9-2-2010

FCIC Official Transcript of the Hearing on "Too Big to Fail": Expectations and Impact of Extraordinary Government Intervention and The Role of Systemic Risk in the Financial Crisis

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UNITED STATES OF AMERICA

FINANCIAL CRISIS INQUIRY COMMISSION

Official Transcript

Hearing on

"Too Big to Fail: Expectations and Impact of Extraordinary Government Intervention and The Role of Systemic Risk in the Financial Crisis."

Thursday, September 2, 2010, 9:00a.m.

Dirksen Senate Office Building, Room 538

Washington, D.C.

COMMISSIONERS

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HON. BILL THOMAS, Vice Chairman

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SESSION I: THE FEDERAL RESERVE:

BEN S. BERNANKE, Chairman

Board of Governors of the Federal Reserve System

SESSION II: FEDERAL DEPOSIT INSURANCE CORPORATION:

SHEILA C. BAIR, Chairman

U.S. Federal Deposit Insurance Corporation

P R O C E E D I N G S

(9:00 a.m.)

CHAIRMAN ANGELIDES: Good morning. Welcome to the public hearing of the Financial Crisis Inquiry Commission. This is our second day examining the issue of financial institutions that have become too big, too important, too systemic to fail.

Yesterday we looked at two case studies, Wachovia Corporation and Lehman Brothers, and this morning we will be hearing from the Chairman of the Federal Reserve, Mr. Ben Bernanke, as well as the Chair of the FDIC, Ms. Sheila Bair.

Welcome, Mr. Chairman. Thank you for joining us here today. I might note that this is the second time you have come before this Commission, first in our offices for a private session when we were first convened as we began our work, I believe almost a year ago. And today, in what will be our final hearing in Washington, D.C., although after today we will head across the country to a number of communities in California, in Nevada, and in Florida, to hold hearings in communities that are still gripped by high unemployment, high foreclosure rates, and we're going to be going to those communities to see how the seeds of this crisis were sown on the ground and what the consequences are today.

Mr. Chairman, as we have done with all witnesses, we will now ask you to do, I would now like to ask you to stand so I can swear you as a witness. And if you would stand and raise your right hand:

Do you solemnly swear or affirm under penalty of perjury that the testimony you are about to provide the Commission will be the truth, the whole truth, and nothing but the truth, to the best of your knowledge?

CHAIRMAN BERNANKE: I do.

(Chairman Bernanke sworn.)

CHAIRMAN ANGELIDES: Thank you very much, Mr. Chairman.

Thank you very much for your extensive written testimony. And this morning we would like to ask you to speak to us orally and take up to ten minutes this morning to give your opening remarks, at which point, upon conclusion of your opening remarks, we will move to questions from Commissioners.

So, Mr. Chairman, the floor is yours.

WITNESS BERNANKE: Thank you, Mr. Chairman. I won't take a full ten minutes, and I would like to say that we will be submitting additional answers to your questions very shortly.

Chairman Angelides, Vice Chairman Thomas, and other members of the Commission:

Your charge to examine the causes of the recent financial and economic crisis are indeed important. Only by understanding the factors that led to and amplified the crisis can we hope to guard against a repetition.

So-called too big to fail financial institutions were both a source--though by no means the only source--of the crisis, and among the primary impediments to policymakers' efforts to contain it.

In my view, the too big to fail issue can only be understood in the broader context of the financial crisis itself. In my full written testimony I provide an overview of the factors underlying the crisis, as well as some of the problems that complicated public officials' management of the crisis.

In understanding the causes of the crisis, it is essential to distinguish between triggers: the particular events or factors that touched off the crisis, and vulnerabilities: the structural weaknesses in the financial system and in regulation and supervision that propagated and greatly amplified the initial shocks.

Although a number of developments helped to trigger the crisis, the most prominent was the prospect of significant losses on subprime mortgage loans that became apparently shortly after house prices began to decline.

While potential subprime losses were large in absolute terms, judged in relation to global financial markets they were not large enough to account for the magnitude of the crisis on their own. Instead, the system's preexisting vulnerabilities, together with gaps in the government's crisis response toolkit, are the primary explanation of why the crisis has such devastating effects on the global financial system and the broader economy.

Let me give an illustration of how vulnerabilities in the financial system greatly increased the effects of the triggers of the crisis.

In the years before the crisis, a system of so-called "shadow banks," financial entities other than regulated depository institutions, had come to play a major role in global finance.

As it grew, the shadow banking system, including certain types of special-purpose vehicles such as those financed by asset-backed commercial paper, and some investment banks had become dependent on short-term wholesale funding.

Such reliance on short-term uninsured funds made shadow banks subject to runs, much like commercial banks had been prior to the creation of Deposit Insurance.

When problems in the subprime mortgage market and other credit markets became known, the providers of short-term funding ran from the shadow banks, disrupting short-term money markets. Thus, the vulnerability--in this case, the excessive dependence of many financial institutions on unstable short-term funding--greatly amplified the effects of the trigger, in this case the prospective losses of subprime mortgages.

Among the consequences of this instability were sharp declines in high volatility in asset prices, widespread hoarding of liquidity by financial institutions, and associated reductions in the availability of credit to support economic activity.

Many of the key vulnerabilities of the financial system were the product of private sector arrangements, including, as just noted, over dependence of many financial institutions on an unstable short-term funding, poor risk management, excessive leverage of some households and firms, misuse of certain types of derivative instruments, mismanagement of the mortgage securitization process, and other problems.

But important vulnerabilities also existed in the public sector, both in the United States and in other countries. These vulnerabilities included both gaps in the statutory framework, and flaws in the performance of regulators and supervisors.

Important examples of statutory gaps were the absence of effective authority to regulate and supervise some important types of shadow banks such as special-purpose vehicles, and broker-dealer holding companies, the lack of authority or responsibility to take actions to limit systemic risks, and the absence of a legal framework under which failing systemically critical nonbank financial firms could be resolved in an orderly way.

Where appropriate authorities existed, financial regulators and supervisors--both in the United States and abroad--did not always use them effectively. For example, bank supervisors in many cases did not do enough to force financial institutions to strengthen their internal risk management systems and to curtail risky practices; and bank capital and liquidity standards were insufficiently stringent.

The recent financial reform legislation addresses many of the statutory gaps I have mentioned, and the Federal Reserve and other agencies are taking strong steps to tighten the regulation of financial institutions, to give regulation and supervision a more systemic and multi-disciplinary orientation, and to make supervision more effective.

Many of the vulnerabilities underlying the crisis were linked to the existence of so-called too-big-to-fail firms, those whose size, complexity, interconnectedness, and critical functions were such that their unexpected failure was likely to severely damage the financial system and the economy.

Because of the grave risks presented should a too-big-to-fail firm file for bankruptcy protection, in the short run governments have strong incentives to prevent such events from occurring; hence, too big to fail.

However, in the longer term, the existence of too-big-to-fail firms create severe moral hazard problems which can lead to the buildup of risk and future financial instability, while complicating the resolution of financial crises.

The existence of such firms also creates an uneven playing field between the largest firms and their smaller competitors. It is critical that the too-big-to-fail problem be solved. An important component of the solution contained in the recent financial reform bill is the development of a resolution framework that allows the government to resolve a failing systemically important nonbank financial firm in an orderly way, while imposing appropriate losses on creditors, protecting taxpayers, and limiting risks to the broader financial system.

