to elevate asset prices and provide liquidity to the market.

IV. Conclusion

Government assistance programs during the recent financial crisis did not follow time-tested principles of effective policy, namely *rarity, selectivity, and seniority;* they were conceived in haste, poorly designed, sometimes transparently politically motivated (GMAC's

recent assistance is an obvious case), mutually inconsistent, and entailed hundreds of billions of dollars of losses (so far) to US taxpayers. Their effects on incentives toward risk could also turn out to be very damaging unless policy makers are able to undertake a credible reform of government subsidies to financial institutions, by which I mean immediate action to change the status quo (particularly in mortgage subsidization via Fannie, Freddie, and FHA) , and to articulate a clear and coherent set of principles that will guide government interventions in the future.

The problem is an urgent one. The waste of resources at the FHA, Fannie and Freddie continue, and the new costs incurred as the result of *post-crisis* subsidization of mortgage risk in those entities could turn out to exceed hundreds of billions of dollars.

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Chair WARREN. Dr. Johnson.

STATEMENT OF SIMON JOHNSON, PROFESSOR OF GLOBAL ECONOMICS AND MANAGEMENT, MIT SLOAN SCHOOL OF MANAGEMENT, AND SENIOR FELLOW, PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS

Dr. JOHNSON. Thank you very much.

I was chief economist at the International Monetary Fund through August of last year, and I've worked on financial crises around the world for the past 20 years, and I'd like to put the U.S. experience and the use of TARP in that comparative perspective.

First and foremost, of course, this was a very severe financial crisis; perhaps the worst the world has seen since the end of World War II, both in its severity, the speed, and its global nature. And it came upon a government, the Bush administration, that was completely unprepared. The managing director of the IMF has entered into the public record the fact that we, at the IMF, urged the administration, with some specificity, after the failure of Bear Stearns, to plan for exactly the kind of contingency that befell us all in September, and we made some specific proposals in that direction. Unfortunately, the administration, as is already on the record, declined to take any such steps. So, this is why much of the TARP was on the fly.

Having said that, though, I'm very sympathetic, having worked in other crises, to the difficulty of the situation that was faced by the designers and the early implementors. Of course, you have three main tasks in this kind of crisis:

You have to stop the panic. And that really requires doing whatever it takes, and it particularly requires, in the U.S. kind of constitutional and fiscal arrangements, that you need congressional authority to put the government's balance sheet behind the financial system. That's what TARP did. That was essential. Not passing—if we—if the Congress had not passed TARP, you would have had a much bigger disaster, irrespective of how the money had been used.

Secondly, you have to maintain domestic demand. And we've seen, obviously, a collapse of private demand—for example, for consumer durables in this country—as a result of the destruction of credit and the collapse of consumer confidence that is at least as bad as what we've seen in many emerging market crises.

Now, the U.S. has many important differences from emerging markets, but, in terms of the severity of that collapse, it was absolutely on a par. And there, I think the broader policies of monetary policy, as my colleagues have mentioned the role of the Federal Reserve, but also the fiscal stimulus that was passed early this year was absolutely essential. Now, I'm sure we can find many things to quibble about, many things we, with retrospect, would like to do better; but, those policies were, I think, again, essential. You would have had a much deeper recession, unemployment would now be higher, unemployment would stay high for longer, if you hadn't done those things.

But, the third piece that you have to do in any crisis is lay the basis for a sustainable recovery. If you just take government money and throw it at the banks, if you bail out everybody uncondition-

ally, if you don't apply an FDIC-type resolution process to your biggest banks when they're failing—just give 'em the money, keep your jobs, don't have to change anything about the governance of your banks—that is asking for trouble. That is not best practice, that is not what the IMF tells countries to do, that's not what the U.S. tells countries to do, that's not what the United States tells the IMF to tell countries to do. It's—in fact, pretty much the exact opposite.

If you look, for example, at the detailed content—I refer you to the detailed content of the Letter of Intent signed by Korea in December 1997. This was a well-designed program in this dimension. Not perfect. In this dimension. There are specific requirements—which the Koreans asked for, by the way; this was not imposed from the outside, but we were strongly supported by the U.S. Treasury, including people who are now in senior positions in this administration—that involved taking over, restructuring, downsizing problem banks.

The bank cleanup is absolutely essential. It has to be done at the beginning, partly for political reasons, because that's your opportunity, and partly for sound economic reasons, because you need the credit system to be cleaned up and coming back as the real economy comes back, let's say, within a 6- to 12-month window, which is where we are now. Our banking system has not had that kind of cleanup, it's not had that kind of restructuring; it is a thinly capitalized banking system, given the likely trajectory of this economy, given the plausible risk scenarios. And it has the incentive to go out and take excessive risk again.

Now, that's not just my view, this is the view of the Bank of England. Andrew Haldane, who's the head of financial stability of the Bank of England, has a paper out—came out about 10 days ago—in which he talks about the cycle. The cycle, this cycle, the boom-bust-bailout cycle, as a "doom loop." This is very strong language from central bankers, I can assure you. They do not ordinarily speak in these terms. He is warning the U.K. and the United States, because his analysis is about both, that by providing unconditional bailouts on this basis—and that, I'm afraid, is how TARP has been implemented—we are asking for trouble. This will happen again and again until we deal with our banking system on a different basis.

So, in conclusion, I would say TARP was necessary. It had to be passed. It created the potential for government support of the banking system. That was needed. But, in terms of the details, pretty much every detail of how it was—the money was actually used, I agree with my colleagues, that it's actually made things worse.

[The prepared statement of Dr. Johnson follows:]

November 18, 2009

Testimony submitted to the Congressional Oversight Panel, hearing on "The overall impact of the Troubled Asset Relief Program (TARP) on the health of the financial system and the general U.S. economy," Thursday, November 19, 2009 (embargoed until 9:30am).

Submitted by Simon Johnson, Ronald Kurtz Professor of Entrepreneurship, MIT Sloan School of Management; Senior Fellow, Peterson Institute for International Economics; and co-founder of http://BaselineScenario.com.[1]

Summary

1) In the immediate policy response to any major financial crisis – involving a generalized loss of confidence in major lending institutions – there are three main goals:
    a. To stabilize the core banking system,
    b. To prevent the overall level of spending from collapsing,
    c. To lay the groundwork for a sustainable recovery.
2) IMF programs are routinely designed with these criteria in mind and are evaluated on the basis of: the depth of the recession and speed of the recovery, relative to the initial shock; the side-effects of the macroeconomic policy response, including inflation; and whether the underlying problems that created the vulnerability to panic, are addressed over a 12-24 month horizon.
3) This same analytical framework can be applied to the United States since the inception of the Troubled Asset Relief Program (TARP). While there were unique features to the US experience (as is the case in all countries), the broad pattern of financial and economic collapse, followed by a struggle to recover, is quite familiar.
4) The overall US policy response did well in terms of preventing spending from collapsing. Monetary policy responded quickly and appropriately. After some initial and unfortunate hesitation on the fiscal front, the stimulus of 2009 helped to keep domestic spending relatively buoyant, despite the contraction in credit and large increase in unemployment. This was in the face of a massive global financial shock – arguably the largest the world has ever seen – and the consequences, in terms of persistently high unemployment, remain severe. But it could have been much worse.
5) There is no question that passing the TARP was the right thing to do. In some countries, the government has the authority to provide fiscal resources directly to the banking system on a huge scale, but in the United States this requires congressional approval. In other countries,

[1] This testimony draws on joint work with Peter Boone, particularly "The Next Financial Crisis: It's Coming and We Just Made It Worse" (*The New Republic*, September 8, 2009), and James Kwak, particularly "The Quiet Coup" (*The Atlantic*, April, 2009). Underlined text indicates links to supplementary material; to see this, please access an electronic version of this document, e.g., at http://BaselineScenario.com, where we also provide daily updates and detailed policy assessments for the global economy.

foreign loans can be used to bridge any shortfall in domestic financing for the banking system, but the U.S. is too large to ever contemplate borrowing from the IMF or anyone else.

6) Best practice, vis-à-vis saving the banking system in the face of a generalized panic involves three closely connected pieces:

   a. Preventing banks from collapsing in an uncontrolled manner. This often involves at least temporary blanket guarantees for bank liabilities, backed by credible fiscal resources. The government's balance sheet stands behind the financial system. In the canonical emerging market crises of the 1990s – Korea, Indonesia, and Thailand – where the panic was centered on the private sector and its financing arrangements, this commitment of government resources was necessary (but not sufficient) to stop the panic and begin a recovery.

   b. Taking over and implementing orderly resolution for banks that are insolvent. In major system crises, this typically involves government interventions that include revoking banking licenses, firing top management, bringing in new teams to handle orderly unwinding, and – importantly – downsizing banks and other failing corporate entities that have become too big to manage. In Korea, nearly half of the top 30 pre-crisis chaebol were broken up through various versions of an insolvency process (including Daewoo, one of the biggest groups). In Indonesia, leading banks were stripped from the industrial groups that owned them and substantially restructured. In Thailand, not only were more than 50 secondary banks ("Finance Houses") closed, but around 1/3 of the leading banks were also put through a tough clean-up and downsizing process managed by the government.

   c. Addressing immediately underlying weaknesses in corporate governance that created potential vulnerability to crisis. In Korea, the central issue was the governance of nonfinancial chaebol and their relationship to the state-owned banks; in Indonesia, it was the functioning of family-owned groups, which owned banks directly; and in Thailand it was the close connections between firms, banks, and politicians. Of the three, Korea made the most progress and was rewarded with the fastest economic recovery.

7) If any country pursues (a) unlimited government financial support, while not implementing (b) orderly resolution for troubled large institutions, and refusing to take on (c) serious governance reform, it would be castigated by the United States and come under pressure from the IMF. At the heart of every crisis is a political problem – powerful people, and the firms they control, have gotten out of hand. Unless this is dealt with as part of the stabilization program, all the government has done is provide an unconditional bailout. That may be consistent with a short-term recovery, but it creates major problems for the sustainability of the recovery and for the medium-term. Serious countries do not do this.

8) Seen in this context, TARP has been badly mismanaged. In its initial implementation, the signals were mixed – particularly as the Bush administration sought to provide support to essentially insolvent banks without taking them over. Standard FDIC-type procedures, which are best practice internationally, were applied to small- and medium-banks, but studiously avoided for large banks. As a result, there was a great deal of confusion in financial markets about what exactly was the Bush/Paulson policy that lay behind various ad hoc deals.

9) The Obama administration, after some initial hesitation, used "stress tests" to signal unconditional support for the largest financial institutions. By determining officially that these firms did not lack capital – on a forward looking basis – the administration effectively communicated that it was pursuing a strategy of "regulatory forbearance" (much as the US did after the Latin American debt crisis of 1982). The existence of TARP, in that context, made the approach credible – but the availability of unconditional loans from the Federal Reserve remains the bedrock of the strategy.

10) The downside scenario in the stress tests was overly optimistic, with regard to credit losses in real estate (residential and commercial), credit cards, auto loans, and in terms of the assumed time path for unemployment. As a result, our largest banks remain undercapitalized, given the likely trajectory of the US and global economy. This is a serious impediment to a sustained rebound in the real economy – already reflected in continued tight credit for small- and medium-sized business.

11) Even more problematic is the underlying incentive to take excessive risk in the financial sector. With downside limited by government guarantees of various kinds, the head of financial stability at the Bank of England (Andrew Haldane) bluntly characterizes our repeated boom-bailout-bust cycle as a "doom loop."

12) Exacerbating this issue, TARP funds supported not only troubled banks, but also the executives who ran those institutions into the ground. The banking system had to be saved, but specific banks could have wound down and leading bankers could and should have lost their jobs. Keeping these people and their management systems in place serious trouble for the future.

13) The implementation of TARP exacerbated the perception (and the reality) that some financial institutions are "Too Big to Fail." This lowers their funding costs, enabling them to borrow more and to take more risk.

14) The Obama administration argues that its regulatory reforms will rein in the financial sector in this regard. Very few outside observers – other than at the largest banks – find this convincing.

15) In fact, TARP also allowed the US Treasury to make it clear that some individuals are "Too Connected to Fail". Financial executives with strong connections to the current and previous leadership of the New York Fed (e.g., through network connections of various kinds) have great power and enormous market value in this situation.

16) The US recovery strategy hinges on continued low interest rates (and a continuation of quantitative easing). This creates risks of a new global asset bubble, funded in dollars and driven by exuberance about prospects in emerging markets. The Fed has already signaled clearly that it will not raise interest rates for a long while.

17) Unless bank regulators limit the direct and indirect risk exposure of US financial institutions to this new supposedly low risk "carry trade", we face the very real prospect of another, even larger crisis.

The remainder of this testimony provides supportive background material, in terms of the global macroeconomic context within which TARP has operated and some important details about the program's implementation.

Global Macroeconomic Context

After a deep recession, the world economy is experiencing a modest recovery after near financial collapse this spring. The strength of the recovery varies sharply around the world:

a. In Asia, real GDP growth is returning quickly to pre-crisis levels, and while there may be some permanent GDP loss, the real economy appears to be clearly back on track. For next year consensus forecasts have China growing at 9.1% and India growing at 8.0%; the latest data from China suggest that these forecasts may soon be revised upwards.
b. Latin America is also recovering strongly. Brazil should grow by 4.5% in 2010, roughly matching its pre-crisis trend. We can expect other countries in Latin America to recover quickly also.
c. The global laggards are Europe and the United States. The latest consensus forecasts are for Europe to grow by 1.1% and Japan by 1.0% in 2010, while the United Sates is expected to grow by 2.4% (and the latest revisions to forecasts continue to be in an upward direction). Unemployment in the US is expected to stay high, around 10%, into 2011.

The current IMF global growth forecast of around 3 percent is probably on the low side, with considerably more upside possible in emerging markets (accounting nearly half of world GDP). The consensus forecasts for the US are also probably somewhat on the low side.

As the world recovers, asset markets are also turning buoyant. Recently, residential real estate in elite neighborhoods of Hong Kong has sold at $8,000 US per square foot. A 2,500 square foot apartment now costs $20 million. Real estate markets are also showing signs of bubbly behavior in Singapore, China, Brazil, and India.

There is increasing discussion of a "carry trade" from cheap funding in the United States towards higher return risky assets in emerging markets. This financial dynamic is likely to underpin continued US dollar weakness.

One wild card is the Chinese exchange rate, which remains effectively pegged to the US dollar. As the dollar depreciates, China is becoming more competitive on the trade side and it is also attracting further capital inflows. Despite the fact that the Chinese current account surplus is now down to around 6 percent, China seems likely to accumulate around $3 trillion in foreign exchange reserves by mid-2010.

Commodity markets have also done well. Crude oil prices are now twice their March lows (despite continued spare capacity, according to all estimates), copper is up 129%, and nickel is up 103%. There is no doubt that the return to global growth, at least outside North America and Europe, is already proving to have a profound impact on commodity markets.

Core inflation, as measured by the Federal Reserve, is unlikely to reach (or be near to) 2% in the near future. However, headline inflation may rise due to the increase in commodity prices and fall in the value of the dollar; this reduces consumers' purchasing power.

This nascent recovery is partly a bounce back from the near total financial collapse which we experienced in the Winter/Spring of 2008-09. The key components of this success are three policies.

- First, global coordinated monetary stimulus, in which the Federal Reserve has shown leadership by keeping interest rates near all time lows. Of central banks in industrialized countries, only Australia has begun to tighten.
- Second, global coordinated fiscal policy, including a budget deficit in the US that is projected to be 10% of GDP or above both this year and next year. In this context, the Recovery Act played an important role both in supported spending in the US economy and in encouraging other countries to loosen fiscal policy (as was affirmed at the G20 summit in London, on April 2nd, 2009).
- Third, after some U-turns, by early 2009 there was largely unconditional support for major financial institutions, particularly as demonstrated by the implementation and interpretation of the bank "stress tests" earlier this year.

However, the same policies that have helped the economy avoid a major depression also create serious risks – in the sense of generating even larger financial crises in the future.

A great deal has been made of the potential comparison with Japan in the early 1990s, with some people arguing that Japan's experience suggests we should pursue further fiscal stimulus and continued regulatory forbearance for banks. This reasoning is flawed.