Tougher regulation and supervision of systemically important firms, and steps to increase the resilience of the financial system, are also important if we are to bring a decisive end to too-big-to-fail.

The findings of this Commission will help us better understand the causes of the crisis, which in turn should increase our ability to avoid future crises, and to mitigate the effects of crises that should occur.

We should not imagine, though, that it is possible to prevent all crises. A growing dynamic economy requires a financial system that effectively allocates credits to households and businesses. The provision of credit inevitably involves risk taking.

To achieve both sustained growth and stability, we must provide a framework which promotes the appropriate mix of prudence, risk-taking, and innovation in our financial system.

Thank you, Mr. Chairman.

CHAIRMAN ANGELIDES: Thank you very much, Mr. Chairman. We will now begin with questions. I will start the questioning, and then we will go to Vice Chairman Thomas, and then to the balance of the members.

So I would like to talk to you for a few minutes about the runup to the crisis, because I believe a lot of the focus is always on did the government do the right thing in the grips of the crisis; the real question for me has always been how did we get to the position where we faced such Draconian choices.

And one of the things that struck me as we reviewed our case studies is the failure of regulator supervisors to identify and contain systemic risk in too-big-to-fail institutions before the crisis hit.

Yesterday we looked at Wachovia where assets grew from about $250 billion to $782 billion by 2007, and a very aggressive growth rate of 17 percent; a tangible asset to tangible equity ratio of 23 to 1; the acquisition of a big book of pay option ARMs from Golden West, which in and of itself was three times Tier One Capital.

But, no recognition by the Fed or the OCC of systemic risk. In fact, no downgrading of the institution until July of '08.

A similar fact pattern at Lehman. Even though we realize the Fed was not the prudential supervisor, but again I'm talking in a larger sense here: very aggressive growth, leverage of 39 to 1.

Let me just ask you: Why such a big miss? And I want to put this in context, that some of your folks who have spoken to us here, like Mr. Alvarez and Mr. Cole, whom we interviewed, talked about the fact that, well, gee, we had--and I think it was maybe Mr. Cole who used the word "myopic look". "We looked at safety and soundness."

But shouldn't have systemic risk been part of a safety and soundness regime, even in the 2000 period? Was this a substantial miss? How fundamental was the failure of proper supervision to the metastasizing of this problem?

WITNESS BERNANKE: Mr. Chairman, first of all it should be recognized that large, complex international financial institutions do have an appropriate role. And the fact that you were seeing growth and complexification of these institutions in a world of financial innovation, international capital flows, financial supermarkets, and a whole variety of other innovations, in itself should not be surprising. That was happening not only in the United States but it was happening globally.

So there clearly was a reason for the growth and for the more complex institutions.

Now that being said, it is certainly true that the system did not sufficiently anticipate the systemic risks associated with these institutions. That was, frankly, partly due to the regulatory structure that was given to us by Congress.

As you had mentioned, our charge was to focus on the safety and soundness of individual institutions. There was no provision, no authority to address systemic risk in an institution. In fact, when the Fannie and Freddie law was redone and there was additional regulation put on Fannie and Freddie, the Congress explicitly said that you are not allowed to consider systemic risks when you are looking at the safety and soundness of this institution.

Now--and furthermore, there was no--

CHAIRMAN ANGELIDES: Was that part of the Gramm-Leach-Bliley--

WITNESS BERNANKE: No, that was part of the Fannie and Freddie's, of the law that created the FHFA, the new institution.

And furthermore, there was no--there was no collective assignment, as there is under the more recent reform legislation, to look for systemic risks. Many of the risks that occur obviously are interactions of the size and complexity of individual firms, but features of the entire system. They are emergent properties, if you will, of the overall system.

Now having said all that, I must also agree that supervisors in the United States and around the world underestimated the risks associated, for example, with insufficient liquidity. Much of the crisis was a liquidity problem, or a bank run essentially.

We underestimated the extent to which risks remained concentrated within important financial firms. And so I'm not claiming that we found all those problems.

But there was a combination of the structure of the system, the underlying trends toward greater and more complex firms, together with some mistakes and shortcomings on the part of regulators.

CHAIRMAN ANGELIDES: Let me ask you [microphone is off]--thank you so much. It is early. It has been a long journey for this Commission.

And this is not a matter of political ideology, but there does seem to be, within the financial markets, there was--it appears to be a greater and greater reliance also on self-regulation. Mr. Alvarez in an interview he did with our staff, I believe in March, talked about the deregulatory environment in which policy decisions were made. And again, without regard to Party--I'm going to say that very squarely here.

Mr. Cole talks about recognizing some of the problems in institutions and the ride up the roller coaster, but the pushback from financial institutions. So how much of this was also a function of a shift away from an aggressive regulatory regime to, frankly, just a common view that we should be more reliance on self-regulation, internal risk management by the institutions, and replacement of regulation?

WITNESS BERNANKE: Well I think there's some truth to that. It was--there was some change I think in overall philosophy. As firms became more complicated, there was a greater and greater understanding that regulators could not replicate all the risk assessments that the firms themselves could do, and we had to rely more on their own assessments. And instead of looking at the risks themselves, making sure that they had good systems in place, and that they were taking appropriate steps to address those risks.

So it was certainly a problem, and it was exacerbated I think by the fact that there's always implicitly an international competition. Before the crisis, one of our main concerns was London and Tokyo, were they, you know, taking away the financial industry from the U.S.? And was excessive regulation doing that?

So those were some of the concerns. That being said, I think that innovation in the financial system partly to avoid regulation but also in part to respond to the legitimate changes in the economy; I referred to the shadow banking system a moment ago, the development of new types of financial institutions, off-balance-sheet vehicles, nonbank mortgage lenders, much bigger investment banking activities and so on.

Our bank regulatory system was designed for a bank-centric financial system, and that's where it came from. And as all these nonbank activities grew we, we the country, were not sufficiently proactive in establishing a regulatory framework to encompass all of those aspects.

CHAIRMAN ANGELIDES: All right. Thank you. But it does seem to be, particularly if we are entering into an era of larger and larger banks, that if we're going to have banks that are too-big-to-fail it would also seem to me that we need regulators who are too-tough-to-fold.

This is going to be a particularly challenging environment with a set of even larger banks, and fewer of them. Would you agree with that? That the challenge going forward is even more dramatic?

WITNESS BERNANKE: I think it is very, very important. As I said before, the most important lesson of this crisis is we have to end too-big-to-fail. And I believe that we, in a much different way than we did before the crisis, we now have the tools to address that.

In particular, tougher regulation and oversight will reduce the risks. The existence of a resolution regime will increase market discipline, because creditors will know that they can lose money. And strengthening the resilience of the financial system itself will reduce the incentive of the government to intervene in these situations.

My projection is that, even without direct intervention by the government, that over time we are going to see some breakups and some reduction in size and complexity of some of these firms as they respond to the incentives created by market pressures and by regulatory pressures as well.

CHAIRMAN ANGELIDES: So our staff prepared for us what I thought was an excellent--all the information you already know, by virtue of being Chairman of the Fed and your background, but it was striking. Our staff did for us, and it's posted on our website, essentially a history of too-big-to-fail; also, governmental rescues, from Franklin National, to Continental Illinois, through the multiple rescues in 2008.

And as I look at it, you almost can take the view that, you know, Wall Street seems to believe that a financial sucker is born every crisis. And so I think one of the biggest questions that Americans have is: How do we break this cycle?

What is the single most important thing that should have been done, and can be done in the future, to break the cycle? The single most important policy action that we can take?

WITNESS BERNANKE: There has to be a credible way to let firms fail--in fact, to require that they fail. I mean, I think it is striking that the new rules do not permit discretion. They do not allow so-called open-bank assistance, which allows the government to assist a firm to continue to exist.

Rather, what it does it provide a system for trying to take a firm into receivership in a way that does minimal damage to the system.

It's not going to be easy. I mean, let me just be clear. This is not going to be easy to implement, because these are large, complex firms with multi-national presence.

CHAIRMAN ANGELIDES: And significant power.

WITNESS BERNANKE: And significant power. But it's a very important step to take away the discretion. If I might just cite the example of FDICIA, the law passed in the early '90s, which created a set of well-specified triggers under which the FDIC has to come in and close a bank, except under extreme circumstances--the systemic risk exception. There is no systemic risk exception for the resolution regime in the Dodd-Frank bill.

That has worked very well. And the analogy to using that, applying that to large firms I think is very important. So I could hardly agree with you more, Mr. Chairman, that this was a catastrophe, and it is bad in the long run as long as in the crisis, and we must address it.

CHAIRMAN ANGELIDES: All right. Let me talk for a moment about failed institutions. As you know, we had Mr. Fuld here from Lehman yesterday. We had Mr. Baxter from the Federal Reserve Bank of New York.

You have stated I think on many occasions that the failure of Lehman had significant consequences. So in our role as Commissioners trying to do our level best to understand the history of his crisis, we're trying to--at least I am--trying to unfurl the set of decisions, the whys, the wherefors.

When you first testified to Congress I believe after the failure of Lehman, you had essentially said in your testimony--and I'm shortening this up--that Lehman was not rescued essentially because the market, the participants, had had time to prepare in the wake of market developments.

And I say this, as I said yesterday, it seems to me the decision to allow Lehman to fail was a conscious policy decision. Now I'm not implying that people said, oh, just let them go down, but that like any other policymakers you were weighing a whole set of factors.

Now since early on it seems though the Fed and other officials have indicated that it was solely due to a lack of legal authority, the inability to make the loan under 13.3, the lack of sufficient collateral; but when I at least look at the chronology, it seems to me you were trying to deal with a whole set of complex factors.

We released yesterday a chronology of different events along the way, and it seems to me, you know, there was serious consideration of financial assistance, the Fed stepping into the shoes of the clearing banks if that was necessary. You know, Mr. Dudley, for example, I think in July proposed a Maiden Lane type solution.

Mr. Geithner had told the FSA, I think as late as a few days before the failure, that government assistance was possible. And as late as I think the last few days, there's a Federal Reserve Board of New York document, I think Mr. Parkinson circulates, that talks about an FRBNY financial commitment. "We should find a maximum number of how much we are willing to finance before the meeting starts, but not divulge our willingness to do so to the Consortium. The terms of any liquidity support should be long enough to guard against a fire sale, but on a short enough fuse to encourage buyer of Lehman assets to come forward two months to a year in duration?" And then there's a note, "Lehman is bigger and more global than Bear."

So there seems to be a robust debate about the efficacy of financial support. There certainly seemed to be political considerations--and I don't necessarily mean at the Fed, but among Treasury, White House, which is legitimate. People are trying to weigh the mood of the country, how policymakers are going to view this. There's an awareness of impacts, a larger triparty book than Bear, a bigger and more complex institution to unwind.

I don't see any documents or discussion along the way about legal bars or government analysis of a shortage of collateral. This is all by--and I see Mr. Alvarez's opinion in March of 2009 saying the Fed has wide latitude in terms of how it defines collateral.

My real question for you is: What was the mix of policy considerations? I understand, because I've been in transactions on the private side and the public side, that there will be legal barriers, obstacles that have to be respected, but it doesn't look as though that cut this discussion off.

What were the biggest considerations? Would you have saved Lehman if you had the legal authority? But in rolling up to that decision, trying to determine were they too-big-to-fail, not too-big-to-fail, you've already said you thought it had significant disastrous consequences, but what were the things you were trying to weigh, the decision-making factors?

WITNESS BERNANKE: So I can only speak for myself. I don't know everybody's view on that.

CHAIRMAN ANGELIDES: Okay. Great.

WITNESS BERNANKE: So first of all there was of course, we were trying to arrange a private takeover over the weekend, and we wanted that to be done on the best possible terms that we could.

And for that reason there was some benefit I think in the weeks prior to Lehman to keep our hands, you know, a little bit up to the vest in terms of what we were willing and able to do. So there was some of that going on in the week prior to the Lehman weekend.

That being said, let me just state this as unequivocally as I can. As you know, before I came to the Fed Chairmanship I was an academic, and I studied for many years the Great Depression, financial crises, and this is my bread and butter. And I believed deeply that if Lehman was allowed to fail, or did fail, that the consequences for the U.S. financial system and the U.S. economy would be catastrophic.

And I never, at any time, wavered in my view that we should do absolutely everything possible to prevent the failure of Lehman.

Now on Sunday night of that weekend, what was told to me was that--and I have every reason to believe--was that there was a run proceeding on Lehman, that is people were essentially demanding liquidity from Lehman; that Lehman did not have enough collateral to allow the Fed to lend it enough to meet that run; therefore, if we lent the money to Lehman, all that would happen would be that the run would succeed, because it wouldn't be able to meet the demands, the firm would fail, and not only would we be unsuccessful but we would have of saddled the Taxpayer with tens of billions of dollars of losses.

So it was both a legal consideration, but also a practical consideration. Legally speaking, we are not allowed to lend without a reasonable expectation of repayment. The loan has to be secured to the satisfaction of the Reserve Bank. Remember, this was before TARP. We had no ability to inject capital or to make guarantees.

The unanimous opinion that I was told, and I heard from both the lawyers and from the leadership at the Federal Reserve Bank of New York, was that Lehman did not have sufficient collateral to, to borrow enough to, to save itself. And therefore any attempt to, to lend to Lehman within the law would be futile and would only result in loss of cash.

In some cases you can take the going-concern value of the firm into consideration, but in this case Lehman was under a run. It's going-concern value was melting away because its customers, its counterparties, its employees, and so on, were not going to be sticking with this firm.

So I believe as of Sunday night that it wasn't just a question of legality; it was a question of whether there was anything we could conceivably do that would prevent the failure of the firm. And therefore, it was with great reluctance and sadness that I conceded that there was no other option.

There was never any discussion which says here's how we can save Lehman; should we do it or not? We never had a discussion like that. The discussion was: There is no way. And that was my belief, and that is how I proceeded. Because, as I said, if I could have done anything to save it, I would have saved it.

Now you asked, appropriately, about the--

CHAIRMAN ANGELIDES: Can I ask one question on that, very quickly?

WITNESS BERNANKE: Certainly.

CHAIRMAN ANGELIDES: Which is, you said you represented your own views. There were differential views, though, expressed? I've seen in the e-mails concerns about the politics. Bear's been bailed out. The GSEs. There seems to be some political reluctance. Mr. Wilkinson's writing e-mails: can't stomach a bailout.

WITNESS BERNANKE: Well it's certainly understandable that people would have those concerns, but I must say that in my own case, and as far as I know in the cases of the other principals, the primary consideration was the knowledge that the failure of Lehman would have catastrophic consequences.