We should keep in mind that repeated fiscal stimulus and a decade of easy monetary policy did not lead Japan back to its previous growth rates. Japanese outcomes should caution against unlimited increases in our public debt.

Perhaps the best analysis regarding the impact of fiscal policy on recessions was done by the IMF. In their retrospective study of financial crises across countries, they found that nations with "aggressive fiscal stimulus" policies tended to get out of recessions 2 quarters earlier than those without aggressive policies. This is a striking conclusion – should we (or anyone) really increase our deficit further and build up more debt (domestic and foreign) in order to avoid 2 extra quarters of contraction?

A further large fiscal stimulus, with a view to generally boosting the economy, is therefore not currently appropriate. However, it makes sense to further extend support for unemployment insurance and for healthcare coverage for those who were laid off – people are unemployed not because they don't want to work, but because there are far more job applicants than vacancies. Compared with other industrial countries, our social safety net is weak and not well suited to deal with the consequences of a major recession.

America is well-placed to maintain its global political and economic leadership, despite the rise of Asia. But this will only be possible if our policy stance towards the financial sector is substantially revised: the largest banks need to be broken up, "excess risk taking" that is large relative to the system should be taxed explicitly, and measures implemented to reduce the degree of nontransparent interconnectedness between financial institutions of all kinds.

TARP Specifics

In a financial panic, the critical ingredients of the government response must be speed and overwhelming force. The root problem is uncertainty - in our case, uncertainty about whether the major banks have sufficient assets to cover their liabilities. Half measures combined with wishful thinking and a wait-and-see attitude are insufficient to overcome this uncertainty. And the longer the response takes, the longer that uncertainty can sap away at the flow of credit, consumer confidence, and the real economy in general - ultimately making the problem much harder to solve.

Instead, however, the principal characteristics of the government's response to the financial crisis have been denial, lack of transparency, and unwillingness to upset the financial sector.

First, there was the prominent place of policy by deal: when a major financial institution, got into trouble, the Treasury Department and the Federal Reserve would engineer a bailout over the weekend and announce that everything was fine on Monday. In March 2008, there was the sale of Bear Stearns to JPMorgan Chase, which looked to many like a gift to JPMorgan. The deal was brokered by the Federal Reserve Bank of New York - which includes Jamie Dimon, CEO of JPMorgan, on its board of directors. In September, there were the takeover of Fannie Mae and Freddie Mac, the sale of Merrill Lynch to Bank of America, the decision to let Lehman fail, the destructive bailout of AIG, the takeover and immediate sale of Washington Mutual to JPMorgan, and the bidding war between Citigroup and Wells Fargo over the failing Wachovia - all of which were brokered by the government. In October, there was the recapitalization of nine large banks on the same day behind closed doors in Washington. This was followed by additional bailouts for Citigroup, AIG, Bank of America, and Citigroup (again).

In each case, the Treasury Department and the Fed did not act according to any legislated or even announced principles, but simply worked out a deal and claimed that it was the best that could be done under the circumstances. This was late-night, back-room dealing, pure and simple.

What is more telling, though, is the extreme care the government has taken not to upset the interests of the financial institutions themselves, or even to question the basic outlines of the system that got us here.

In September 2008, Henry Paulson asked for $700 billion to buy toxic assets from banks, as well as unconditional authority and freedom from judicial review. Many economists and commentators suspected that the purpose was to overpay for those assets and thereby take the problem off the banks' hands - indeed, that is the only way that buying toxic assets would have helped anything. Perhaps because there was no way to make such a blatant subsidy politically acceptable, that plan was shelved.

After the "Paulson Plan" was passed on October 3, 2008, it was quickly overtaken by events. First the UK announced a bank recapitalization program; then, on October 13, it was joined by every major European country, most of which also announced loan guarantees for their banks. On October 14, the US followed suit with a bank recapitalization program, unlimited deposit insurance (for non-interest-bearing accounts), and guarantees of new senior debt. Only then was

enough financial force applied for the crisis in the credit markets to begin to ease, with LIBOR finally falling and Treasury yields rising, although they remained a long way from historical levels.

The money used to recapitalize (buy shares in) banks was provided on terms that were grossly favorable to the banks. For example, Warren Buffett put new capital into Goldman Sachs just weeks before the Treasury Department invested in nine major banks. Buffett got a higher interest rate on his investment and a much better deal on his options to buy Goldman shares in the future.

As the crisis deepened and financial institutions needed more assistance, the government got more and more creative in figuring out ways to provide subsidies that were too complex for the general public to understand. The first AIG bailout, which was on relatively good terms for the taxpayer, was renegotiated to make it even more friendly to AIG. The second Citigroup and Bank of America bailouts included complex asset guarantees that essentially provided nontransparent insurance to those banks at well below-market rates. The third Citigroup bailout, in late February 2009, converted preferred stock to common stock at a conversion price that was significantly *higher* than the market price - a subsidy that probably even most *Wall Street Journal* readers would miss on first reading. And the convertible preferred shares that will be provided under the new Financial Stability Plan give the conversion option to the bank in question, not the government - basically giving the bank a valuable option for free.

Note that this strategy is not internally illogical: if you believe that asset prices will recover by themselves (or by providing sufficient liquidity), then it makes sense to continue propping up weak banks with injections of capital. However, our main concern is that it underestimates the magnitude of the problem and could lead to years of partial measures, none of which creates a healthy banking system.

The main components of the administration's bank rescue plan included:

- Stress tests, conducted by regulators, to determine whether major banks can withstand a severe recession, followed by recapitalization (if necessary) in the form of convertible preferred shares
- The Public-Private Investment Program (PPIP) to stimulate purchases of toxic assets, thereby removing them from bank balance sheets

The administration as much as said that the major banks will all pass the stress tests, making it appear that the results were foreordained. Essentially, this was used to signal that the government stood behind the 19 banks in the stress test and would not allow any of them to fail. Effectively, the government signaled which banks were Too Big To Fail.

We also do not expect the PPIP to meet its stated objective of starting a market for toxic assets (both whole loans and mortgage-backed securities) and thereby moving them off of bank balance sheets. In essence, the PPIP attempts to achieve this goal by subsidizing private sector buyers (via non-recourse loans or loan guarantees) to increase their bid prices for toxic assets. Besides the subsidy from the public to the private sector that this involves, we are skeptical that the plan as outlined will raise buyers' bid prices high enough to induce banks to sell their assets. From the

banks' perspective, selling assets at prices below their current book values will force them to take writedowns, hurting profitability and reducing their capital cushion.

As long as the government's strategy is to prevent banks from failing at all costs, banks have an incentive to sit the PPIP out (or even participate as *buyers*) and wait for a more generous plan. Again, the key question is how the loss currently built into banks' toxic assets will be distributed between bank shareholders, bank creditors, and taxpayers. By leaving banks in their current form and relying on market-type incentives to encourage them to clean themselves up, the administration has given the banks an effective veto over financial sector policy. There is a chance that the PPIP will have its desired effect, but otherwise several months will pass and we will be right where we started.

Ultimately, the stalemate in the financial sector is the product of political constraints. On the one hand, the administration has consistently foresworn dictating a solution to the financial sector, either out of deep-rooted antipathy to nationalization, or out of fear of being accused of nationalization. On the other hand, bailout fatigue among the public and in Congress, aggravated by the clumsy handling of the AIG bonus scandal, has made it impossible for the administration to propose a solution that is too generous to banks, or that requires new money from Congress.

One problem with this velvet-glove strategy is that it was simply inadequate to change the behavior of a financial sector used to doing business on its own terms.

This continued solicitousness for the financial sector might be surprising coming from the Obama Administration, which has otherwise not been hesitant to take action. The $800 billion fiscal stimulus plan was watered down by the need to bring three Republican senators on board and ended up smaller than many hoped for, yet still counts as a major achievement under our political system. And in other ways, the new administration has pursued a progressive agenda, for example in signing the Lilly Ledbetter law making it easier for women to sue for discrimination in pay and moving to significantly increase the transparency of government in general (but not vis-à-vis its dealings with the financial sector).

And the Obama administration has pushed hard for a new agency to better regulate financial products offered to consumers. This is a commendable effort that is likely to succeed, despite opposition from the financial sector. Unfortunately, there has been no parallel effort to rein in the economic and political power of our largest financial institutions.

The power of the financial sector goes far beyond a single set of people, a single administration, or a single political party. It is based not on a few personal connections, but on an ideology according to which the interests of Big Finance and the interests of the American people are naturally aligned - an ideology that assumes the private sector is always best, simply because it is the private sector, and hence the government should never tell the private sector what to do, but should only ask nicely, and maybe provide some financial handouts to keep the private sector alive.

To those who live outside the Treasury-Wall Street corridor, this ideology is increasingly not only at odds with reality, but actually dangerous to the economy.

Chair WARREN. Thank you very much, Dr. Johnson.

Mr. Pollock.

STATEMENT OF ALEX POLLOCK, RESIDENT FELLOW, AMERICAN ENTERPRISE INSTITUTE

Mr. POLLOCK. Thank you, Madam Chairman, members of the Panel.

I believe an enlightening historical analogy to TARP is the Reconstruction Finance Corporation, or RFC, of the 1930s. In both cases, the original liquidity idea developed into a solvency idea, providing additional equity, not just more debt, to banks in the form of preferred stock. TARP has made equity investments in almost 700 financial companies. The RFC made investments in over 6,000 banks in its day. The vast majority of these were retired in full after paying dividends along the way. So, counting by the number of financial institutions, the RFC was about ten times as big as TARP.

Now, this next line was especially put in for Congressman Hensarling, so I'm sorry he's not here——

Chair WARREN. We'll make sure it gets to him.

Mr. POLLOCK [continuing]. That the RFC was run by a conservative Texas Democrat, Jesse Jones, who was a tough-minded, successful entrepreneur, who, among other things, owned banks, but who had dropped out of school after the 8th grade. An interesting contrast to this panel. [Laughter.]

"There was a disposition"—wrote Jones, "on the part of President Roosevelt to use the RFC as a sort of grab bag or catchall in spending programs, but I insisted on its being operated on a business basis, with proper accounting methods."

So, let's start with "on a business basis." In my view, the managers of TARP are fiduciaries for the taxpayers as involuntary investors. Their principal goal should be to run the program in a businesslike manner, to return as much of the involuntary investment as possible to its owners, along with a reasonable profit on the overall program. That means the predominant discipline should be that of investment management, not of politics.

All of the language of the Emergency Economic Stabilization Act, which authorized TARP, always speaks of TARP as acquiring assets, and approves funding for acquiring assets. However, with the $50-billion Home Affordable Modification Program, TARP is not acquiring any asset at all, but simply spending taxpayers' money. And, very conveniently, whatever TARP spends is, under the Act, automatically appropriated.

Now, an obvious difference of the RFC from TARP is that the RFC was a corporation—a government corporation, but a separate corporate entity, with the ability to account for itself as a corporation. In general, it seems to me that if such interventions as TARP or the RFC exist at all, they are better established as separate corporations rather than as "programs", mixed into other entities.

As I quoted above, Jesse Jones said, "I insisted on proper accounting methods." In contrast, it appears that, in more than a year, no financial statements for TARP have been produced for the Congressional Oversight Panel, the Congress, or the public.

Now, the Act requires only an annual fiscal year statement, but good managerial practice and proper accounting methods certainly require, at a minimum, quarterly financial statements. In my view, TARP should have full, regular quarterly financial statements which depict its financial status and results exactly as if it were a corporation. Moreover, TARP's financial statement should include line-of-business reporting by its major activity areas.

An essential principle is that government crisis intervention should be kept temporary. The emergency programs need to be turned off when the crisis is over, allowed to wind down over time, and finally disappear. Now, it's easy to imagine how much the Treasury and the administration would like to extend, as long as possible, the power and independent capacity they enjoy through the operation of TARP, but, in my view, it's time to observe its target expiration date of December 31st, 2009. The very fact mentioned before, that TARP disbursements are, by law, automatically appropriated, is reason enough to enforce a timely expiration.

We've experienced not just a bubble, but a double bubble in real estate prices, one in housing and one in commercial real estate. The banking system—and, notably, smaller banks—are disproportionally concentrated in real estate risk—and in commercial real estate risk, in particular. The implications for bank failures are easy to see.

At the same time, the FDIC has announced that its net worth is negative; that is, that the deposit insurer is itself out of capital. So, this gave me the idea that perhaps before its December 31st expiration, TARP should make a preferred stock investment in the FDIC. And if——

Chair WARREN. Mr. Pollock, I'm afraid you're out of time.

Mr. POLLOCK. Could I make one——

Chair WARREN. You certainly——

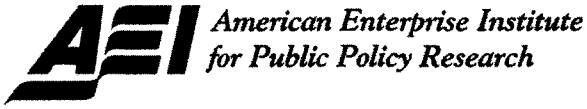
Mr. POLLOCK [continuing]. Final point?

Chair WARREN [continuing]. May.

Mr. POLLOCK. The overall program of TARP will either have an overall profit or a loss. I hope it has an overall profit, like the RFC did. But if it has a loss, the Act provides that the President shall submit a legislative proposal that recoups from the financial industry an amount equal to the shortfall. This is a very interesting possible liability of the financial industry, and it's one more good reason to demand full and proper accounting from TARP, as well as to question any disbursement which does not acquire an asset.

Thank you very much.

[The prepared statement of Mr. Pollock follows:]



Statement before the Congressional Oversight Panel
Of the Troubled Asset Relief Program (TARP)

TARP on a Businesslike Basis

Alex J. Pollock

Resident Fellow

American Enterprise Institute

November 19, 2009

The views expressed in this testimony are those of the author alone and do not necessarily represent those of the American Enterprise Institute.

Madam Chairman and Members of the Oversight Panel, thank you for the opportunity to be here today. I am Alex Pollock, a resident fellow at the American Enterprise Institute, and these are my personal views. Prior to joining AEI five years ago, I spent 35 years in banking, including twelve years as President and CEO of the Federal Home Loan Bank of Chicago. I have both experienced a number of financial crises and studied the instructive history of recurring bubbles and busts.

TARP in Historical Context

I believe the closest historical analogue to TARP is the Reconstruction Finance Corporation (RFC) of the 1930s. Like TARP, the RFC was created under a Republican administration, and expanded under the succeeding Democratic one (in the RFC case, the Hoover and Roosevelt administrations) as an emergency response to financial crisis. In both cases, the original liquidity idea--loans for the RFC, troubled mortgage assets purchases for TARP-- developed into a solvency idea: providing additional equity to banks in the form of preferred stock.

Consider the approaches available to a government to address a financial crisis. First, there is delay in recognizing losses while issuing assurances (for example: "the subprime problems are contained"). Then there are central bank lending operations, providing liquidity. But however freely the central bank lends, it is by definition providing debt, not equity. No matter how much it lends to entities with negative capital, the capital is still negative. When the capital is gone, new capital, not just liquidity, is needed.

The RFC made preferred stock investments in banks to offset the capital which had been lost. Its goal was to have a modest overall positive return on the taxpayers' money and redemption of the preferred stock at par when growth resumed and the firms were refinanced in the private market. By and large, this strategy appears to have succeeded.

In September, 2008, when considering the original "Paulson Plan" to buy mortgage assets, I expressed the view that something along the lines of the RFC's preferred stock investments would be a better idea. Of course, this is how TARP then turned out, and it is still my opinion that this is the least-bad approach.

TARP has made equity investments in almost 700 financial companies. The RFC made investments in over 6,000 banks, including such major banks of the day as National City Bank of New York, Chase National Bank, Manufacturers Trust Company, National Bank of Detroit and Continental Illinois. The vast majority of these were retired in full, after paying dividends along the way. The RFC also assisted over 1,000 savings and loans. Counting by the number of financial institutions involved, the RFC program was about ten times as big as TARP.

The RFC's bank equity investments totaled about $1.3 billion—scaled to nominal GDP of 1933 vs. 2008, this would be the equivalent of about $325 billion today—comparable to TARP, which has a few gigantic investment positions. The RFC was also involved in numerous other areas, with a total of $10 billion spent fighting the Depression, which would be the GDP-scaled equivalent of about $2.5 trillion.

The RFC, like TARP, got involved in transportation companies. In the RFC's case, this was financing for railroads, said to have been the worst paying of its major investments. This seems likely to be true of TARP's automobile company investments, as well.