Let me just say one word about the testimony you referred to, which has gotten--which has supported this myth that we did have a way of saving Lehman. This is my own fault, in a sense, but the reason we didn't make the statement in that testimony, which was only a few days after the failure of Lehman, that we were unable to save it was because it was a judgment at that moment, with the system in tremendous stress and with other financial institutions under threat of run, or panic, that making that statement might have, might have even reduced confidence further and led to further pressure.

That being said, I regret not being more straightforward there, because clearly it has supported the mistaken impression that in fact we could have done something. We could not have done anything.

CHAIRMAN ANGELIDES: One last question on this subject. That is, a loan was made under the PDCF to the broker-dealer I believe in the amount--I mean, I guess authorized, $50 billion but I think the daily amounts were $29- $30 billion, and I have the numbers exactly with me, that you were able to do that because?

WITNESS BERNANKE: Because they had sufficient collateral to make--to support the loan.

CHAIRMAN ANGELIDES: That was not available on the night before at the Holding Company level?

WITNESS BERNANKE: Correct.

CHAIRMAN ANGELIDES: Because the Holding Company had a capital hole, in your judgment?

WITNESS BERNANKE: I believe it had a capital hole, but in any case the calculations were that the liquidity demands on the Holding Company were much greater than the collateral that they had available to meet those demands. And moreover, by the way, we didn't do anything to prevent the broker-dealer from lending to its own Holding Company, and it didn't seem to decide that was a smart thing to do, either.

CHAIRMAN ANGELIDES: Of course at that point they had filed bankruptcy. And I'm not going to take your time with yesterday's dialogue with Mr. Baxter about what I referred to as the smoking letter about whether in fact the Holding Company had the ability Sunday night. We'll continue to look at that matter and what transpired.

WITNESS BERNANKE: I can only tell you what I knew at the time. And what I knew at the time, and what I was informed, and what I believed, was that there was no capacity for them to borrow sufficiently, have enough collateral to borrow sufficiently to meet their obligations.

CHAIRMAN ANGELIDES: Was that based on an analysis? Or was that based on the private Consortium's analysis?

WITNESS BERNANKE: That was based on analysis at the Federal Reserve Bank of New York, primarily, which had been going on through the weekend. And of course prior to that, we had done a lot of analysis based on our presence at Lehman during the summer.

CHAIRMAN ANGELIDES: All right. One final question--I'm exhausting my time, but this is very quickly. I want to ask you, as we look at the genesis of this crisis, it's hard not to look at the actions of the Federal Reserve. And I know Mr. Thompson is going to want to talk about this, so I will just ask very quickly, when you look at the opportunity to regulate subprime lending under HOPA, rules were adopted in 2001 that end up covering only 1 percent of the loans, when you look at the referral of unfair and deceptive lending practices to Justice, only two institutions, I think the Desert Community Bank in Victorville, California, and the First American Bank in Carpenter, Illinois, only two referrals in six years; a decision not to examine nonbank subsidiaries; was this a very significant failure, looking back in retrospect?

WITNESS BERNANKE: It was, indeed. I think it was the most severe failure of the Fed in this particular episode.

CHAIRMAN ANGELIDES: All right. Well, I think Mr. Thompson will want to ask some more about that. I will defer the rest of my questions, if I have any, to Mr. Thomas. Thank you very much, Mr. Chairman.

VICE CHAIRMAN THOMAS: Thank you, Mr. Chairman.

And thank you, Mr. Chairman. It's nice to see you again.

Let me say first of all, for those of us who have been around for awhile, some folks might move us in the category of "Mr. Senator" as having been around forever, and you look at the political situation just in terms of coordination and ability to move quickly, which is always difficult in a political body, in the fall--well, December '07 through '08, fall of '08, spring of '09, and of course now today, historically when you look back, that actually was a Presidential election period.

There was a change in government. And for those of us who have been actually involved in these kinds of processes, I want to thank you, and I want to thank the others who were involved. Because it took, in my opinion, a degree of aggressiveness that, had you not been bold enough to carry out, circumstances might have been significantly different.

So thank you.

After the fact, you get people who may have been pretty upset--some behind closed doors; some in open doors--now beginning to take a look at really where we were, and situations that would have occurred.

Obviously you talk about gaps. The reason we talk about gaps is because we now know they were gaps. Before we knew they were gaps, it's always hard to find the gaps.

One of my worries is, now being more acquainted with the complexity, the failure of transparency, what people thought was adequate capital carrying out various kinds of behaviors, and the complexity that's now present, not just nationally but internationally, one of the concerns I have is--well, your final statement about obvious needs in terms of the structure that we have on a flexibility in movement, that when you try to look at dealing with too-big-to-fail, and so we aren't going to let that happen again, and you set up a structure, is there any concern about some of these structures might be too complex to unravel in a time period that's meaningful, given the circumstances?

Because at some point, what I've heard from virtually everyone--and we just heard the testimony yesterday on some of the derivatives products and some of the synthetics built off of derivatives, they're still trying to unwind them in the Lehman Bankruptcy.

What concerns can you share with us in terms of-- I mean, I often think, you know, you've got the cartoon of the child who's going to go out in the snow. So the mother puts on one layer, two layers, three layers, and it finally then is allowed to go outside and play and it can barely move getting outside.

You can set up a structure to make sure that it doesn't happen, but how do you keep the flexibility to allow the system to function? Where are we in terms of your concerns with the Dodd-Frank legislation, providing some additional tools, comfort level, and now understanding better, and more importantly, if we are now not going to have these crisis interventions when we do fail, unwinding structures in a reasonable way?

WITNESS BERNANKE: That's an absolutely central question. Of course as you know, Chairman Bair has written a testimony which addresses this issue in some detail.

VICE CHAIRMAN THOMAS: As we say, she's next.

WITNESS BERNANKE: She's next on the program, I understand. It's a very difficult problem. Certainly the kind of firms we're talking about are much more complicated than the small- and medium-sized banks which are the typical companies that are unwound through the FDICIA process, for example. So this is not at all an easy process.

However, I think we will be much better off if you think about--one thing I feel people don't always appreciate is that we tried to do these very complex operations, you know, within hours, within a weekend. And certainly we'd of been much better off if we'd had an extended amount of time to understand, and study, and prepare, and make plans, and that is an important part of what the FDIC's new Division on Complex Firms is about.

They will be aided, as will we at the Federal Reserve, by living wills--that is, by a required document that firms will provide which will explain how they would be wound down. And if those living wills are not satisfactory, we have the authority to require them to simplify their legal and organizational structure as necessary to make it feasible.

So it is going to be very difficult, but certainly we will be in a much better place than we were prior to this crisis.

I think the one area where it's going to take a lot of effort is the international element, because these firms--one of the banks that we supervise has offices in 109 countries, each one with its own bankruptcy code and its own rules and so on. And we're going to need to develop sort of the moral equivalent of tax treaties with other jurisdictions whereby we have rough agreements on how we would cooperate and work together to unwind a firm, and that will be very challenging.

But it is something that is currently being heavily investigated by international bodies like the Financial Stability Board, and I think it should be a top priority.

VICE CHAIRMAN THOMAS: And where are we in terms of those discussions? Because that was definitely one of the concerns that I had. We can resolve our problems, and if we can't get an international agreement, given the complexity and multi-national nature of today's financial structure. And of course the farther away you get from the cliff, the less you want to kind of make the sacrifices that allow for that international stability.

What's your comfort level in where we're going on that?

WITNESS BERNANKE: Well one word on domestic, which is there was just a roundtable, and the FDIC is well advanced in developing some rules to explain how they will invoke these powers. And we are working with the FDIC to try to develop more knowledge about how you would go about unwinding U.S. firms.