Running on a Business Basis

The RFC was run by a conservative Texas Democrat, Jesse Jones, a tough minded and successful entrepreneur, who had dropped out of school after the eighth grade. Jones' memoirs of his experiences, Fifty Billion Dollars—My Years with the RFC, make a highly interesting read. (A lot of the $ 50 billion was war production finance of the 1940s, not relevant to our topic.)

"There was a disposition on the part of President Roosevelt to use the RFC as a sort of grab bag or catchall in his spending programs," Jones wrote, "but I insisted on its being operated on a business basis with proper accounting methods."

"On a business basis," said Jones: in my view, the managers of TARP are fiduciaries for the taxpayers as involuntary investors. The principal goal should be to run the program in a businesslike manner to return as much of the involuntary investment as possible to its owners, along with a reasonable overall profit. The predominant discipline should be that of investment management, not politics.

The language of the Emergency Economic Stabilization Act of 2008 (EESA), which authorized TARP, always speaks of TARP as acquiring assets. In acquiring preferred stock in banks, TARP became an investor in assets different from the original idea, but they are still assets, which can be managed in a businesslike way to recover the taxpayers' investment.

However, with the $50 billion "Home Affordable Modification Program" (HAMP), TARP is not acquiring an asset at all, but simply spending the taxpayers' money to subsidize mortgage loan modifications, including subsidies to mortgage servicing companies. There is no asset acquired. The Wall Street Journal reasonably suggested its fear that TARP is morphing into "an all-purpose bailout fund." And very conveniently, whatever TARP spends is under EESA automatically appropriated by Congress.

An obvious difference of the RFC from TARP is that the RFC was a corporation—a government corporation, to be sure, but a separate corporate entity, with dedicated management and a board of directors, its own borrowing authority, and of course, the ability to account for itself as a corporation. "U.S. policymakers of the 1930s," wrote a student of the RFC, Walker Todd, "enacted a separate, politically accountable" organization, with "a clearly defined network of checks and balances."

In general, it seems to me that such interventions as TARP or the RFC, if they are to exist, are better established as separate corporations, rather than as "programs," mixed into other entities, such as the Treasury or the Federal Reserve.

Regular Financial Statements

Jesse Jones, as quoted above: "but I insisted on...proper accounting methods."

In contrast, it appears that in more than a year, no financial statements for TARP have been produced for the Congressional Oversight Panel or the public. EESA does require a public, annual fiscal year financial statement, presumably forthcoming though not yet produced. But good managerial practice and proper accounting methods require much more than that--at a minimum quarterly financial statements.

In my view, TARP should have full, regular, audited financial statements, which depict its financial status and results, exactly as if it were a corporation. There should be a balance sheet, with all assets, liabilities, accumulated profits or losses, and contingencies. There should be a profit and loss statement and a statement of cash flows. The expenses should include the interest cost of the Treasury debt required to fund its disbursements, and like every financial operation, TARP management should be estimating probable losses on investments and reserving accordingly.

Had TARP been organized as a corporation, it would have facilitated this accountability. But even with its status as a "program", we should insist on appropriate and regular accounting. Everybody must agree with this basic requirement for financial responsibility.

Moreover, TARP's financial statements should include line of business reporting. Logical separate profit and loss reporting units would include: the Capital Purchase Program; automotive program; Citigroup; AIG; mortgage modification (of course a total loss from the TARP point of view); and small business and consumer programs.

Enforcing the Temporary Nature of TARP

An essential principle is that government crisis interventions should be kept temporary. They should not be allowed to morph into permanent economic distortions. "Emergencies markedly increase both the demand for and the supply of governmental controls," as Robert Higgs has written in Crisis and Leviathan. The emergency programs need to be turned off when the crisis is over, allowed to wind down over time, and finally disappear, as the RFC (after having its life extended by the crisis of World War II) did.

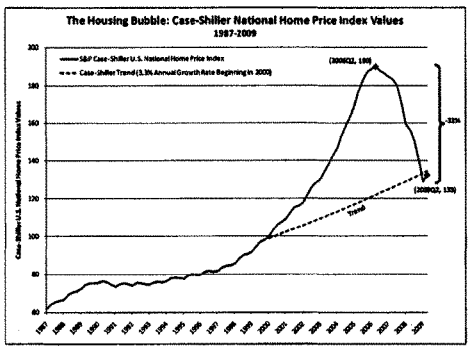
Over the last several months, financial markets have greatly recovered and rediscovered their taste for risky assets. Although obvious problems remain, especially in the smaller banks (as discussed below) the extended panic of summer, 2007 to spring, 2009, has passed.

It is easy to imagine how much the Treasury and the Administration would like to extend as long as possible the power and independent capacity they enjoy through the operation of TARP. But in my view, it is time to observe its target expiration date of December 31, 2009.

The very fact, mentioned above, that TARP disbursements are by law automatically appropriated, is reason enough to enforce a timely expiration.

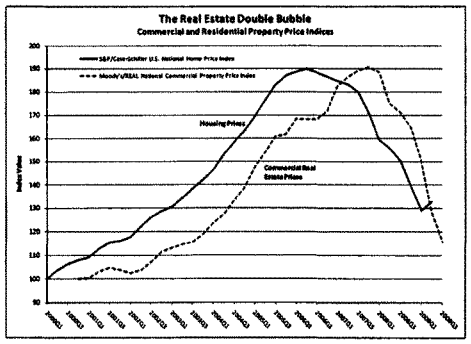
Current Financial Context: Small Banks

The collapse of the vast bubble in housing prices has had national average prices, as measured by the Case-Shiller National Home Price Index, fall about 30% from their mid-2006 peak. They have now returned to their long-term trend line, as shown in the following picture of the bubble.

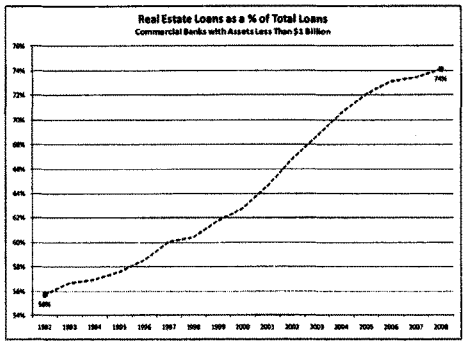


Of course, prices can overshoot the trend on the downside, too, but a great deal of adjustment has already taken place.

However, we have experienced not just a bubble, but a double bubble in real estate prices: one in houses and one in commercial real estate. The two bubbles are remarkably similar in shape, but the second lags the first by about six quarters, as shown below.



Smaller banks are disproportionally concentrated in real estate risk, and in commercial real estate risk in particular. Their concentrations in real estate loans have been growing steadily since the early 1990s, and real estate loans increased to 74% of the aggregate loans of the about 6,500 banks with assets of less than $1 billion, as shown in the next chart.



The implication of difficult credit conditions ahead for these banks is easy to see.

At the same time, the FDIC has announced that its net worth is negative—that is, the government deposit insurer is itself out of capital. Perhaps, before its December 31 expiration, TARP should make a preferred stock investment in the FDIC?

The Use of TARP's Final Net Profit, If Any

According to a cumulative profit and loss statement published at the beginning of 1940, the RFC had a cumulative net profit, after providing for losses and for the cost of debt, of $160 million on its capital of $500 million. "The program of putting capital into banks," wrote Jesse Jones, "was carried out without loss to the government or the taxpayer. On the contrary, it has shown profit through interest and dividends."

If TARP should succeed in making a final overall profit, what should be done with that profit?

EESA provides that all revenues from as well as repayments of TARP investments must go to reduce the federal deficit. But a better idea would be to declare the whole profit of TARP (over and above repayments and expenses), should there be one in the end, as a cash dividend to those American households who actually pay federal income taxes. It was their money all along; they took all the risk; they deserve an explicit return.

A future Congress might consider this idea.

Recoupment of TARP's Final Net Loss, If Any

Section 134 of EESA provides that if there is a final shortfall in TARP, "the President shall submit a legislative proposal that recoups from the financial industry an amount equal to the shortfall in order to ensure that TARP does not add to the deficit or national debt." This is an interesting possible liability of whoever is included in "the financial industry." Of course, Congress may not enact the required Presidential proposal, but this provision is one more good reason to demand full and proper accounting from TARP.

Thank you again for the opportunity to share these views.

Chair WARREN. Thank you, Mr. Pollock.

Dr. Zandi.

STATEMENT OF MARK ZANDI, CHIEF ECONOMIST AND COFOUNDER, MOODY'S ECONOMY.COM

Dr. ZANDI. Thank you, Professor Warren and the Panel. It's a pleasure to be here.

My remarks reflect my own views, and not those of the Moody's corporation.

I'll make four points:

Point number one, I think the TARP has contributed significantly to the stability of the financial system. The system isn't functioning normally. Small banks are failing at a high rate, and the structured finance market is dormant. But, the system is stable, and I think that's significantly related to TARP.

Now, it's very difficult to disentangle TARP with all of the other policy efforts at the Federal Reserve, FDIC, and Treasury, but I think it's fair to say that, without TARP, none of the other things would have worked, that it was a necessary condition for the stability in the financial system. So, without doing it, I think we'd be in a measurably more difficult place today.

So, point number one, I think it's been very effective.

Point number two, different aspects of TARP have worked better than others. Let me sort of rank-order things from my perspective, from the best to the worst.

I think the CPP program and the bank stress tests, absolutely necessary, have worked very effectively, and the success of that is evident in the repayments that are already occurring, that are coming in quite quickly.

I think it would have been more desirable if TARP could have done what it was designed to do, and that was to buy troubled asset, but it was overwhelmed by the environment and the situation and the politics, and I don't think there was any other choice than to step in and provide that equity. And I think it's worked quite well.

I think backstopping TALF and PPIP, also very effective—it hasn't helped increase transactions, but it has had a very measurable impact on pricing in asset markets, which has significantly reduced pressure in the financial system. So, if you look at asset-backed spreads, they've come in quite dramatically since the time TALF was announced. I don't think that's any accident. So, to look at bond issuance and say it's not working would be a mistake. It has helped very, very significantly in that way.

I think the use of TARP money for the auto bailout was very efficacious, very important, very well timed, that if GM and Chrysler had not gotten that money, they would have been forced into liquidation, which would have resulted in mass layoffs at a time when the economy was reeling. I think that was critical to resolving that in an orderly way.

What hasn't worked, the housing stability efforts have been particularly disappointing. The take-up on HAMP and HARP will be incredibly low unless they are changed. And I think it should be changed.

And, of course, small business lending, that aspect of TARP has not worked at all, and that's very important. I'll get to that in just a second.

So, point number two, there are differences in the relative performance of the different aspects of TARP.

Point number three, the cost. It's going to be significant. By my calculation, it'll probably come in somewhere between 100- and 150 billion, when everything is said and done. That's a lot of money, but that's well below the fears that many had when TARP was passed; certainly nothing close to the 700 billion. And, in fact, that's a good lesson. I think it's important—it was very important to pick a big number, to show the markets that the Federal Government was, in fact, not going to let the system fail. And that's why that number was so key. In fact, it helped restore stability and actually reduced the ultimate cost of the plan.

Finally, point number four, I think TARP's objectives are not over. I think it needs to remain in place. Two key things need to be done, and TARP can play a key role. One is small business lending. Small businesses are key to the job machine. The job machine is not working. And part of the reason for that is the lack of credit, the collapse of the credit card industry and the tightening up of credit card lending. And, of course, the small bank failures are so key to small businesses in very small communities. And I think TARP needs to play a much larger role in the provision of credit to small businesses.

And secondly, foreclosure mitigation isn't done. House prices are going to resume falling, in my view, early next year, when a lot of these loans in the foreclosure pipeline get pushed through into a foreclosure sale. Nothing in our economy works well when house prices are falling. That's still the largest asset in most people's household balance sheet. And creditors aren't going to extend credit unless they know how much people are worth. So, I think that needs to be worked on, and TARP will play a key role in that.

Thank you very much.

[The prepared statement of Dr. Zandi follows:]

Written Testimony of Mark Zandi
Chief Economist and Cofounder of Moody's Economy.com

Before the Congressional Oversight Panel

Taking Stock: Independent Views on TARP's Effectiveness

November 19, 2009

The Troubled Asset Relief Program has contributed significantly to restoring stability to the financial system. In turn, this financial stability has been instrumental to ending the Great Recession.

Some aspects of the TARP program have been more successful than others. Most effective has been the use of TARP funds to provide capital to the banking system during the height of the financial panic. The financial system would not have stabilized without this help. The use of TARP money to purchase troubled assets, through such efforts as the Fed's TALF program and Treasury's PPIP program, have not brought a significant increase in transactions, but have substantially improved credit spreads and the pricing of these assets, reducing pressure on the financial system. TARP also helped bring about the orderly bankruptcies of GM and Chrysler, forestalling what otherwise would have been a disorderly liquidation accompanied by massive layoffs throughout the industry during the worst of the recession. Where TARP has been least effective has been in stemming the foreclosure crisis and stopping the crash in house prices. Efforts to jump-start small business lending have also been largely unsuccessful.

TARP's ultimate cost to taxpayers is projected to be between $100 and $150 billion. This is consequential, but falls well short of the program's original $700 billion price tag.

TARP History

Only a year ago, the nation's financial system was near collapse. Fannie Mae and Freddie Mac and insurer AIG had been effectively nationalized, Lehman Brothers, Wachovia and Washington Mutual were no longer going concerns, and nearly every other major financial institution was on the brink of failure. There were deposit runs on banks and money market funds, and financial markets were in disarray. The commercial paper market had shut down, threatening the ability of major non-financial businesses to finance their operations.

Poor policymaking helped turn what had been a serious but controllable financial crisis into an out-of-control panic in the fall of 2008. Policymakers' uneven treatment of troubled institutions from Bear Stearns to Fannie and Freddie to Lehman Brothers created uncertainty among shareholders and creditors regarding the value of all financial institutions. Stockholders dumped their shares and creditors demanded much more collateral in exchange for providing liquidity to financial institutions. The entire financial system was thrown into disarray.

The Troubled Asset Relief Program was the first large-scale attempt to restore stability to the system. In September 2008, the U.S. Treasury and Federal Reserve asked Congress to establish a $700 billion fund, primarily to purchase poorly performing residential and commercial loans that were threatening the viability of the financial system. For a variety of economic and political reasons, Congress initially rejected TARP, further exacerbating the financial turmoil.

With the financial panic intensifying and the threats to the economy clear, Congress quickly reversed itself and TARP was established. Unfortunately, with economic conditions eroding rapidly and asset purchases extremely complex, the TARP's objective shifted to injecting capital directly into major financial institutions. This initially involved buying senior preferred stock and warrants in the nine largest American banks, and was then extended to other banks. TARP funds were subsequently used for a number of other purposes, including support for the housing and auto industries as well as back-stopping efforts by the Federal Reserve and Treasury to facilitate the purchase of troubled assets.

TARP Costs

As of mid-November 2009, an estimated $558 billion of the original $700 billion in TARP funds had been committed by policymakers for various purposes (see Table 1).

Table 1: TARP Funds
Billions $, Week Ending November 12, 2009

	Committed	Provided	Ultimate Cost
Total	**558**	**401**	**100-150**
CPP (Financial institutions)	208	205	15-20
Less: Tarp Repayments		71	
Homeowner Affordability and Stability Plan	50	27	20-30
AIG	70	70	30-35
Citi (TIP)	20	20	0
Bank of America (TIP)	20	20	0
Citi debt guarantee	5	5	0
Bank of America debt guarantee			0
Federal Reserve (TALF)	55	20	2-5
GMAC	13	13	5
GM	50	49	25-30
GM (for GMAC)	1	1	0
Chrysler	15	15	5
Chrysler Financial (loan 1/16)	2	repaid	0
Public-Private Investment Fund	30	23	2-5
SBA loan purchase	15	0	4-6
Auto suppliers	5	4	4-5

Sources: Treasury Department, Moody's Economy.com

The largest commitment of TARP funds has involved $205 billion to recapitalize the banking system via the Capital Purchase Program (CPP). Another $115 billion has been committed to support three distressed and systemically important financial institutions: AIG, Bank of America and Citigroup. The commitment to the motor vehicle industry, including GM, GMAC, Chrysler, and the auto suppliers, totals $85 billion. An additional $85 billion was committed to support the Fed's TALF program and the Treasury's PPIP program. The housing industry received a commitment of $50 billion and some $15 billion has been set aside to facilitate small business lending.