As you agreed, the international aspect is very difficult. But there is a very concerted effort. As I mentioned, the Financial Stability Board and the Basel Committee, the Bank for International Settlement, and other international bodies are looking at this very seriously.

I think what we will have to do is work primarily with the principal countries. Although this bank is in 109 countries, there are 4 or 5 countries which are the most important that we have to work with, which have the largest banks and bank presence.

So it's going to require again some agreements, some MOUs, some work together, some ideas about how you're going to divide assets, how you're going to reconcile different bankruptcy codes and the like. So there's a lot of work to be done. And, you know, I think we have a way to go still, but obviously we are very focused on doing that, and we have a lot of cooperation and goodwill from our international partners.

VICE CHAIRMAN THOMAS: And, Mr. Chairman, you indicated, I think the phrase was "the regulations given to us by Congress," and we always look for the ability to structure legislation with the flexibility under regulations to not put you into a statutory straitjacket, but I had some concerns yesterday in testimony.

When you look at that period in late September, early October, in attempting to deal with Wachovia, and in the minutes of the FDIC discussions they take the very extraordinary step of accepting the concept of hopefully no dollar exposure but responsibility for backup on the Citi/Wachovia structure. That's put to bed.

And then literally the very next day, IRS issues 2008-83, fundamentally changing a two-decade-old Tax Code provision. And you may recall some of us from the Article I part of government being fairly sensitive because there's a difference between "needed" and "desirable."

And it concerns me very much that whoever was meeting came up with an idea that could solve the problem, but didn't fully appreciate the consequences of inventing solutions when you're charged with not carrying out activities, and the argument was "we weren't given the power by Congress," but where you came up with an idea that could be inventive, you go ahead and do it.

The real difficulty for me in the long run in these kinds of situations is whether the Executive Branch is a demand center, or whether it's a command center. And clearly there are times when it has to be a command center, both domestically and internationally. But more often the argument that we had to be a command center is used to do what you want to do, rather than not.

Did you have any behind-the-scenes' knowledge of IRS and Treasury deciding to create a, what we call in the business, a rifle-shot in terms of picking up losses of a company that they could acquire? Which just kind of fundamentally violated a portion of the Tax Code, as I said, that had been honored for a couple of decades, which actually changed the result of what happened to Wachovia in finding a home, in my opinion--and others may argue.

Any reaction to what I just said?

WITNESS BERNANKE: All I can say is, I just don't know the facts in that. But I can say that I have, I have no knowledge; I had no inside knowledge, or any other kind of knowledge, of this fact before it occurred.

From my perspective, putting aside the very important procedural and legal issues that you raise, it was inconsequential because one way or the other Wachovia was going to get protected. And that was the thing I was concerned about.

I did not advocate or get involved in any way with the tax decision.

VICE CHAIRMAN THOMAS: Well our concern is that in a crisis which we went through, necessity can be the mother of invention, but you'd better come up with a solution coming out the other end that doesn't provide you or embolden you with the opportunity to do what happened again.

I know some of my colleagues got pretty frightened when they were presented with the option that you must pass what's on this piece of paper before tomorrow morning or the world as you know it is going to end.

You get away with that once, and I'm hopeful that as we continue to move forward you spend a lot of time consulting with those who actually believe they have some role to play, not after the fact but during it.

Do you have a comfort level now in terms of your ability to communicate with the Legislative Branch that perhaps you couldn't do in that crunch timeframe?

WITNESS BERNANKE: Yes, certainly with the benefit of time. Clearly these activities were not things that I wanted to do. The Federal Reserve took an enormous amount of heat for them, and came under a lot of pressure politically and legislatively because of those actions.

So I would much rather have not have had to do them. And I am very happy to see that we're moving towards a system where there is a well-designed framework for addressing these problems. And I hope that we can make it workable so that we will avoid any such freelancing in the future.

VICE CHAIRMAN THOMAS: Well just let me say, Mr. Chairman, you have taken a lot of heat. But in the final legislative battle in terms of the legislative product, I think you did pretty well defending your position in the way the final legislation was written.

One last question in terms of comparisons, which are always questions that we wind up trying to examine because we don't know what happened behind closed doors. How was Lehman different from AIG? If there was a run on AIG, capital was locked up in insurance subsidiaries, no buyer. There had to be differences, obviously.

What to you were the differences?

WITNESS BERNANKE: There was a fundamental difference, which was--again, the issue was could we make a loan that was adequately secured? That was reasonably likely to be paid back?

Unlike Lehman, which was a financial firm whose entire going-concern value was in its financial operations, AIG was the largest insurance company in America. And the Financial Products Division, which got into the trouble, was just one outpost of this very large and valuable insurance company.

And therefore--and in fact that's why they created this, because they wanted to ride on the coattails of the AAA rating of AIG.

So unlike Lehman, which didn't have any going-concern value, or not very much, AIG had a very substantial business, a huge business, more than a trillion dollars in assets and a large insurance business that could be used as collateral to borrow the cash needed to meet Financial Products' liquidity demands.

So that's a very big difference. And indeed, the Federal Reserve will absolutely be paid back by AIG.

VICE CHAIRMAN THOMAS: Thank you, Mr. Chairman. I just want to thank you, once again, for in political terms your bravery and willingness to move in the way that you did. Thank you, very much.

CHAIRMAN ANGELIDES: Mr. Georgiou?

COMMISSIONER GEORGIOU: Thank you for joining us today, Dr. Bernanke. After reading and re-reading your prepared testimony, with all respect, I find a less-than-thorough discussion of one area that I think is exceedingly important, which is the erosion of market discipline associated with the creation of the engineered financial instruments that became toxic assets on the balance sheets of our financial institutions.

These assets became a significant cause of the liquidity crisis faced by these institutions when they couldn't meet their obligations, either because they couldn't sell the assets without a steep discount and ever-increasing discount, and couldn't borrow against the assets as collateral except with a large and increasing haircut.

And of course when they faced collapse, these institutions turned to the American Taxpayer through the Federal Reserve and others to essentially rescue them from their excesses.

You have spoken to the deterioration in mortgage-origination standards which, you know, they were problematic to be sure caused in many instances by differential financial rewards to mortgage originators who were paid more to steer borrowers to mortgage products that produced greater returns to the mortgage holders and greater costs to the borrower, which of course resulted in a higher likelihood of default by the borrower, but you didn't address what I regard as frequently perverse incentives of the other parties to the mortgage securitization process, all of whom were compensated in cash when the products were created without regard to its success or failure to perform as represented to the investor-owners.

The underwriting investment banks legally responsible for the exercise of due diligence on the products, the lawyers who drafted the prospectuses, the accountants who created the accompanying financial statements, the credit rating agencies that rated these securities, all received their fees in cash when the securities were sold, and only if they were sold.

So is it any surprise that every participant in the chain opined that everything was in order when we know that it was not?

Some 92 to 94 percent of the mortgage-backed securities and their tranches that were created that were rated AAA have now been downgraded, and many of them exceedingly severely. And we're not speaking here only of simple mortgage-backed securities, but collateralized debt obligations in which miraculously in a process I've likened to Medieval alchemy, the take the BBB tranches of mortgage-backed securities, which are the first ones to suffer a loss when the borrowers default, and miraculously put them all together and somehow create a security that's not just rated AAA, but Super Senior, and actually essentially sold as a product that cannot fail, but of course fail they did.