Of the TARP funds that were committed, I estimate that close to $400 billion has actually been provided. Funds for the CPP total $134 billion, as $71 billion that was originally committed has already been repaid by stronger financial institutions that don't need direct government help. All the TARP funds committed to AIG, Bank of America and Citibank have been provided, as have most of the funds committed to the motor vehicle industry. Less than half the TARP funds committed to the housing market have been provided, as take-up on the HAMP loan modification and HARP refinancing plans backed by these funds has been very modest to date. Slow take-up on TALF and PPIP has slowed the provision of TARP funds so that well

under half the amount committed has been provided. None of the funds committed for small business lending has been provided.

Assuming no other major initiatives using the TARP fund, the ultimate cost to taxpayers of TARP is expected to be between $100 and $150 billion. The mostly costly aspect of TARP will be the aid to the motor vehicle industry, which could total up to nearly $50 billion. AIG will cost taxpayers up to $35 billion. Support to the housing market is expected to cost as much as $30 billion. The CPP program is ultimately expected to cost between $15 and $20 billion, while credit losses on the TALF and PPIP programs are expected to reach $10 billion. Some $5 billion will be lost on the small business lending program.

To put these costs into context, the total direct cost to taxpayers of the financial panic and Great Recession is expected to end up close to $1.2 trillion (see Table 2). Much of the cost beyond TARP relates to the fiscal stimulus packages passed in early 2008 and again in early 2009, which together will cost taxpayers nearly $900 billion. After considering the nearly $750 billion in indirect taxpayer costs resulting from the weaker economy and its impact on tax revenues and government spending, the total cost to taxpayers of the crisis and Great Recession is projected to be nearly $2 trillion, equal to 14% of GDP. The savings and loan crisis in the early 1990s cost taxpayers some $350 billion in today's dollars; $275 billion in direct costs and $75 billion due to the associated recession. This was equal to almost 6% of GDP at that time.

Table 2: Federal Government Response to the Financial Crisis
Billions $, Week Ending November 12, 2009

	Committed	Provided	Ultimate Cost
Total	**12,136**	4,037	**1,195**
Federal Reserve			
Term auction credit	900	109	0
Other loans	Unlimited	108	3
Primary credit	Unlimited	20	0
Secondary credit	Unlimited	0	0
Seasonal credit	Unlimited	0	0
Primary Dealer Credit Facility	Unlimited	0	0
Asset-Backed Commercial Paper Money Market Mutual Fund	Unlimited	0	0
AIG	41	44	2
AIG (for SPVs)	9	0	0
AIG (for ALICO, AIA)	26	0	1
Rescue of Bear Stearns (Maiden Lane)**	27	26	4
AIG-RMBS purchase program (Maiden Lane II)**	23	16	1
AIG-CDO purchase program (Maiden Lane III)**	30	23	4
Term Securities Lending Facility	200	0	0
Commercial Paper Funding Facility**	1,800	14	0
TALF	1,000	44	0
Money Market Investor Funding Facility	540	0	0
Currency swap lines	Unlimited	29	0
Purchase of GSE debt and MBS	1,450	925	0
Guarantee of Citigroup assets	286	0	0
Guarantee of Bank of America assets	108	0	0
Purchase of long-term Treasuries	300	299	0
Treasury			
TARP****	558	401	136
Fed supplementary financing account	479	479	0
Fannie Mae and Freddie Mac	400	97	51
FDIC			
Guarantee of U.S. banks' debt*	1,400	330	4
Guarantee of Citigroup debt		10	0
Guarantee of Bank of America debt		3	0
Transaction deposit accounts	500	0	0
Public-Private Investment Fund Guarantee	1,000	0	0
Bank Resolutions	Unlimited	23	83
Federal Housing Administration			
Refinancing of mortgages, Hope for Homeowners	100	0	0
Expanded Mortgage Lending	Unlimited	150	22
Congress			
Economic Stimulus Act of 2008	170	170	170
American Recovery and Reinvestment Act of 2009***	717	717	717

Notes:
*Includes foreign denominated debt
**Net portfolio holdings
*** Excludes AMT patch
****The ultimate cost of TARP shown is the point estimate in the range of $100 to $150 billion

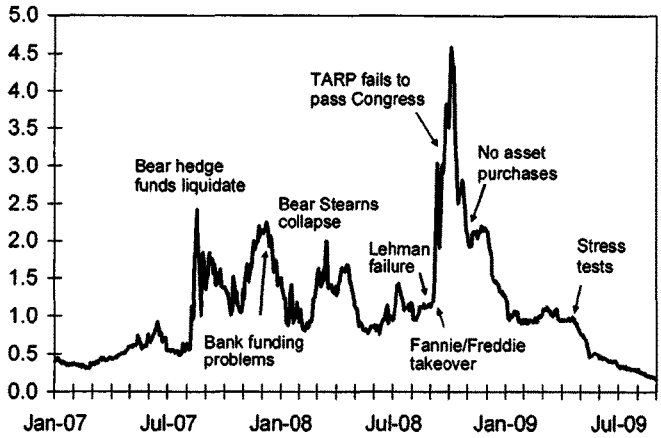
Sources: Treasury Department, Moody's Economy.com

Capital Purchase Program

The most successful part of the TARP program has been the CPP. Without capital injections from the federal government, the financial system would have likely collapsed. It is difficult to imagine what that would have looked like, but we can say at the very least that credit would have been pulled back much more dramatically. As it is, the economy has suffered a very severe credit crunch as private financial and non-financial debt outstanding contracted sharply during the past year.

Today, while the financial system is still not functioning normally – small banks continue to fail in large numbers and the structured finance market remains largely dormant – it is stable. This is evident in the sharp narrowing of the spread between LIBOR and Treasury bill yields. This so-called TED spread was a record wide 450 basis points at the height of the financial panic a year ago (see Chart 1). It has recently fallen to less than 25 basis points, close to the level that prevailed prior to the crisis. Depository institutions remain reluctant to extend to credit to businesses and consumers, but they are lending more freely to each other, which is the first step towards the freer flow of credit across the economy.

Chart 1: Policymakers Stabilize the Banking System
Difference between 3-mo Libor and Treasury bill yields



A variety of policy initiatives helped restore stability to the financial system. The unprecedented monetary policy response, including an effective zero federal funds rate target, credit easing and a range of new credit facilities has been instrumental. Stress tests of the 19 major bank holding companies in spring 2009 and the FDIC's new guarantees of bank debt as well as higher deposit insurance limits were also important. Yet none of these efforts would likely have succeeded without the CPP, which provided the time necessary to allow these other efforts to work.

The CPP has been so successful that there is now a growing list of banks that are repaying their TARP funds. Banks have paid an appropriately high price for their TARP funds, in the form of significant dividends, restrictions on executive compensation and additional regulatory oversight. These high costs provide significant incentives for banks to repay TARP aid as quickly as possible and allow the government to exit more quickly from its significant intervention in the financial system.

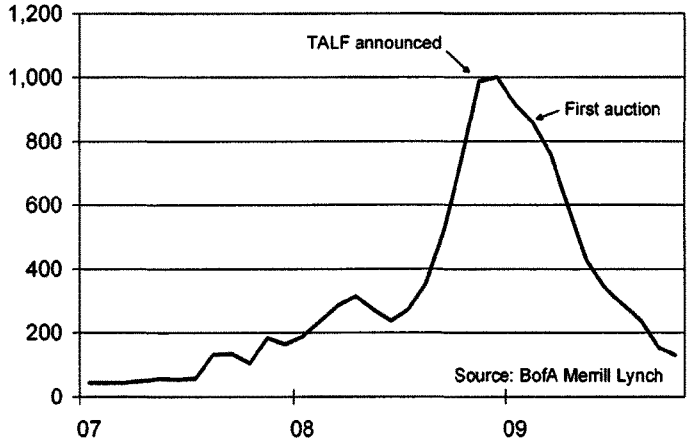
Troubled Assets

It is unfortunate that the TARP program was unable to fulfill its original objective, namely to fund the purchase of troubled assets on the balance sheet of financial institutions. These assets are still sitting on the balance sheets of these institutions and thus impairing the flow of credit. Institutions are uncertain of the value of these assets and thus their own capital adequacy. This uncertainty is limiting their willing and ability to extend credit more broadly.

Various policy efforts have been implemented to reduce the financial pressure on financial institutions of having these troubled assets on their balance sheet. For example, the bank stress tests required most of the nation's largest banks to raise substantially more capital in order that they could withstand the serious erosion in the performance of these assets that would occur under a very adverse economic scenario.

The Fed's TALF program and Treasury's PPIP program provide favorable financing to investors to purchase a wide range of assets. TARP money is used to cover the potential losses on both programs, making them possible. Neither program has resulted in a significant amount of investment activity, but they have helped to support asset prices as interest rates have fallen and spreads with risk-free Treasury yields have narrowed. When TALF was announced in late 2008, the option-adjusted spread on auto loan asset backed securities stopped rising at a whopping 1,000 basis points (see Chart 2). By the first TALF auction in early 2009, the spread had narrowed to 900 basis points and is hovering close to 100 basis points today. This spread narrowing has been driven by a multitude of factors, but arguably most importantly has been TALF.

Chart 2: TALF Risk Asset Prices
Automobile ABS, option-adjusted spread, bps



TARP funds have also been used to forestall the failure of AIG, Bank of America and Citi, thus supporting asset prices broadly. AIG has been effectively nationalized, while the government holds sizable ownership stakes in Bank of America and Citi. In a sense, the troubled assets owned by these institutions have been quarantined so that they will not infect asset markets and drive prices lower, which in turn would threaten the viability of other financial institutions.

TARP has not been able to directly remove troubled assets from the financial system, but it has been effective in mitigating the systemic risks posed by the still sizable amount of troubled assets within the financial system.

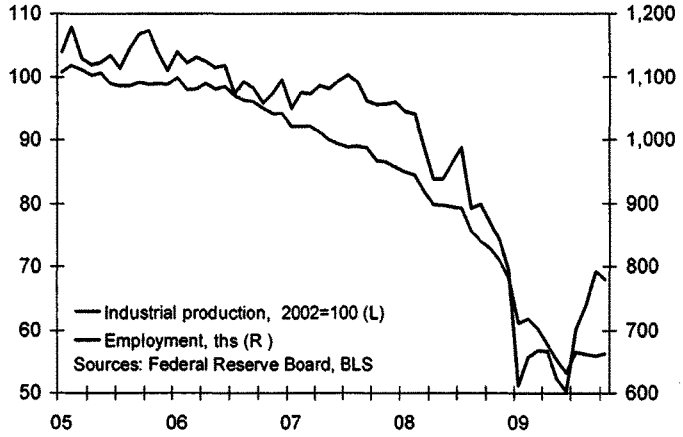
Auto Bailout

TARP was instrumental in assuring the orderly bankruptcy of GM and Chrysler and supporting the entire motor vehicle industry. Without TARP monies, these firms would have entered into bankruptcy early this year and they would have very likely ceased as going concerns. The liquidation of GM and Chrysler would have in turn caused the bankruptcy of many vehicle part suppliers and as a result Ford as well.

Without any government help, liquidation was likely, resulting in hundreds of thousands of lost jobs at the worst time for the sliding economy. The vehicle manufacturers would have filed for Chapter 11, a restructuring, but it would have likely turned into a Chapter 7, a liquidation. Their factories and other operations would be shut down and their assets sold to pay creditors. Given the collapse in the financial system and resulting credit crunch, debtor in possession, or DIP, financing would be all but impossible to get. Bankrupt firms need DIP financing to operate their businesses – to pay suppliers, finance inventories and meet payroll – while they restructure. It is a risky business for the DIP creditors even in good times, but they are a senior creditor when the bankruptcy court distributes the bankrupt firms' assets, and they also charge high rates and fees for the risk. However, in current credit crunch that prevailed earlier this year nothing would have persuaded creditors to take the risk. TARP monies were necessary to fill this void.

GM and Chrysler have been significantly rationalized, but they appear to be financially viable even at currently still very depressed vehicle sales rates. GM is considering when to begin repaying the government loans it has received and there is even discussion of when it may go public. Ford is doing measurably better and conditions actors the entire vehicle industry has improved; production is up and employment has stabilized (see Chart 3). Just a few months ago, this would have seemed very unlikely. TARP has played an instrumental role in this industry's turnaround.

Chart 3: Autos Go From Free-Fall to Stability
Motor vehicles and parts



Foreclosure Crisis

One aspect of the TARP program that has not worked well is the effort to bring an end to the residential mortgage foreclosure crisis. The Housing Affordability Stability Plan or HASP, which is funded by TARP money, has not been a success. HASP is composed of a mortgage loan modification plan known as the Home Affordability Mortgage Plan or HAMP and the Home Affordability Refinancing Plan or HARP.

The idea behind HAMP is to provide monetary incentives to homeowners, mortgage servicers and mortgage owners to modify mortgage loans largely by temporarily reducing their mortgage rate and thus monthly mortgage payment. The idea behind HARP is to allow Fannie and Freddie to refinance the loans they own or insure even if the homeowners are deeply underwater – the value of their home is less than the debt they owe on the home.

Some $50 billion in TARP money has been committed to HAMP and HARP, but it is very unlikely these programs will be large enough to use this money. The take-up on HARP has been particularly low as homeowners are discovering that the interest rate they are being offered on a refinancing is not low enough to cover the transaction costs involved, at least sufficiently quickly. The rates are higher as the credit characteristics of many potential refiers have weakened as they have become casualties of the very difficult economy.

Take-up on the HAMP plan also looks to be falling well short of what policymakers had hoped for. When the plan was announced back in the spring, President Obama had said he expected that there would be 3-4 million in loan modifications. Instead, there will more likely be between 500K and 750k in permanent modifications (see Table 3). The problem is that many homeowners are so far underwater that even with a modification that lowers their monthly payment there is still a high probability that they will default on their modified loans. Mortgage servicers and owners have little interest in modifying these loans.

Table 3: HAMP Performance
Millions of First Mortgage Loans, January 2009

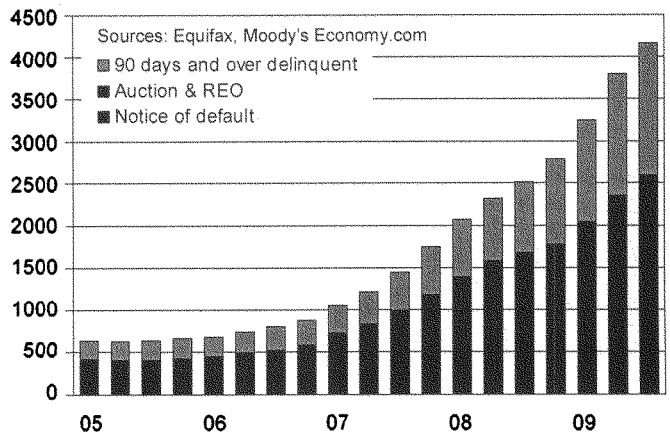
Total First Mortgage Loans	55.00
HAMP Eligible Loans	8.50
(Owner-occupied, non jumbo, immenent default)	
Less: Insufficient income even at 2% rate	2.00
Less: Too far underwater	2.50
Less: Default probability too high or too low	2.00
Loans That are NPV Positive	2.00
Less: Servicers don't participate in HAMP	0.30
Trail Modifications	1.70
Less: Trail mods that fail	1.02
Permanent Modifications	0.68
Less: Redefaults	0.20
Foreclosures Avoided	0.48

Assumptions:
Based on historical data through 2009q3
Peak-to-trough house price decline 38% based on Case Shiller national house price index; trough in 1010q3
10.7% peak unemployment rate in 2010q3
Federal funds rate 0% at year-end 2009, 1% year-end 2010, 3.25% year-end 2011, 4.5% by year-end 2012
10-year Treasury yield of less than 5.5% through 2012
30% redefault rate
40% pass-through from trial to permanent HAMP modification

Source: Equifax, Moody's Economy.com

However, the HAMP plan has slowed down the foreclosure process this summer. Mortgage servicers and owners have been working to determine which of their troubled mortgage loans might qualify for the plan. The slowing in foreclosure sales has also resulted in more stable house prices this past summer. Loans are backing up in the foreclosure pipeline. As of the end of September, based on credit file data there were an astounding 4.2 million first mortgage loans in the foreclosure process or headed in that direction as they were 90 days and over delinquent (see Chart 4). For context, there are 52 million first mortgage loans outstanding.