And then we go to CDO-squared, CDO-cubed, and synthetic CDOs which are creations that are essentially bets on the success or failure of the underlying other securities, when they then have other things to sell.

So the financial reform legislation attempts to address some of these problems by prohibiting differential compensation to mortgage originators for steering borrowers to riskier products, and by requiring issuers to hold 5 percent of the products they created.

Since it seems to me that nothing focuses the mind of Wall Street bankers more than having their own money at risk and their own skin in the game, it is hoped that greater discipline and diligence will be exercised when the creator knows that their own financial future depends on the performance of their creation.

So I apologize for such a long intro, Dr. Bernanke, but I would ask you to comment on the initiatives put in place by the Federal Reserve in exercising its responsibility to be the safeguard of the safety and soundness of America's financial institutions to address some of these issues.

WITNESS BERNANKE: Sure. I did refer in my testimony to the problems with the originate-to-distribute model, which goes all the way from the initial mortgage loan all the way to the securitization, and there were clearly a lot of problems there.

We are trying to address them. Although, as I said earlier, we were late in developing mortgage underwriting standards under HOPA, we did in fact in 2007-2008 establish some very strong standards, and I'm sure they will be maintained by the new Consumer Protection Agency.

We also have put out--we also have banned--the Federal Reserve has banned yield-spread premiums, which allow lenders to be compensated on the basis of the type of mortgage that they provide. And so we have tried to address the front end of originate-to-distribute.

COMMISSIONER GEORGIOU: Right.

WITNESS BERNANKE: On skin-in-the-game, I think we all agree that we want to create good incentives, and that is one way to do it. And the Fed is also involved in making sure that incentive compensation contracts for both executives and other employees of financial firms reflect appropriately the long-run returns to their activities and not the short-run returns, as you were describing.

The only--

COMMISSIONER GEORGIOU: And how would--if I could just probe you on that, how would you propose to rejigger those compensation incentives to reflect the long-term performance?

WITNESS BERNANKE: Well we are asking the--since the nature of the business differs across institutions--we're asking for proposals. We're asking for companies to show us what they're going to do, and we work with them and make sure we're satisfied.

But the basic principal is that returns should depend--first of all, they should be risk-adjusted. So if you take a riskier action, that should be taken into account.

And secondly, there should be a longer horizon so that, not just whether you made the sale, or made the deal, but rather how did it work out over a number of years.

COMMISSIONER GEORGIOU: Right.

WITNESS BERNANKE: And so things like nonvested stock, and things of that sort, are ways to achieve that. So that is another step.

COMMISSIONER GEORGIOU: And some have suggested a basket--an index based on a basket of the securities created so that you can actually track over time the success or failure of those securities, and compensate people more or less depending on how they perform.

WITNESS BERNANKE: For capitalism to work, you have to have incentives tied to performance. And I think one of the things people are very upset about is the fact that it seems like a lot of people who drove their companies into the ditch walked off with lots of money, and that's not good capitalism, and it's not good for--it's not a good ethical outcome, either.

The only comment I would make, though, one thing which is puzzling in a way is that these firms that packaged the securities, whether it was by mistake or not, ended up being pretty exposed to them, and they took a lot of losses in many cases. And so we have to figure out why, even though they were so exposed to these securitized products, they weren't more careful. But that's clearly a key issue.

COMMISSIONER GEORGIOU: Well thank you. And I think the answer at the end there is: Sometimes they just got caught without being able to sell them all. I mean, you know, it is a game, to some extent, like when there's musical chairs, the music stops and you're not necessarily finding a seat. And I think that to some extent happened to some of these institutions.

Let me turn--I appreciate your considerations, and I encourage you, as you look at these institutions on a go-forward basis, you consider that kind of--those kinds of thoughts as you evaluate their soundness.

There's some data that we've seen that suggests that the sixth largest U.S. banking organizations, which are

BofA, JPMorgan Chase, Citigroup, Wells Fargo, Goldman Sachs, and Morgan Stanley, now are actually larger as a result of mergers and the elimination of other institutions than they were even in 2007 just before the height of the crisis.

Apparently they are now--they were 58 percent of GDP in 2007, and something like 63 percent of GDP in 2009, which had gone up from 17 percent of GDP in 1995. So there's been a consolidation and a growth.

And I guess my question to you would be: Given their increasing size, do you really believe that these institutions would not or would not be allowed to fail by the Fed if they got into financial trouble today?

I mean, I hope it doesn't happen, but let's just say for the sake of argument that a diminution in some other asset class results in serious stress to both the balance sheet and the liquidity needs of these institutions. Are we really in any better shape today to avoid the bailouts that have been so criticized in the last few years?

WITNESS BERNANKE: The Federal Reserve was created, but we're always well within the law, and we always did what was--only exerted our legal powers. And the changes in the bill that was just passed has, for example, eliminated the ability of the Federal Reserve to lend to an individual institution.

So I would say--and it also has specified of course to the resolution regime how we must deal with a failing systemically critical firm. So, you know, barring some midnight session of Congress which rewrites the law, I don't see any way that it would be feasible for the government to bail out a firm in the same way that happened during the crisis.

So it's very important that we make sure that our methods that we do have, the resolution regime, et cetera, that they work. And that's something we're very much engaged on.

I think it's also very important that we make sure that firms--although we're always going to have big and complicated firms, we want to make sure that they're big and complicated for the right reasons, for good economic reasons and not because they're simply trying to hide behind too-big-to-fail. And my belief is that, again, the combination of tougher oversight, additional capital required for a systemically critical firm, tougher resolution regime, and those things are going to take away some of the attractiveness to firms of being too big and will I think help us over time with market discipline to reduce the size and complexity of some of these firms.

COMMISSIONER GEORGIOU: I noted on page 17 of your prepared testimony you did speak to the size of the firms and, in certain respects, the unmanageability with regard to risk of some of the institutions.

I wonder if--some have suggested that they've simply gotten too large. I'm not sure I agree. I understand the notion that we need large institutions to compete in a global marketplace, and to meet the financing needs of large--our own large corporations and other borrowers, but it's not inconceivable and commonly utilized that when a large credit facility is necessary people enter into syndicates. If one bank isn't big enough, somebody, one or two of them take a lead and bring others in. And so you still end up pulling together the resources necessary.

You know, we've had some extraordinarily startling testimony in the course of our eight months or so of hearings. We heard from the CEO, the Chief Financial Officer, and the Chief Risk Officer of AIG that they did not know that the products sold by the Financial Products Division had provisions in them that, if the AIG's ratings went down, or the tranches that they had insured against in the credit default swaps, the failure of which they'd insured against, went down, that they had collateral calls which were ultimately what brought AIG to the brink of insolvency.

And the same, similar kind of astonishing testimony from Citigroup's then-CEO, Chief Financial Officer, and Chief Risk Officer, that they did not know that their banking subsidiary had sold collateralized debt obligations with a liquidity put associated that permitted, if they were downgraded, permitted the holders to essentially put them back to Citibank to the main holding company and get--and they did so. In one day they took $25 billion and bought this stuff back, which was a third of their then-capital of $75 billion on some $3.3 trillion of assets.

I mean, these were astonishing risk management failures. And some have even speculated that really they couldn't possibly have meant it when they testified here that they didn't know.

But assuming for the sake of argument that they did not know, that really can't--ought not to occur on a go-forward basis. So are these institutions so complex and so diverse in their product mix that they've become too large to manage? And if that's the problem, then how do we address that from the Federal Reserve's perspective?