Chart 4: The Foreclosure Crisis Continues to Mount
Ths of first mortgage loans



Mortgage servicers and owners will eventually determine that many of these loans are not viable candidates for the HAMP plan and will resume pushing these loans through the foreclosure process to a sale. Foreclosure sales are thus expected to increase measurably early in 2010, forcing a resumption of the house price declines.

For the HAMP plan to work more effectively it will have to be modified to include incentives for mortgage services and owners to engage in principal writedowns. At this time, this seems less than likely given pernicious and unanswered questions about moral hazard, adverse selection and fairness, although this could change if house prices resume declining next year and threaten the fragile economic recovery.

Conclusions

The TARP plan has come under withering criticism since its inception in the teeth of the financial panic over a year ago. Indeed, it was nearly still-born. These criticisms have been largely misplaced. While TARP has not been a universal success, it has been instrumental to the stabilization of the financial system and bringing an end to the Great Recession.

The CPP program gave many financial institutions a lifeline when there was no other. Without the CPP's equity infusions it is very likely the entire financial system would have come to a grinding halt. TARP has also been used to shore up asset prices and by extension the financial system by backstopping Fed and Treasury efforts to provide cheap financing to investors and ring-walling troubled assets in large systemically important financial institutions. The use of TARP money to help in the rationalization of the motor vehicle industry was vital to ensuring an orderly winding down of the industry at a time when an unraveling of the industry would have been a serious blow to the economy. TARP funds have not been

used effectively in foreclosure mitigation efforts, but policymakers will hopefully not give up and will implement the changes necessary to make the effort a success in coming months.

When all is said and done, TARP will cost taxpayers a substantial sum of money, but not nearly as much as most taxpayers and policymakers thought when the plan was conceived. TARP was well worth its' cost.

Chair WARREN. Thank you, Dr. Zandi.

We're going to do questions round robin, sort of, although there are just three of us, so you should all feel free to intervene if we want to pursue a line together. That's fine.

I'd like to start, though, with a point you made, Dr. Zandi, and that sort of underlies the others, and that is, you make the point that TARP helped with bank stability, and was critical. I think this was your first point in both your prepared remarks and in your oral remarks today. But, the question I want to press on is, How stable is "stable"? Do we have a group of very large financial institutions that are stable, so long as the government continues to pump money into them and to give them substantial guarantees, whether those are explicit guarantees or implicit guarantees, and that, in turn, forces us into the direction of asking about bank profitability—they are stable only if they have a business model now that works and that produces the kind of long-term profits that we can say, "Yes, this is now a functional banking system"?

And so, I think about these sources of bank profitability. There's lending, which I thought was supposed to be the bank's business. Business lending—evidently, not so much. And consumer lending, which seems to be, borrow money at a very low cost from the taxpayers, and then increase the interest rates and fees charged to consumers. A new study out by Pew Charitable Trust says they've examined the 400 largest credit cards and seen that, in less than a year now, interest rates on credit cards have gone up somewhere between 13 and 23 percent on these cards, at a time when the cost of funds has actually declined. There's also been a big push on fee income.

The other way that banks seem to be making money is by trading. They're out making investments in the marketplace, which—I'm old-fashioned, but I didn't think that was a traditional banking activity, and certainly raises the specter that, yes, they make profits today, but if they make bad trading decisions down the line, those banks are not so stable as they look.

So, I want to start with Dr. Zandi, but I welcome anyone's comments on this question. We describe our banks as more stable than they were, but is this because we just continue to guarantee them and put money into them, or is it because they have developed business models that, in fact, are not sustainable over the long haul?

Dr. Zandi, you want to start that?

Dr. ZANDI. Sure. I think it's fair to say that the Nation's largest banks are stable and viable, and will be profitable going concerns. I think that the smaller banking institutions—many smaller bank institutions will fail, in large part because of their bad lending—in large part related to the bad lending to commercial real estate lending, which is still being played out.

But, in the case of the largest banks, particularly the banks that went through the stress test, I think, in fact, they're probably overcapitalized. And the reason they're not lending is because house prices are falling and unemployment's rising. And I think once house prices stabilize and unemployment stops rising, we'll see credit flowing more normally, because they are well capitalized.

Small banks are not, and there will be many bank failures. And that goes to the problems with small business. And——

Chair WARREN. Okay. And you're confident—when you say they're well capitalized, you're confident that they're well capitalized against the projected losses in their portfolio, on their toxic assets——

Dr. ZANDI. Yes. I think these——

Chair WARREN [continuing]. Removed from the books?

Dr. ZANDI. I think the stress tests were substantive. I don't think they were merely superficial. The stress tests were important in establishing confidence, but they were substantive, and that if you look at the loss rates that they had to capitalize to under the adverse economic scenario, those loss rates were significant. So, I believe that unless we get the adverse scenario or something worse, they'll be fine.

Chair WARREN. Dr. Baker, could I ask you to jump in on that?

Dr. BAKER. Yeah. I'd be a little more pessimistic, for a couple of reasons. I mean, I think the stress tests were very useful, and I think they did help, as I said, a lot for transparency, but in terms of the adverse scenario, we're actually looking at higher unemployment rates today—I mean, the current rates in the projections, going forward—than what we had in the adverse scenario.

Also, I'd point out, those stress tests only ran through 2010, and we're looking at having a very bad time going at least into 2011, if not further. So, I think we probably are looking at high loss rates, perhaps higher than in that adverse scenario, for some time into the future. So, I'd be a little less confident. And not to say that they're all going to collapse, but I'm less confident about their soundness, going forward.

Now, getting to your specific questions about the models, I don't know that we have viable models, going forward. I mean, if you look at where the profits for the major banks were coming from prior to the crisis—well, a lot of this was coming from securitization of assets, which, even assuming we get the market fixed, securitization back in a proper place—we could argue there almost certainly will be less fees from that, going forward. I think many of us hope that there'll be less fees from things like credit cards, bank overdrafts, because that is the purpose of legislation being debated in both the House and Senate. That was an important part of the profits for many of the major banks, and smaller banks, as well.

Also, you had situations of, do you want to call it, "mis-selling," whatever, auction-rate securities, other instruments being sold to small governmental units that were almost certainly inappropriate to them, that did amount to large fees, in many cases, for the major banks.

So, these are areas of profitability that I think there's at least a hope, that many of us have, will not be there in the future.

So, do they have a viable model? Well, you'd mentioned, quite rightly, that many of them are making big profits on trading. That's fine, but that's inappropriate for a bank. And we have a situation where Goldman—I mention them because they're just most visible in this respect—they're quite openly trading very aggressively—and, for the moment at least, making very large profits—

but quite clearly with both explicit and implicit Government guarantee. The implicit Government guarantee: They're too big to fail. No one thinks we will let Goldman go under. And the explicit guarantee, that they have, I believe it's still, $28 billion in loans, through the FDIC, that are guaranteed by—and I shouldn't say "through"—guaranteed by the FDIC. So, this is not a proper model, to be having the government have the FDIC guarantee money for the banks to then speculate with. So, that's certainly not a viable model, at least that I would envision, going forward.

Chair WARREN. Mr. Pollock, could you add?

Mr. POLLOCK. Jesse Jones, in his most instructive memoirs, which I recommend to everybody, says what you're always doing in a panic is buying time. Why are you buying time? Because what typically happens in the wake of the crisis is, bank operating profits and margins become very large. And so, you have a race, if you will, or a balancing, between large operating profits created by the very low interest rates, and recognized losses. So, the low cost of carry—say, carry on $8 trillion, which is about the total loans of the banking system—it's not that the banks have no loans; they have $8 trillion dollars of loans, now being carried at extremely low refinancing rates. That generates big operating profits, which allows you to take the time to write down the past losses. This is the classic pattern. It happens over and over again. A great example was the dealing with the loans to less-developed countries, in the 1980s, which followed this pattern.

So, that's what we're now observing, Madam Chair.

Chair WARREN. Thank you.

Dr. Calomiris.

Dr. CALOMIRIS. I want to address your question about the credit crunch.

Chair WARREN. Yes.

Dr. CALOMIRIS. It's going to get a lot worse, or persist over time, especially for small businesses. I am not giving you that comment as an academic, but as a business consultant to banks, especially credit card banks. I can tell you exactly what they're doing and exactly why they're doing it.

First of all, looking at banks more broadly, capital scarcity persists, so lending isn't going to happen when banks have scarce capital. Even if, from a regulatory standpoint, they can be allowed to go ahead and do some lending; there's extreme caution.

Chair WARREN. So, I just want to——

Dr. CALOMIRIS. I have a long list.

Chair WARREN [continuing]. Draw a line under——

Dr. CALOMIRIS. Yeah.

Chair WARREN [continuing]. What you're saying. I'm going to let you do your entire list. But, you would say, when Dr. Zandi says they are overcapitalized and have more than enough capital, that——

Dr. CALOMIRIS. It's laughable.

Chair WARREN. Okay.

Dr. CALOMIRIS. But, I'll explain why.

Chair WARREN. Okay.

Dr. CALOMIRIS. I'm sorry, I don't mean to be insulting. I'm just saying, of course they're not overcapitalized——

Chair WARREN. I——

Dr. CALOMIRIS [continuing]. For two reasons.

Chair WARREN [continuing]. Just want a chance to draw this out.

Dr. CALOMIRIS. First of all——

Dr. ZANDI. And I consult to them, as well, by the way.

Dr. CALOMIRIS. Right. Well, let me tell you—let me give you an example.

Banks are not just meeting the statutory capital requirements. Regulators can set capital, on a bank-by-bank basis, any way they want. You don't know what the bank's capital requirements are. I do know what my clients' capital requirements are. Their capital requirements, instated by their regulator, might be twice what the statutory minimum is. Why? Because regulators right now are playing a political game of overkill to try to impress Congress with how tough they are, so they can survive the shakeout that's happening right now. That's a big part of what's going on. The FDIC, in particular. Actually, they talk out of both sides of their mouth, because they don't want to scare away—they don't want to make their banks too mad. But, I'm telling you, literally double the statutory capital requirement is being imposed.

Secondly, small business lending—well, small businesses don't want to invest or hire people, because of the huge risks; and not just economic risks, but political risks right now. Most small businesses pay personal income tax rates. Look at what healthcare, energy taxes, and other personal income tax rates are being discussed in Washington, and you tell me, if you're a small business, if you want to be investing.

When you look at the credit card bill, the credit card bill did exactly what I thought it would do, which is hugely raise interest rates on credit cards. The most damaging piece of the credit card bill, I'm sure was unintended. It mortgagized outstanding credit card balances. In other words, you can't raise interest rates on outstanding credit card balances. That means that a credit card balance—let's say, $1,000—is now a mortgage. Well, that means that the way you think about that, as a credit card bank, is completely different. You don't have the option to increase the rate, so you're going to have to start off with a very, very high rate. It's just basic economics.

So, FAS 166/167 is about to make things much worse, because it's, again, overkill. What it's going to do is impose the same capital requirements off balance sheet as on balance sheet. We should have capital requirements for off balance sheet, but it shouldn't be one-for-one. I've analyzed this for over a decade, and there are ways to solve this problem.

The problem right now is, we're in an overkill environment, and the credit crunch is just going to continue. I mean, there's no way that it's going to come to an end quickly. And it's not the banks' fault.

Chair WARREN. Dr. Johnson.

Dr. JOHNSON. Just to answer your question, it's not a stable system that we have now. When you have an entity such as Goldman Sachs, that has direct access to the Federal Reserve, as Dr. Baker said, and is allowed to take any kind of risky investments they want, you're basically running a big hedge fund.

Now, I understand the strategy is to allow these banks to recapitalize themselves by making large operating profits, but that assumes they know how to manage their risks, that assumes there aren't additional shocks, and assumes they don't pay out a large amount of those profits as bonuses, which seems to be their intention.

These are very different days from previous attempts to recapitalize and stabilize the banking system, such as the 1980s, when the strategy worked, over a period of time. So, I think we're asking for trouble now.

Chair WARREN. Thank you, Dr. Johnson.

I've gone way over—

Panelist Atkins.

Mr. ATKINS. Okay, thank you very much.

Chair WARREN. Thank you all.

Mr. ATKINS. Interesting discussion. What I first want to do is go back in time. You all have addressed TARP, and, everybody, I think, agrees that it's difficult to unwind that, along with all the other programs, and we have to view TARP as part of, the bigger government response.

But, I just want to pose a question, because when we think of TARP and we think of that spring and summer after Bear Stearns—and some of you all have raised this issue—it was sort of a sleepy spring and summer, where I think of—it was an opportunity that wasn't grabbed by regulatory agencies, and the government in general, to plan for what was going to happen, and a lot of folks in the marketplace didn't view things with the concern that they should have. So, I just want to pose a question. What if there had been no TARP? I mean, how would we be worse off than we are now? Because we see all the problems that we see now. We have markets that are still sort of dysfunctional; they might be stable, but in some of them the Fed is the main player. And would there have been any difference had we just continued the adhocism that we had seen earlier in 2008? Because I still don't see the market confidence there. But, I was just wondering—pose this to all of you—Dr. Baker to Dr. Zandi, you know, everybody in between—what you all think of that.

Dr. BAKER. Well, I'm not convinced we'd be in a hugely different world. I think that you would have seen, obviously, more active Fed intervention, more of the sorts of AIG/Bear Stearns bailouts, workarounds, however you want to call it. I was sort of struck—we had—you know, after Lehman failed—I think that just about everyone would agree that was a mistake, to let Lehman go under. And the Fed, some weeks afterwards, came up with the statement that they didn't have the legal authority. Now, the reality was, at least in my view, that no one was in a position to challenge the legal authority of the Fed as they acted. Now, whether or not they had the legal authority, would a court—could one envision a court having said—you know, suppose the Fed had set up some sort of structure, AIG-type structure, to keep Lehman afloat—would the courts have said, "You can't do that. You have to let Lehman go under"? It's a little hard for me to believe. Maybe that would have happened, but it's a little hard for me to believe.

So, if we envision the world without TARP, I think we would have had more AIG-type workarounds. Where would we be today? Probably with a less stable financial system. I think that stands to reason. It's also possible—again, suppose we imagine this crisis continuing, where you had major banks teetering, week by week. Congress could have acted subsequently. I mean, my biggest criticism about the way Congress acted at the TARP was that there wasn't time to really debate, "Okay, if we're going to put forward 700 billion, what conditions do we want to address now?" Because we all know, in Washington, the best time to do something is at a crisis. I mean, now we're having a debate, going forward, on financial reform, and we'll see what comes of that. But, you had an opportunity to at least have placeholders. You didn't need final reform, but you could have had placeholders.

And, just to be very specific, suppose we said—we'd put in a placeholder, saying that there would be an onerous capital requirement on institutions of larger than 50 billion assets that would go into effect January 1st, 2011. Well, that would be a real strong incentive for Congress to work out a more substantive reform.

Things like that could have been done in the period leading up to the TARP. They weren't, because the argument was, "We have to do this tomorrow." And that's literally what was being said at the time. And that, I think, was the biggest flaw. It wasn't, "We either do this right now or we don't do it." We would have had other opportunities, and we rushed in with something that wasn't well thought out.

Dr. ZANDI. Yeah, I think the world would have been measurably worse without TARP. And I think we get a sense of that when you think back to the days when TARP was constructed. When TARP was voted on for the first time by Congress, and voted down, the market responded violently. There was complete turmoil. And if Congress had not reversed itself and voted for TARP a week later, I think the markets would have completely shut down and we would have had major financial failures, and the system would be measurably worse.

Now, we would have ultimately responded to that and done something else. It wouldn't have been called "TARP," we'd be here talking about something else. We would have responded, but we would be in a measurably worse place. The banking system would be less stable. It would be more concentrated. Our problems would be significantly greater. And in all likelihood, we'd still be in a recession, in my view.

Dr. CALOMIRIS. I think that that's the point. The point is, unfortunately, your counterfactual was an incomplete one—that is, What replaced TARP is the key question. And I think that we could presume that what you would probably see instead of TARP would be forbearance, forbearance that is like what we did with the guarantees, an across-the-board sort of debt-guarantee program that would have found a way to extend guarantees from the Fed, from the FDIC, from the Treasury, somehow, on an ad hoc basis. And we know that, from a risk standpoint, the worst kind of government interventions are forbearance interventions, because there you put institutions in a situation where the zombies persist, and they have even stronger incentives to take on risk.

So, at least if you recapitalize a financial institution, you give them some money that they hope to keep. So, given that forbearance probably would have replaced it, from a risk standpoint, it would likely have been worse.

So, I—you know, it's a hard counterfactual.

Mr. ATKINS. All right.

Dr. Johnson.

Dr. JOHNSON. I would just add, to those points, the global context. You have to remember that they were forced into this by a sequence of events, by—into using TARP for the capital purchase program for the attempt at recapitalization—by what happened in the U.K. and what the Europeans did the day after the G7/IMF meeting. Now, the alternative, I agree with my colleagues, would have been, if you hadn't passed TARP, the Fed would have had to have done something. It would have done it very quickly. And I agree with Charles, it probably would have been a very messy thing. And, I think, constitutionally, it would have been a very complicated thing. Obviously, Federal Reserve didn't want to do that, they had good reason not to want to do it. This is an issue—we're using the fiscal power—it's a fiscal balance sheet of the United States. The authority to do that rests with the Congress, no question about it. So, getting the authority was absolutely what they needed to do, and they got it in a rush, because no one was prepared; they hadn't thought ahead.

Mr. ATKINS. Okay. Thank you.

Chair WARREN. Mr. Silvers.

Mr. SILVERS. This has been so interesting, it's hard to know even where to pick up the threads in a thoughtful way, but I'll try.

Do you all agree that—and I think several of you have said this in the testimony, but I just want to make it clear—do you all agree that the primary thing that we did in TARP, with the capital purchase program investments in October, was to implicitly put the balance sheet of the Federal Government behind the financial system, that that was the meaning of that act, in more than the precise dollar amounts that went into different firms?

Mr. POLLOCK. I'd say, Mr. Silvers, that the key, as I mentioned in my testimony, is the difference between debt and equity. I see financial crises as evolving through three periods:

The first period is denial and hoping for the best, which I characterize as "the subprime problem is contained," period.

The second period is a lending period; central bank is lending money. But, if somebody has negative capital, it doesn't matter how much you lend them; they still have negative capital—they're still broke, even if you're lending them money. So, in a really bad crisis, there is an issue of replacing capital.

Now, what happened in that situation was, you might say, an act of honesty. The government's balance sheet already was the capital of the financial system; we made it explicit. I think that making it explicit probably did, as the other panelists have said, significantly help.

The other thing that significantly helped was the stress tests programs, which others have mentioned. But I think the most important thing about the stress tests was that it threw out mark-

to-market accounting. It made mark-to-market accounting irrelevant. The combination of those two got us the normalization of——

Mr. SILVERS. Right.

Mr. POLLOCK [continuing]. Spreads that we've seen.

Mr. SILVERS. Yeah. You've answered far more than I asked. I just wanted to make sure that we all have agreement here, that this is the meaning of what they did.

Dr. Calomiris is shaking his head, so maybe you don't agree.

Dr. CALOMIRIS. I think that you pose a great question, and here's my answer to it.

Mr. SILVERS. All right.

Dr. CALOMIRIS. "Was it the announcement or was it the actual cash flowing?" is the way I would put your question. Okay?

Mr. SILVERS. Okay.

Dr. CALOMIRIS. So, first of all, the announcement had—it depends on which dimension of financial——

Mr. SILVERS. Right.

Dr. CALOMIRIS [continuing]. System you're talking about, and which institution. And so, if you're asking the question—from the standpoint of the bear run that was occurring on Goldman Sachs and Morgan Stanley stock price, the announcement was it. The actual cash flows, probably not very important. And from the standpoint of Goldman Sachs, I would say the announcement was it; they didn't need the flows.

From the standpoint of smaller banks, I would say that the flows mattered, to the extent that they're going to survive and be able to where—you know, survive this crisis—the flows mattered more than the announcement of the program.

So, I think—and the—and I would say that the overall policy toward small business lending and consumer lending really depended much more on the followthrough. And so, that's really——

Mr. SILVERS. Can——

Dr. CALOMIRIS [continuing]. Where the key issue is.

Mr. SILVERS. Can I——

Dr. CALOMIRIS. And it——

Mr. SILVERS. Can I stop you right——

Dr. CALOMIRIS [continuing]. Hasn't been there.

Mr. SILVERS. Can I stop you right there? You say there were—in your view, there were certain large financial institutions that needed confidence, not cash. Were there not—what's your view of the large financial institutions for whom cash would—whom there simply wasn't enough—might not have been enough cash? Right? Citi, B of A, and the like.

Dr. CALOMIRIS. Right.

Mr. SILVERS. You agree that there's a continuum——

Dr. CALOMIRIS. I agree. I agree. I was trying to draw the two extreme points.

Mr. SILVERS. Right.

Dr. CALOMIRIS. But, I agree with you, that when you talk about Citibank, the physical assistance is just as important, maybe more important. So, I think that there's a—depending on what you're talking about, the answer is different. But, I think the crucial point is that, from the standpoint of actually getting consumer and small

business lending flowing again, which we are not getting, it's the followthrough that matters, not just the announcement.

Mr. SILVERS. Well, and——

Dr. CALOMIRIS. And that's the problem.

Mr. SILVERS. Yeah. Well——

Dr. CALOMIRIS. The announcement wasn't good enough for that.

Mr. SILVERS. All right. Well, on that—I'm sorry—Dean.

Dr. BAKER. I was just going to say, very quickly, I think that, you know, putting this in a little context, we, in effect, had this implicit "too big to fail." We'd rescued Bear Stearns, certainly Fannie and Freddie. The—that was taken away when Lehman collapsed. TARP, in effect, put that back in. So, in that sense, I think it was the announcement playing the largest part. But, certainly, for the smallest banks, obviously, there was no "too big to fail" with them.

Mr. SILVERS. Dr. Johnson, you had your hand up.

Dr. JOHNSON. Yes. To answer your original question, yes, but, the way you stop a panic, the way you turn the corner in any financial crisis, is, you have to provide—public sector provides capital. The reason you're—and the characteristic of the crisis, the private sector won't provide capital anymore; it's too afraid of what's happening. And the issue most countries have is whether they can afford it, whether the IMF, some outside entity, will provide the capital, on what basis. We didn't have those problems, but we had the problem of whether Congress would go for it. And also, what Treasury wanted to do. Treasury's intentions were very unclear and made more murky, in this regard, their stated intentions around the TARP prior to that.

Mr. SILVERS. Dr. Johnson, if we take that point, we now have three very large TARP—you said, in your prepared remarks, that you thought we had a thinly capitalized banking system. I believe Dr. Zandi expressed a somewhat different view. Right. Now, we have four large banks that represent the majority of bank assets in the United States: Citi, B of A, Wells, and JPMorgan Chase. One of those banks has been allowed to return TARP funds: JPMorgan Chase. I think there's some consensus that, in terms of Dr. Calomiris' continuum, they were always at the very strong end.

So, the other three are not being allowed to return TARP funds. This seems to me to be consistent—the other three represent a very substantial part of our banking system—this would seem to me to be consistent, Dr. Johnson, with your remark that the banking system is thinly capitalized, at least in the eyes of the regulators, who are not allowing them to return the capital.

That ties, in my view, to this question of what we actually did, in terms of putting, effectively, the public's balance sheet behind the private financial system, because it appears to me now—and I'll ask you to respond, since the Chair is allowing me this indulgence, here—if we pull back—do we now have a circumstance in which we have strengthened the private balance sheets, such that we can pull back on the public balance sheet? And that leaves aside the question of how we pull back on the public balance sheet. But, have we got there?

The fact that three of the four largest banks in the country are not being allowed to return TARP funds suggests we haven't. You all are the experts; I'd welcome your observations on this.

Dr. JOHNSON. So, yes, we have a thinly capitalized banking system, as I said, relative to the trajectory of the economy. That's the way I would put it—relative to what I'd see as the real risk scenario. So, this is also in the minds of the management of these companies; they have raised their capital substantially, they're now at the levels that Lehman had right before it failed. So, is that enough capital? Probably not, in their minds.

And Charles, I think, is making a good point, that, in any crisis, the regulators tend to tighten on capital. They—I mean, without even worrying about losing jurisdiction, which I'm sure is an issue here. But, this is a natural reaction. You need to have more capital. So, the problem, of course, was, we didn't put enough capital in, because, in the United States, we shy away from things that feel like the government is owning a productive enterprise. Most other countries don't have that scruple; they'd tend to treat this on a much more pragmatic basis—the government use the public balance sheet, overcapitalize, and then get out, privatize that, sell that off. We don't like to do that, here. So, it was done on a thin-capital basis.

Dr. ZANDI. I think the large banks, in aggregate, are very well capitalized, and, in fact, arguably, overcapitalized under the most likely economic scenario. Now, I think, given the uncertainties with regard to that scenario, and the fact that, if you go into a scenario that's more adverse, that it could be very adverse, given a 10.2-percent unemployment rate, it makes sense to be very cautious in allowing institutions that you think are at the bottom end of that spectrum to give back their capital. You want to be sure that in your economic forecast that you're making is the right forecast before you do that.

So, I think the way this process is working is entirely appropriate. You're saying that the institutions at the good end of the spectrum can repay, institutions at the bottom end can't repay, until it is absolutely certain that the coast is clear. And how can we say that it is? Unemployment's 10.2 and rising, and house prices are falling. How can we?

Mr. SILVERS. Well, this brings me back to, really, the point of this hearing, which is the economic impact of TARP, because if the bottom end of—and this may sound like a statement, but it's going to wind to a question—if the bottom end of the banking system, in terms of capital adequacy, represents, say, 40 percent of the banking system's assets, which is roughly what the three institutions that are not being allowed to return TARP money are—and then there's a whole lot of weakness, obviously, in the small bank sector, which you all have discussed—but, if the bottom end is that big, what does this tell us about the relationship of what we've done in TARP? If the bottom—and then, let me just add one more complicating thing—if the bottom end is that big, and the Chairman of the Federal Reserve is saying that, "we're not getting business lending, because our banks are weak"—what does this tell us about the way we have managed TARP in relationship to the economic—not the financial, but the economic—consequences of the way we have managed it?

Dr. CALOMIRIS. If I can answer your first question——

[Laughter.]

Which I haven't had a chance——

Mr. SILVERS. Feel free.

Dr. CALOMIRIS. I think that I have a very different calculation than my friend Mr. Zandi on where the very largest financial institutions are. I think it is a spectrum. I agree with him there. But, I think that it's highly debatable whether, if we really did mark-to-market, or even—not just mark-to-current-market, but mark-to-recovery-value—on some of those banks, whether they would be solvent. I don't believe that one of them would be. And so—when you look into the weeds of this, you will find different pros and cons. For example, in Citibank,—I understand, most of their securities are not going to be resetting to interest rate—adjustable rates. And that's a positive, in terms of risks of default, going forward, on that portfolio. But, you know, overall, there's a lot of negative within that portfolio, too.

If you read Michael Pomerleano's analysis of this, which he started about a year ago and has been continuing to do, it's very much more pessimistic on recovery values of those portfolios. I'm not telling you that he's right, but I'm telling you that I don't think, based on my conversations with bankers, that anyone thinks that it's obvious that one or two of those banks are even solvent. Now, on the other hand, I think that there's a big difference among them. And I don't really want to go on the record saying that a particular bank is insolvent, but I'll just say that I think that, arguably, one of them is, and that the other two are pretty weak.

Mr. SILVERS. Why don't we just go down the line, here.

Mr. POLLOCK. I would say, when it comes to being thinly capitalized, banking systems are, by definition, thinly capitalized. Walter Bagehot wrote, "The profitability of banking depends on the smallness of the capital." He was right. So, when you get into a panic and prices are moving in ranges that aren't going from 99 to 98 and a half, but from 99 to 42, of course we have capital problems.

I think the way this relates to TARP is the issue of timing that I said before; TARP has made these investments. The point of the investments is to buy time for the operating earnings. We're talking about something that's less than a year so far for these investments, or maybe a year. So, my view would be, the investments could stop on December 31st, but the existing investments are going to be managed over a period of several years. Continental Illinois was bailed out by an RFC investment in 1934. It repaid the investment in 1939. That's 5 years. In 1939, it was the most profitable bank in the country.

So, I think, in TARP we have to have a similar several-year time period for the management of the investments that the government has made as fiduciary for the taxpayers. As I said, that's where I think the focus should be.

Dr. JOHNSON. So, if I understood the question correctly, my answer would be that TARP has not been well managed with a view to building a sustainable recovery in the credit system. I think that the banks that pay back the capital probably shouldn't have been allowed to pay back. I think it's a tricky judgment. You want them to raise more capital; you, ideally, want them to raise more private capital. And then, you do reach a point where the government ownership gets in the way of that. I'm not suggesting the government

should run the banking system in this country. That, I think, very obviously would be a disaster. But, the government has to be involved, and you have to come back with a lot of capital, relative to the worst-case scenario, because the worst-case scenario is what people are worried about. That capital is your cushion against losses. And if they're trying to get by with a little bit of—thin capital and a lot of implicit guarantees from the government, that's a good deal, if it works. If it's a bad deal, it's not their problem; it's your problem. And that's a very bad arrangement.

Mr. SILVERS. Does that arrangement, in particular, tend to give you a Japan scenario?

Dr. JOHNSON. Well, the Japan scenario is the extreme version of what Charles talked about before—is forbearance. And it came in a particular set of macroeconomic circumstances I don't think are going to be repeated here. But, the idea—I think that we will avoid that kind of—the zombie banks, the zombie companies. We do actually—we're better—we're not good, but we're better at recognizing losses and at moving on, than was Japan.

I think you're just going to have—it's going to be—it's going to be some combination of sluggish credit for small business and excessive risktaking in trading markets that go bad. Of course, hedge funds fail all the time. They're supposed to fail. Hedge funds are designed to fail. You go and set up another hedge fund. That's the business model. And sometimes you have good years, and you share that with your investors, and sometimes you have bad years, and you just move on.

Having your major banks in your—that's fine. I'm not opposed to hedge funds. We should see it—recognize what it is. But, to have your biggest banks do that, as long as hedge-fund investors know what they're getting into, that's okay. But, if you have your biggest banks operate on that basis is reckless and irresponsible. It's a bad idea.

Mr. SILVERS. We've taken tons of time, but Dean hasn't gotten his chance.

Dr. BAKER. Yeah. Well, just quickly, to comment on some of the differences here on whether the solvency of the three major banks, there; someone questioned it. I think the differences largely depend on what our projections are, going forward. I mean, there's a wide variance here, and really an extraordinary wide variance, because it's not just on, sort of, unemployment, but we're also looking at a situation where we could come up with very plausible scenarios that say that house prices more or less stabilize where they are now, or the real estate prices more or less stabilized. I can also give you very plausible scenarios where they fall by another 15 percent. And from the standpoint of bank solvency, that's a huge, huge difference. So, again, Mark—you know, I'm not going to say who's—we don't know who's right; we'll find out in a year or two. But, the point is, there's a very, very wide range, here, and it's clear we could find plausible scenarios under which those three banks will all be just fine, but also plausible scenarios under which they may well face insolvency.

Chair WARREN. Thank you.

I want to follow up, if I can. I'm going to stay in the same line of questioning so we can still keep talking about this. But, I just

want to bear down on one part of this. Thanks to TARP, we now have some very large financial institutions who are operating with implicit guarantees. Citi has an explicit guarantee of more than $300 billion. That has enormous pricing effects in the market, and distortions in attracting capital. Obviously, it also creates the kind of moral hazard questions you're all talking about, the idea that our largest financial institutions are giant hedge funds for which we can all celebrate when they have a good year, but—I think we have some recent experience that suggests they don't always have good years.