WITNESS BERNANKE: Well it's our responsibility, and the other regulators', to make sure that their management is effective and that they have good risk management system.

And if we are persuaded that they cannot manage the risks of the corporation because it's too large or complex, we are able--we have the authority to make them divest, or to change their structure. And that is not even counting the new authority that if a firm is viewed as being systemically risky, that it could be broken up on that ground, as well.

So we do have some authority there. And in the case, for example, of Citi, which you mentioned, they are in fact--they have created a very substantial portion of their company, put it into a separate structure which is being sold off.

So I agree with you that, where there is failure of risk management, or business management, because of size or complexity, it is very important that the firm and the regulators work to address the problem, and I assure you that we will.

COMMISSIONER GEORGIOU: Thank you, very much. If I might, could I reserve two minutes of my time?

CHAIRMAN ANGELIDES: You've got one minute and seventeen seconds, but we will graciously grant you the forty-four seconds.

COMMISSIONER GEORGIOU: Thank you very much.

CHAIRMAN ANGELIDES: Mr. Holtz-Eakin.

COMMISSIONER HOLTZ-EAKIN: Thank you, Mr. Chairman, and thank you, Mr. Chairman for spending this time with us today.

I guess I would like to follow those who preceded me in thanking you for your service during this very difficult period. And more generally, to the Federal Reserve for its cooperation with this inquiry throughout. It's really been very helpful.

I don't have a particularly systematic set of questions. I have a couple of things I'm curious in, but I want to go back to the trigger that you mentioned, the housing bubble subprime crisis.

You touched on this some in your written testimony, but could you just walk us through your view of the causes of the housing bubble? And I'm interested in the points of recognition within the Federal Reserve when we had a housing bubble, and sort of what your policy options were in light of that.

WITNESS BERNANKE: So bubbles by their very nature are extremely difficult to understand, even after the fact.

The house prices began to increase fairly rapidly in the middle to late '90s. And then of course they accelerated to some extent in the early 2000s, and then peaked in 2005-2006.

My own view is that there are many factors that contributed to that. In my testimony I discussed two that I think are important.

One was the interaction of expectations and optimism on the one hand, and innovation and mortgage instruments on the other. What you saw was an increased willingness on the part of lenders to make loans to people who were really not qualified on the expectation that appreciation in the value of their homes would allow them, by giving them more equity, would allow them to refinance into more standard instruments.

And what we saw as the crisis progressed was increasingly sketchy instruments that had, if they had even existed prior, had been reserved only to very limited groups of customers. But now you had people who had not bought a house before using Option ARMs, and Interest Only, and other complex mortgage instruments whose primary purpose was to bring the monthly payment to as low a level as possible.

And again, that worked okay as long as prices were rising. But of course prices couldn't rise forever. And once they stopped rising, the whole process unwound. So I think that was very important. And people like Bob Shiller have pioneers in identifying those issues.

Another factor which I have talked about since 2005 is the so-called "global saving glut." All that really means is that, for a variety of reasons--and the timing here works well--going back into the '90s the U.S. has been a major recipient of global capital flows, and a lot of those capital flows have gone into relatively safe fixed-income instruments like mortgage-backed securities, or securitized credit products.

That includes not only the excess savings from Asia, emerging markets, and oil producers, but also even the gross savings from Europe and other places that have been looking for those kinds of instruments.

And so that demand both reduced mortgage rates, reduced spreads, and gave investment houses in the U.S. and elsewhere an incentive to create these new products, the alchemy that Mr. Georgiou was talking about, taking uncertain mortgages and by restructuring them creating these tranches of so-called AAA Senior, Super Senior debt, et cetera.

So I think that was probably important.

The controversial issue, because it matters so much for the future of how monetary policy is conducted, is what role did monetary policy play? And there's a lot of conventional wisdom about this. And I think the only honest answer is: We really don't know exactly how big the role was.

But I have tried to give some arguments why I think that the view that monetary policy was a principal cause is not supported by the evidence, and I can repeat that if you'd like, but very briefly there was the fact that the previous relationships between monetary policy and housing prices don't look remotely like what they would have had to have been in order to account for the increase in house prices in the recent episode.

Cross-country, we don't see any relationship between monetary policy and housing prices. And finally, I think even if there had been some relationship, it would have been very questionable that we should have, you know, substantially raised interest rates in the situation in 2003-2004, given what was happening in the macro economy as an attempt to try and close off the housing bubble.

My strong preference--and I said this in my very first speech as a Governor in 2002--was that we should use supervision and regulation to approach bubbles. We didn't do that--

COMMISSIONER HOLTZ-EAKIN: Thank you.

WITNESS BERNANKE: --going forward we need to be able to do that. And that's very important.

On the Fed's views, the Fed has taken criticism for not, quote, "recognizing the obvious," et cetera. We always of course knew the house prices were rising quickly, but as of 2003-2004 there really was quite a bit of disagreement among economists about whether there was a bubble, how big it was, whether it was just a local or a national bubble. So we were certainly aware of that risk factor.

But, you know, frankly we--by the time it was evident that it was a bubble and that it was going to create risk to the financial system, it was rather late to address it through monetary policy.

COMMISSIONER HOLTZ-EAKIN: So if you rolled the clock forward then, and we get into the subprime mortgage crisis, there's a point at which I believe you say it will be contained and not spill over. And without pointing fingers, I'm just curious, what was the basis of that judgment? And what were the things you didn't know--because it obviously did.

WITNESS BERNANKE: So this was related to, in fact the thinking was that if house prices did come down some, and that 25-30 percent was not what people were contemplated, but if they did come down some, that the economy could manage that okay.

And when I said what I said, it was based on the observation that even under very bad scenarios, the total losses in subprime adjustable rate mortgages, for example, were unlikely to be more than say $300 or $400 billion, which is a lot of money obviously, but compared to global financial markets where there's $60 trillion of equity value in markets around the world, it was just a very small amount of money.

So the loss of $3- or $400 billion of equity value would do almost nothing to the world economy.

But what happened here was that the financial system had these vulnerabilities and weaknesses, which I talked about in my longer testimony, and what was a relatively small factor in the scheme of things triggered these weaknesses and led to a much bigger crisis.

And so what I did not recognize when I thought and said that this crisis was contained was that it was based on my view that the losses were going to be, you know, manageable. What I did not recognize was the extent to which the system had flaws and weaknesses in it that were going to amplify the initial shock from subprime and make it into a much bigger crisis.

COMMISSIONER HOLTZ-EAKIN: And so if we then move to the crisis, I want to talk a little bit about too-big-to-fail institutions in both the history we have to investigate, and then going forward.

So as it sort of bleeds into the broader financial markets, what institutions are you watching carefully? And by what criteria are you selecting the ones that you really are worried about?

WITNESS BERNANKE: You mean today?

COMMISSIONER HOLTZ-EAKIN: At the time. You know, as the crisis begins to unfold, what was the nature of the Fed's criteria for identifying institutions that they needed to be on watch against?

WITNESS BERNANKE: Well, again, to begin with it's important to remember that the Fed was not a systemic regulator at that time.

We had some very specific responsibilities for bank holding companies, principally. We did not have responsibilities for AIG, or for the investment banks, or for Fannie and Freddie, or for mortgage bankers. So many of the areas where there were problems, we simply did not have an ongoing authority or supervisory presence.