So, I want to just ask the question, following exactly the same line of questioning. If these largest financial institutions are raising capital only because the guarantees are there, and the guarantees are distorting market investments, risktaking, pricing, how do you wind back out of that? How do you get the ball to spin in the other direction?

Dr. Calomiris.

Dr. CALOMIRIS. The way you do is profitability. Just to remind you, from 1992 until 2006 was consistently an unprecedented high-profitability experience for the U.S. banking system.

Chair WARREN. Dr. Calomiris, let me stop you right there.

Dr. CALOMIRIS. But, that's——

Chair WARREN. I'm all for profitability.

Dr. CALOMIRIS. No, no, I'm just saying——

Chair WARREN. I get that.

Dr. CALOMIRIS. That's the only way out.

Chair WARREN. No, I understand. But, that's why I started the questions, back when I started my questions, with how they're producing their profits. And they're producing their profits from being a hedge fund—I think Dr. Johnson referred to that calmly as "reckless." Was that the term? Taking on reckless risks. And the other way they're producing profits right now is trying to squeeze consumers to try to get in ahead of a move; they're borrowing cheap from the taxpayer and then increasing rates on the taxpayer for their consumer lending. And they're not doing any other form of lending. I'm sorry, that's not a sustainable profit model. So——

Dr. CALOMIRIS. No, I'm not——

Chair WARREN [continuing]. What's our model, here? Should we all just go to Las Vegas and——

Dr. CALOMIRIS. No.

Chair WARREN [continuing]. And bet it all on black–22? And if it comes in, we have a stable banking system, and if we don't, we'll just quit.

Dr. CALOMIRIS. Well, no, of course not. But, what I would say is kind of troubling, and I agree with you; what's troubling is, Citibank, of course, has made a lot of its profits from one activity that's not going to be very profitable for it, going forward, and that's the credit card business, especially with FAS 166 coming into play, starting in January, and because Citibank, unlike some small credit card issuers, will not be able to exempt itself through various loopholes from FAS 166/167. So, you have a huge problem, which is consumer credit is not going to be as profitable for Citibank as it used to be.

So, I think what I'm trying to get at here is that part of the problem is that we're tying one hand behind the banking system right now with the overkill that we've done, and we're actually taking the profitable business away from them, in two ways: first of all, I talked already about credit cards; but, secondly, small business lending. And small business lending is not going to be profitable until small businesses start demanding loans more. And I don't think that's going to happen until they're more confident about the recovery.

Chair WARREN. And if I can——

Dr. CALOMIRIS. And my view is, it's not going to be a sustained, high-growth recovery; it's going to be great 2010, and what most economists are projecting is 5-year growth rate for the U.S. economy around 2 percent. That is not good news for small businesses. And the regulatory and political risks they're facing are really—

So, I'm worried, but I'm saying, the way we get out of it is with profitability in the bread-and-butter of banking. And the problem is, I'm not seeing it right now.

Chair WARREN. Dr. Johnson.

Dr. JOHNSON. I think, broadly speaking, there are two ways out of this. One is to allow the banks to take more advantage of consumers than they have in the past. Kind of an extraordinary——

Chair WARREN. Ah, there's a solution.

Dr. JOHNSON [continuing]. Kind of an extraordinary concept. If you explained it to consumers, I'm not sure they would really go for it, given the way they've been treated. But, you could relax the rules, you could allow them to mislead consumers more, all kinds of trickery could be allowed, and that would, without question—as Charles said, that would allow them to boost their profits.

Dr. CALOMIRIS. I'm sorry, that's a distortion. I didn't say anything about trickery. I'm talking about capital requirements, and I'm talking about limitations on interest charges.

Dr. JOHNSON. I think an alternative way forward is to break up the biggest banks. The reason you have implicit guarantees in a system like this is because banks are too big to fail, or they're perceived to be too big to fail. That's what the debt market thinks. That's why Goldman Sachs can borrow at a relatively small spread over Treasury's. And it's very hard to—there are, of course, regulated proposals to try and restrain that power and to try and make it a credible threat that if bad things happen, you would be able to close them down. Unfortunately, I think that the likelihood that those would work are really very low, because these banks are so big, and, when they fail—when they bet it all on black–22, and the bet goes bad, you can't just say, "Well, you're out of luck. Go away." Because the damage—the collateral damage—I think the issue Charles raised—of small business is very important. That's a macroeconomic effect. That's the effect of a massive recession, primarily. That's why they're not going to be borrowing money, that's not why they're not going to come back. That is going to hurt the bank's bottom line. But, that's because the massive banks were able to get themselves into the position where some failed, and the ones who survived now have more market share, they have some more pricing power, which is part of the profitability, but they're also taking a lot more risk. Even the standard VaR models, which

are deeply flawed, show risk levels in the big banks back to the levels of 2005, perhaps 2006.

Chair WARREN. So, if I'm understanding you correctly, you're saying that the advantage to breaking up the big banks is, we end up with more banks that can fail, because we let them fail, but more banks, then, that can figure out their profitable models and go forward. Is that——

Dr. JOHNSON. Absolutely.

Chair WARREN. Is that the consequence of——

Dr. JOHNSON. If you——

Chair WARREN [continuing]. Breaking them up?

Dr. JOHNSON [continuing]. If you try to run capitalism in which some people have a "Get out of jail free" card or a no-bankruptcy exemption, it goes badly. You cannot run a market-based system on that. And I think there's broad agreement across the political spectrum. The question is how to implement that. My view is, you've got to keep it simple. And "simple" means more banks, financial institutions the size of CIT group, which was turned down for a second bailout this year, rightly, and which is going through bankruptcy, and that's a good thing, and that's not causing massive financial distress in the United States or around the world—you need more banks the CIT Group size, 80 billion—eight-zero—fewer of the Goldman Sachs size, 800 billion or going up to a trillion.

Chair WARREN. Dr. Zandi, I think, has been cut out of the conversation. I want to be sure he gets a chance.

Dr. ZANDI. Thank you.

Taking a less ambitious approach than breaking up the big banks, maybe there are a few things you could influence that would have an impact on your exit strategy.

And, in my view, the exit strategy becomes much easier if the economy stabilizes; again, if unemployment stops rising and house prices stop falling. And there are three things you could influence that would have an impact on that:

First is, you could have an impact on small business lending. And I do think that's very important to job growth. I agree with Dr. Calomiris—that they're not getting credit, and that's a problem.

Second, the housing—the foreclosure mitigation, that's not working well. And the foreclosure mitigation plan should be adjusted. And TARP money can be used for that, because a lot of the TARP money that's been allocated to the current mitigation plan will not be used, because you're going to get takeup. And there are things you could do to make that measurably better, and that would help in stemming the house price declines.

And then, third, something we haven't talked about—and I think this is really important to lending, more so than capital for these large institutions—one of the key reasons why the credit card lenders aren't extending credit is, the structured finance market is not working well. It's improved. Those spreads have come in. But, there is no bond issuance.

The amount of structured finance issuance this year is less than $200 billion for the entire year. And I'm not suggesting we want to go back to 2 trillion a year, because that was obviously dysfunctional, as well, it represented a lot of bad lending. But, there's got

to be a happy medium, because those institutions need to be able to use the structured finance market to clear off their balance sheet. And so, there are things that you could do with the TARP money to make that work better.

So, those are—it's not as ambitious as breaking up the big banks, but maybe these are some things you can do to make the system work a little bit better and get to the exit strategy quicker.

Chair WARREN. That's very useful, thank you.

I'm way over my time.

Panelist Atkins.

Mr. ATKINS. Thank you, Madam Chairman.

Well, I want to continue, actually, on this, because I do think that this ties into what we're going to look forward to in the future, which I think is—TARP, for all its warts and what's happened, you know, we're stuck with. The Treasury Secretary has to make a determination by the end of the year as to whether he's going to extend the program. So, the real question is, you know, If he does, you know, what should TARP look like next year? And, you know, when we talk about, you know, the whole structured finance market and securitization, that had a great benefit of lowering costs for everybody—for consumers—and helping the whole machine work the way it did up until last year. And it has—at least my perception is—like yours, it has ground to a halt. And then you have—Dr. Calomiris said you have government intervention, because you, unfortunately, do have deadbeats out there who don't pay their credit card bills. And so, of course, that raises the costs for all the good folks, who do pay their credit card bills. And then you have government intervention on top that then, by preventing companies to differentiate, raises the costs for everybody.

So, how do—how can—you know, if the Secretary does decide to extend this program, how can TARP work to help ameliorate this situation? And then, with the view that Mr. Pollock said, that TARP is constrained by the statute, literally, to buy assets. Treasury has veered away from that, I think, you know, very problematically, if that were to be challenged in court. So, I just want to solicit your opinions as to, you know, if they were to buy assets, how could this move forward?

Dr. CALOMIRIS. Well, I would tell you that if I were king, here's the—here are the things I would do.

Number one, I agree with Alex that we should just bring TARP to an end, in terms of new funds. But, I—that doesn't mean that we can't address these two very important problems of consumer credit and small business credit. We already have something called the Small Business Administration. We have a lot of interesting vehicles there. I would caution you that I have a study that shows a lot of moral hazard in Small Business Administration lending. It needs to be reformed, but it could be expanded, potentially. But, that shouldn't be done as part of TARP.

In terms of what we can do for consumer credit, and for credit more generally, and for securitization problems, which Mark mentioned, I think we really have to get serious about not letting accounting standards, run wild, destroy the financial system. FAS 166/167, it's happening January 1st. It's going to make a big difference. A bunch of accountants, sitting off in their monastery,

have decided that they're going to destroy consumer credit and other credit markets through an excessive burden on securitization capital requirements. It's—I'm not saying that they're doing it mean-spiritedly, I'm just saying I think they're wrong. And the problem is, no one elected them. I'm not saying we should politicize all of our accounting. I don't know the answer. But, I know one thing—just as they were very unhelpful—FAS was very unhelpful in its mark-to-market accounting during the crisis, FAS 166 is going to be very unhelpful getting out of it. So, we need an answer for that.

And I think, also, finally reforming the credit card bill to get rid of the limitation on increasing interest rates on outstanding balances—just that one thing, which I think was an unwitting part of the bill; I don't think they intended to mortgagize credit cards—but, I think that that kind of reform could make a huge difference.

So, I would say, shut down TARP, reform and expand SBA, potentially, get rid of this FAS 166/167 bomb that's about to go off, and think about some slight tweaks to the credit card bill.

Mr. POLLOCK. I agree on the problems with the Financial Accounting Standards Board, but I don't see what TARP can do about it. The only investment of TARP, in terms of acquiring an asset, that occurs to me that could be helpful, going forward, is the one I mentioned: Namely, recapitalizing the FDIC. Other than that, I don't see what it could do; and therefore, I think cessation of the new activities on December 31st makes sense.

But TARP will last a long time. As I said before, we're looking at a several-year period where these investments will exist. I think the profitability coming from banks isn't what we talked about at all, it's something very basic; it's the yields on the fundamental assets minus extremely low cost of carry, which generates high operating profits. I said, you work through the asset writeoffs while these profits continue, and they ultimately succeed, if all goes right, in paying off the preferred stock investments, and then we rack up TARP and find out if we had an overall loss or profit, by business line.

Mr. ATKINS. Dr. Baker.

Dr. BAKER. Yeah, a couple of points. I want to get back to a point that Mark had raised about the issue of falling house prices. I think some of our policies—and part of this is TARP, part of this is other policies we've pursued—have been designed quite explicitly to keep house prices from falling. And I think it's very problematic, because we've had a bubble—we had a housing bubble. We still have a bubble in many areas; it's partly deflated. Other areas, it's completely deflated. I don't think we have interest, in those areas where it's partly deflated, in trying to sustain that bubble for longer. In effect, it's a form of forbearance. And we've had a number of policies. The Fed's policy of buying mortgage-backed securities. The FHA, I think, has gone overboard; that's why it's in trouble. It's made more loans than—in contexts where it should not have; it did not use good judgment in, basically, replacing the subprime market. And finally, we've also had the housing tax credit, which was certainly—a first-time-buyer tax credit, which was a boost to the market, at least thus far.

I don't think we have an interest in trying to prevent house prices from adjusting. We may want to help homeowners. I've talked about ways. There's other ways we could do it: bankruptcy reform, right to rent. But, I don't think we have an interest in propping up house prices.

The other point, again—just in terms of the unwinding—I'd just get back to what Simon had said—we have, basically, two alternative scenarios that we all sort of recognize, with the large institutions. One is to trust the regulators to do a good job. And I'm not questioning their competence, but it's just—it's a difficult thing. We've seen they did not do that. The alternative is to go the route he had suggested, of looking to break them up. Those are really the two options. Unfortunately, I think that Congress, with their reform measures, looks to be taking the route that, "We'll do a better job next time." And we could hope that's true; I'm just not confident that it'll turn out that way.

Mr. ATKINS. Dr.——

Dr. JOHNSON. I wouldn't spend the TARP money that's available on any of these initiatives we're discussing. You should—you should extend TARP for 1 year; you should save the money in case you need it. We are not out of the woods yet. I think we're all agreeing there are serious risks. We have different versions of those risks. Those all could be large. Those all could impact financial institution. If you—either the money is committed or it's no—you're no longer authorized to spend it. You'll have to go back to Congress again for another conversation. That, I think, would not be an easy conversation. And that, you know, you're going to have—exacerbate the issues of turmoil. The world economy is not settled. Okay? The U.S. economy is certainly not settled back onto a sustainable recovery path. If you've still got some—you still have over 200 billion—$250 billion available in TARP, I would keep that, very carefully, and use it only when you absolutely need it.

Mr. ATKINS. Yeah. The counter is that it does weigh down on the deficit, and, you know, obviously we have problems in that area, as well. But—good.

Chair WARREN. Mr. Silvers.

Mr. SILVERS. I have a couple of, sort of, more specific questions that the testimony has brought forward.

I would just note, first, that having TARP funds in—TARP is accounted for, as a deficit matter, based on the losses. It's not a $700-billion impact on the deficit. It was originally budgeted by CBO at 250; it's now at 150. I don't have an independent opinion about whether those numbers are right, but that's how it works. And so, I believe that Dr. Johnson's comment has almost—has no deficit impact, per se.

Now, let me come to my questions. Dr. Calomiris, you said something very interesting that I want to follow up on. You know, this Panel issued a report on guarantees. I guess it was our last report?

Chair WARREN. Uh-huh.

Mr. SILVERS. On guarantees. And we did the best we could at trying to figure out what the economic impact of the Citi guarantee was. We had a lot of trouble doing it. Perhaps apropos of Mr. Pollock's comments about disclosure and accounting and so forth, we

just had a lot of trouble trying to figure out what it was—what its value was and how it moved.

You made a comment that made me think that you might have an opinion as to what the ultimate net cost of the Citi guarantees might be, if any, to the Federal Government.

Dr. CALOMIRIS. I could have an opinion about that, but I haven't done that calculation.

Mr. SILVERS. Well, let's take the biggest—let's take it at the crudest level. Do you think, based on some of the observations you made a moment or two ago about Citi's portfolio—do you think that that guarantee, given that there is a fee involved—we've been paid for it in preferred stock and the like—do you think that guarantee is likely to end up being a positive or negative? Going to make money, or lose?

Dr. CALOMIRIS. I—you know, I wouldn't want to give you an opinion without—I'm willing to look at it, actually, and could——

Mr. SILVERS. I would very much——

Dr. CALOMIRIS [continuing]. Give you an opinion afterwards.

Mr. SILVERS. I would very much appreciate it.

Dr. CALOMIRIS. But, I don't want to——

Mr. SILVERS. That's fair enough. I'm ambushing you a little bit. I'd very much appreciate your opinion——

Dr. CALOMIRIS. Okay.

Mr. SILVERS [continuing]. Afterwards.

Mr. Pollock, you seem to have——

Mr. POLLOCK. I can't speak to the specifics of it, but, generically, with this kind of a deal, you make money in most scenarios, and in the terrible scenarios, you lose a lot of money.

[Laughter.]

Mr. SILVERS. I see. Well, that's a—certainly a—I think that's a safe comment——

Chair WARREN. Safe prediction.

Mr. SILVERS [continuing]. Safe prediction to make.

Secondly, there is some type of dialogue around TARP that talks about one of the successes of TARP being the rise in our equity market prices. I think other people seem to be concerned that—about, sort of more broadly, the comment, Dean, you made, that we may—be going through sort of mini-asset bubbles in different markets, perhaps in housing, perhaps in equities. Dr. Johnson, you talked about—you talked, in your written testimony, about the influence of, essentially, what you called a "carry trade" on the equities markets, which is an analysis that, I believe, Nouriel Roubini has also made. There are some settings in which everyone knows what that means, and so forth; but, we're in Washington, and not everybody does. Can you explain what you mean by that, and what you think the relationship between the state of the banking system we've just been talking about and the equities markets is?

Dr. JOHNSON. Certainly. I think the statement—or—as used—or the terms most commonly used in financial markets today, is not particularly about the equity market; it's much more about emerging markets. So, the question of—Where's the next bubble? Right? Where do you have the overexuberance? And I think many people take the view, and I take the view, that we're back to a pattern we've seen before, from the '70s, '80s, and '90s, which is—the fron-

tier of reckless lending, where borrowers get carried away is not actually in the United States, it's in—somewhere in—it's Asia, it's around China, or it's Brazil, or it's Russia. Unfortunately, it's funded by institutions that are based in the United States, so that creates financial system risk, which we've not been good at controlling in the past.

I think the Federal Reserve made it very clear—and this is facilitated—I mean, this—that's a general pattern—for example, recycling petrol dollars, I think, given the likely trajectory of oil prices, will again run through New York—from Middle East, through New York, out to Asia, for example.

Very low interest rates in the U.S., which makes sense from a domestic U.S. point of view, given high persistent unemployment—will only facilitate this and make the U.S. more attractive as a funding currency. Some of that happens offshore, some of that you will see also coming directly as borrowing in the United States. Whether or not it—you see it in the balance of payments depends on whether people are willing to take the foreign exchange risk, which is an interesting question. But, this is to carry cheap interest rates.

If you remember, the big discussion about low interest rates in the runup to—the role in the subprime crisis; people talked about the global savings glut. Not exactly a global savings glut, necessarily, this time, but cheap funding costs, easy monetary policy would definitely do the same thing.

So, what they do is, this feeds the exuberance, this encourages overborrowing, and this comes back to damage the global financial system.

Mr. POLLOCK. I'm sure——

Mr. SILVERS. And can I just make sure that I—because your statement didn't quite get to what my question asked.

It—am I right in understanding what you say to mean, that because we have very low cost of funds in the United States, a lot of financial actors, both domestic and international, go to dollar-denominated markets to borrow. And some of that money that they borrow is being fed back into our equities markets. Is that the answer to my question? Or is there—if not, please——

Dr. JOHNSON. I don't think it's a—I don't think the mechanism we're discussing particularly affects the equity markets. I mean, this is——

Mr. SILVERS. You don't. Okay.

Dr. JOHNSON. It's a—the—there is an equity-market effect. Obviously, this is the cyclical effect of Fed, loosening and presume to tighten, and equity prices are based on a market view——

Mr. SILVERS. Right. Of course.

Dr. JOHNSON [continuing]. Of what that tightening path is. And as you revise that view, that affects equity prices.

I think the big dynamic and the carry trade that people worry about is funded in dollars, going to take risk in emerging markets——

Mr. SILVERS. In emerging markets.

Dr. JOHNSON [continuing]. Which, for example, Goldman Sachs does within its own balance sheet, does private equity investments in China, funded by very low cost of capital in the United States.

Dr. ZANDI. Yeah, I don't——

Mr. SILVERS. Gotcha. Thank you.

Dr. ZANDI [continuing]. Think anyone's arguing that there's a carry trade into U.S. equity. It's carry trade—I borrow here, and I'm going overseas and buying assets in Asia. So, I don't know that——

Mr. SILVERS. Well, I thought that Roubini argued that it was U.S., but perhaps I'm mistaken.

Dr. CALOMIRIS. If I could comment quickly——

Chair WARREN. Thank you.

Dr. CALOMIRIS [continuing]. Just on the equity runup. I mean, there has been dramatic runup since March, but it's important to keep in mind there was a dramatic fall, you know, even after the TARP was passed, until March, you know, so we're still looking at equity prices that are down roughly 30 percent from what their pre-recession peaks were.

Chair WARREN. Okay. Thank you.

Mr. POLLOCK. I agree with everything that Dr. Johnson said about the carry trade. There's one thing we could add, which is that when people talk about a carry trade, they're often talking about a cross-currency position——

Mr. SILVERS. Right.

Mr. POLLOCK [continuing]. Where not only have you borrowed cheaply, but you are borrowed or you're short a currency you expect to be falling, versus, usually, fixed income in some other currency. So, there are two aspects to it. One is the cheap interest rate, the other is the expectations of a falling dollar.

Dr. CALOMIRIS. If I can just add quickly to that. So, you can also talk about—look, banks make their money, let's say, in about six different ways. One of them is by just taking up bets that come in, 99 percent of the time, profitable. Riding the yield curve is a form of a carry trade. It's taking interest-rate risk. Should banks really be all about taking interest-rate risk? I'm not sure. But, that's how they make a lot of their money.

They also do carry trade in foreign exchange. There's a wonderful paper—I think it's very good—on the carry-trade puzzle. It turns out—like the equity-premium puzzle in finance, there's a carry-trade puzzle—it turns out that the carry trade, using any kind of reasonable utility models of risk, is just excessively profitable. But, when you look at the states of the world in which you lose on the carry trade, they're extreme states of the world, so that it's not a sort of normal distribution. So, the key——

Mr. POLLOCK. Just like your Citibank position, Mr. Silvers.

Dr. CALOMIRIS. Exactly. And so—well, this is Alex's point, also, about how banks make money—so, the reason—I mean, banks do, and have traditionally, taken bets that, like carry-trade bets or riding the yield-curve bets, that are their bread-and-butter, which sometimes finance professors criticize them for.

Chair WARREN. Thank you.

[Laughter.]

Chair WARREN. We'll take that.

So, I want to go back to a point you made, Dr. Johnson, just a minute ago. You started your testimony, both your oral testimony and your written testimony, talking about what needs to happen

after a crisis like this, and you put very strong emphasis on the need for financial reforms, going forward, and how, without that, we really will be caught in a "doom loop." And you talk about the need for reform in banking practices. You have suggested the need to break up large financial institutions. And we have talked here about how to back out of government guarantees so these markets can start to function normally again.

You also just said you think we need to keep TARP open; otherwise, there would be a very uncomfortable conversation with Congress the next time we face a crisis.

So, this puts, to me, the question—and that is, the TARP is what keeps these large financial institutions comfortable and powerful, and they are, as we speak, lobbying Congress for a continuation of the status quo, in terms of the means by which they earn their profits and the guarantees that they enjoy. So, I'm a little confused about why you would want to keep TARP open and keep the notion of a larger guarantee to come if you make mistakes, at the same time that you're advocating critical reforms that seem to be, at best, facing an uphill climb.

Dr. JOHNSON. Well, it's a good question. And, you know, I am emphasizing the need for these fundamental reforms, break them up. And, I think, in the context—if you had a smaller system, where banks could fail, and that was—that's obviously what we don't have—I would still be in favor of being able to provide systemic support, when needed. And I think that is best practice. That's not to say you should have open-ended money available for these massive financial institutions. And just as a practical matter, if you are faced by—with a choice between collapse or rescue, if you get to that point, ever, because of some—something happened, you didn't—you know, the system didn't work as you designed, I would choose rescue, because collapse means a second Great Depression.

Chair WARREN. Well, I understand that. But, what I'm really trying to push on is the other half of the question, and that is—I understand your point, that we need reforms, but evidently we have not pinned reforms to the receipt of TARP money. And so, we are in the position of having given away the money without having asked for anything in return. And I'm just concerned about what that means and why we would want to extend in that direction.

Dr. Calomiris.

Dr. CALOMIRIS. I'm more optimistic, apparently, than most of the people on the panel, about reform. And I want to just take a minute to tell you what I think is some good news, which is, I think, tomorrow, but maybe as late as Monday, the Pew Trust Task Force on Financial Reform, in which I am a member, is going to issue a report, which is going to be a bipartisan consensus of prominent economists and a couple of lawyers, on how we can solve a lot of these problems. And it may seem unlikely, but actually I think that some of the problems associated with "too big to fail," especially, are solvable. They're not easy to solve, but they are solvable. And I think we've got a pretty interesting approach to it.

So, I'll just leave it at that, except to say, that's part of the reason, I think, we don't need to keep this fund, this open-ended fund open, because I think, actually, we'll have another approach which is better.

Chair WARREN. Dr. Baker.

Dr. BAKER. Well, I really look forward to the report tomorrow.

But, in terms of, whether we keep TARP open, I think that we had a lot of inaccurate information that was behind the original passage of TARP, and that resulted in us not putting conditions on it that should have been put on it. And from that perspective, I think it makes perfect sense to say, "Well, why not go back to the drawing board. And in the event we do end up in a bad situation"—again, I—you know, we could say—and I've said many bad things about Congress, but the fact was, they generally do respond to a crisis, and hopefully, if we get into this situation again, we will put better conditions on it that will ensure that the banking system is reformed. So, again, maybe this will all become moot after tomorrow, but, if not, my view would be, start over with TARP.

Chair WARREN. I'm going to try and ask just one very quick question, and then I will yield. And that is—Mr. Pollock, I read your testimony with great care, and listened to what you had to say in your oral remarks. You make the point about investment, which I fully understand. But, the statute also requires that TARP money be used to deal with foreclosure mitigation. It's quite explicit that that is an intent and what Congress had in mind when it authorized the $700 billion. So, you're saying that you think HAMP is not the right way to do it. Can you give us some idea of what you think would be the right approach?

Mr. POLLOCK. Thank you, Madam Chairman. I think it's a very important question.

I read the sections of the statute, with some care, that deal with foreclosure mitigation. What they say is, "When TARP acquires the mortgages"—in other words, it's about an acquisition of a mortgage—then we don't want you to act like a cold-hearted moneylender, we want you to carry out——

Chair WARREN. I didn't read that part in the statute.

[Laughter.]

Mr. POLLOCK. Well, I'd just suggest we could take a look at the sections. It seems to me—I don't give this as a legal opinion, but just as a reader of the statute—that it's phrased in the context of the statute's assumption that TARP was going to be in the business of acquiring mortgage securities and mortgage assets, and that when it did acquire these assets, then the statute was telling it, here's how you have to act as an owner of these mortgages. We want you to look at a modification with an eye to maximizing the present value for the taxpayers and to dealing in a fair way with borrowers.

Chair WARREN. So—I want to make sure I understand—so, it's your view that TARP is not designed as it has unfolded, that TARP money should not be used to deal with mortgage foreclosures?

Mr. POLLOCK. That's correct. It's my view that reading the plain language of the statute, you would conclude that, yes.

Chair WARREN. Thank you.

Dr. Zandi.

Dr. ZANDI. I would disagree. I think it's very important for TARP to focus on foreclosure mitigation. And I think the only way to do foreclosure mitigation that will be effective is to help incent principal write-down, that the current problems with the HAMP plan

is the fact that it's lowering rates temporarily to get the monthly payment down, and not addressing the negative equity that many of these homeowners face. And moreover, that's resulting in less takeup, because the servicers and owners know that the redefault rates are going to be too high, and therefore, they're not HAMPing them. So, the only way this is going to become more effective—and, of course, there are many issues with that—moral hazard, adverse selection, fairness, a lot of issues—but, the only way to make it effective will be principal writedown.

Chair WARREN. Dr. Calomiris.

Mr. POLLOCK. May I just add one point on——

Chair WARREN. Let——

Mr. POLLOCK [continuing]. The statute.

Chair WARREN. Let me give Dr.——

Mr. POLLOCK. If you will——

Chair WARREN [continuing]. Calomiris a chance.

Mr. POLLOCK [continuing]. Come back to me. Thank you.

Dr. JOHNSON. Could I just return to the question—sorry. What, did you call—I thought——

Chair WARREN. Sure.

Dr. JOHNSON [continuing]. You called me.

Chair WARREN. No, no, I was—let's do it all. Mr. Pollock, go ahead.

Mr. POLLOCK. I just wanted to add that I assume that there is, in the Treasury Department, an opinion of the general counsel of the Treasury Department covering this matter, which I would suggest that——

Mr. ATKINS. It's not very good——

Mr. POLLOCK [continuing]. The Oversight——

Mr. ATKINS [continuing]. But, anyway——

Mr. POLLOCK [continuing]. Oversight Panel might wish to request.

Chair WARREN. Thank you.

Dr. Calomiris and then Dr. Johnson. You'll get the final word.

Dr. CALOMIRIS. My—yes. I don't know about—I know that your charge has to do with TARP, and I haven't read the statutory language carefully, and I don't think it's a TARP issue; I think it's not which pocket of the government we take the 50 to 100 billion, or whatever we're going to take; it's how to design the thing.

And I want to agree with Mark Zandi, that if you look at the—and I mentioned it before—the Mexican program for business and consumer debt in the 1990s, they went for several years in gridlock, and then they finally said, "Well, suppose that the government steps in and shares the cost with creditors of writing down the principal, but you have to do it within 6 months." Everybody did it.

Chair WARREN. Yes.

Dr. CALOMIRIS. So, that was what Punto Final meant, meant, you know, final point, "You do it now, or you don't do it." And so, that's been, I think, the essence of what's been missing.

And the nice thing about that writedown of principal is that it works to help marginal borrowers, but not hopeless cases, because creditors won't do their 80 percent, or whatever it is, writedown on a hopeless case. But, if you're a close case, it really works.

Now, there are other good ideas, but I think if you don't start from some sort of concept of government sharing costs of principal writedown, you're not going to get the job done.

Chair WARREN. Thank you, Dr. Calomiris.

And Dr. Johnson.

Dr. JOHNSON. Just to challenge, a little bit, the premise of your question to me a few minutes ago, which is, if we end TARP, if it ends at the end of the year, does that end "too big to fail"? I don't think it affects it at all. I don't think you would even see that in the pricing of Goldman Sachs debt right now, because I think the guarantee is this implicit guarantee, and it's the understanding of what would happen in these rare scenarios that, you know, can ruin the world economy. So, that's one thing. I think those are separate questions.

Secondly, I'm very much in favor of being prepared. One of the big frustrations out of the IMF is the culture of ministers of finance who don't want to talk about the bad things that can happen, and don't want to have any money available, because somehow having the money available will cause the bad thing to happen. We don't run the FDIC with zero capital. Right? If we had zero capital, maybe it would be more credible.

Chair WARREN. Actually, we do.

Mr. POLLOCK. We do, at the moment.

[Laughter.]

Dr. JOHNSON. Yes, right. And it's not a good idea. You should be prepared. And being prepared means that you have money to use, there are clear conditions under which you use it. You war-game the scenarios in which you're going to use it. You talk about that clearly with Congress. You're prepared. This is Dean Baker's very good point. You're never going to be prepared if you wait for the crisis. Right?

So, I don't—I think that there's a bit of a gap between those things, and I'm in favor of being prepared and ending the "too big to fail" problem, which is the most obvious. I'm sure that ending it will only buy us another if we could end it, it would only buy us 20 years of tranquility; the banks will be back, one way or another in ways we can't now anticipate. But, unless you do that and address that directly, none of these other changes are going to make much difference.

Chair WARREN. Dr. Johnson, I take your point, and we can now take this conversation to the next phase, which is the part of the conversation about resolution authority and how we create ways to terminate large financial institutions that have failed if they didn't have adequate government support.

But, you and I are going to have to continue that conversation on an airplane. Dr. Johnson and I both must leave, because we have to get back to classes.

And so, do you still want to ask questions, Paul? You're welcome—I can hand the gavel over.

Mr. ATKINS. Well, having—you have, like, 2 minutes——

Chair WARREN. So—all right—so, with that, I'm going to say, we will hold the record open so that we can send additional questions for the record and so that you can make additional comments. We will send those to you.

I appreciate very much both of our panelists coming here, our staff who put together this hearing, and very much appreciate all five of you coming. It was a very thoughtful, very informative hearing, and we appreciate hearing from you.

Thank you.

This hearing is closed.

[Whereupon, at 11:30 a.m., the hearing was adjourned.]