And so we did not get heavily involved in any of those situations until well into the crisis when, say, maybe around the time of Bear Stearns when it was evident that some important financial institutions were under a lot of stress. And at that point, the Fed, the Treasury, and to some extent the FDIC and other agencies, were then coming together to try to think about how to address them.

So we came rather late to some of these firms. And that was simply the nature of our responsibilities and our authorities.

In terms of which firms to pay attention to, there are multiple criteria. Certainly size is important. But size is by far not the only criterion. For example, Bear Stearns was not that much larger than WaMu for example--

COMMISSIONER HOLTZ-EAKIN: Right.

WITNESS BERNANKE: --but Bear Stearns was a much more complex firm. It had a large presence in the triparty repo market--that is, in the short-term money market--and in securities lending, and other short-term financing. It had a large derivatives book. So it was very interconnected.

The nature--a very important aspect of the crisis was a rolling panic: the notion that as confidence was lost, firms that were vulnerable from a liquidity point of view came under increasing attack. And in some cases also via the Stock Market, the declines in stock prices reduced confidence, et cetera, as well.

It was our view that the failure of Bear Stearns, for example, would lead to some of the same effects we saw with Lehman six months later. That is, huge stresses in the repo markets; problems in the commercial paper market, other money markets; and that those short-term liquidity stresses would feed over into other firms, even those firms that didn't have direct counterparty relationships with Bear Stearns.

So it was those criteria: Size. Interconnectedness. Complexity. And also performance of critical functions.

So, for example, banks like JPMorgan and Wachovia had very important roles in various payments and settlements and other infrastructure-type aspects of the financial system, and that was an additional consideration as we looked at these firms.

COMMISSIONER HOLTZ-EAKIN: Thank you. I don't want to put words in your mouth, but when we talked yesterday with former Under Secretary Steel about this, it really appeared that in the crisis what mattered most was not size, interconnectedness, complexity, but which markets were showing signs of distress and panic. And if firms were in that market, that was the criteria for intervention.

And the reason I wanted to push this is, in the sort of new legislation there's a whole lot of ex-ante sort of thinking about who is going to be the systemically important institutions, which it doesn't appear that you could anticipate because you don't know the markets that will be distressed.

Do you think that's a fair concern?

WITNESS BERNANKE: Well it is a fair concern. The legislation requires us to identify systemically important institutions for the purposes of oversight, but I don't believe that you have to be pre-identified as systemically important for the resolution regime to apply to a firm.

I think that's a decision that's made at the time.

COMMISSIONER HOLTZ-EAKIN: Okay, but how then could they prepare a living will if they have not been identified as someone who should be resolved?

WITNESS BERNANKE: Well I think that for firms that are on the cusp, if you will, I think prudence might have us work with them on these issues in any case. I think that would be important for complex firms.

But you raise an important point.

COMMISSIONER HOLTZ-EAKIN: I'm just trying to figure out how this works.

The second question I have--this is a slight tangent--but on the living will, I'm just wondering how you think about this, is we relied in the past on systems of internal risk assessment as a substitute for direct measurement of the risk exposures of firms because they were too complicated for us to do an assessment of the risk, so we wanted to make sure they had good systems.

If firms are too difficult to resolve, can we rely on their plans for resolving themselves if we don't understand how to do it? It sounds like the same thing.

WITNESS BERNANKE: They have to come up with the plan, but then we have to--so they are better placed than we are to figure out the best way to unwind the firm. But we have to take the responsibility, with their cooperation, of assuring ourselves that it is a workable plan. And the responsibility for that is the Fed, the FDIC, and whatever other regulator is relevant. And so we are going to put together a lot of expertise and try and figure that out.

At the Fed, one of the lessons we have taken from the crisis is that we really need to take a much broader, more multi-disciplinary approach. We need to bring in more finance people, more economists, more payments' people, more lawyers, more accountants, to supervise--to supplement the supervisory activities and make sure we really have the breadth of perspective that we need to get this done.

COMMISSIONER HOLTZ-EAKIN: Okay. So, sorry to jump back and forth, but going back now to as the crisis unfolded and the Fed's decisions about where to actually intervene with institutions, I want to ask again about Lehman versus AIG, just for thinking about the criteria for intervention. And what I'm not sure I understand is what you said about AIG, that it was easy to make a loan in that case, and I guess I just want to walk through the logic of that.

Because you said you didn't want to loan to Lehman because you would be lending into a run, and that they didn't have sufficient assets and you wouldn't get repaid.

AIG had no buyer, so it looked a lot like Lehman in that regard. There was clearly a run, a liquidity run.

And you did ultimately lend into it. And indeed, had to go back and lend a lot more in short order. So it didn't look like you both lent into the run and stopped it; it looked like it continued, to me.

And what I'm confused about is your assessment of the ability to get repaid. Because my understanding--and this could be wrong--is that a lot of the assets they had were not available as collateral for loans; they would be locked away in the insurance divisions in the firm.

And so what is the difference in the thinking about Lehman versus AIG and the nature of Fed intervention?

VICE CHAIRMAN THOMAS: Mr. Chairman, I yield the gentleman two additional minutes to cover the answer.

COMMISSIONER HOLTZ-EAKIN: Thank you.

WITNESS BERNANKE: So first, both of them bet the criterion for us trying to save them if at all possible. They both were systemically critical. But AIG had a completely separate business, an ongoing business, that had a going-concern value. It had a lot of shareholder equity.

It had subsidiaries that we're seeing now that they're trying to sell off that have substantial value. And so it was our assessment that they had plenty of collateral to repay our loan--because it was in a separate business that did have a lot of going-concern value and did have a lot of assets.

Now it is true that in the fourth quarter they lost more money than any company in history, like $62 billion, and that made things much more difficult, and therefore required some additional help from the Treasury in terms of capital, et cetera.

But I think at the time that we made that decision, the problems with AIG didn't relate to weaknesses in their insurance businesses, it related very specifically to the losses of the Financial Products Division. The rest of the company was, as far as we could tell, was an effective, sound company with a lot of value, and that was the basis on which we made the loan.

COMMISSIONER HOLTZ-EAKIN: So the calculation is, you can lend into the run at AIG and stop it eventually--perhaps it took longer than you thought--

WITNESS BERNANKE: As long as they have enough collateral to--

COMMISSIONER HOLTZ-EAKIN: --and there's no capital hold on an ongoing concern, but the same is not true for Lehman?

WITNESS BERNANKE: Lehman did not have enough collateral in terms of financial assets, and its going-concern value was tied up completely in its financial operations. It didn't have a separate business, insurance or other business, that provided additional value and protection.

COMMISSIONER HOLTZ-EAKIN: Well, last question, and just briefly. What would be different now--Bear, Lehman, AIG--with the new authorities of the Fed? How would that have played out if you had had the authorities you have now? What would you have done in each case?

WITNESS BERNANKE: Well, in the case of Bear, remember Bear was acquired by JPMorgan--

COMMISSIONER HOLTZ-EAKIN: But it was a subsidized acquisition.

WITNESS BERNANKE: A subsidized acquisition. Maybe the existence of this resolution regime might have changed the bargaining position somehow.

COMMISSIONER HOLTZ-EAKIN: Okay.

WITNESS BERNANKE: So if we could have gotten them acquired, I think that would have been the first choice. But without any kind of subsidy.

Barring that, I think in all three cases they would have been appropriate candidates for the application of this regime and we would have supported that.

COMMISSIONER HOLTZ-EAKIN: And so in particular AIG, a firm you assessed to be a healthy, ongoing concern, would have been resolved?

WITNESS BERNANKE: I don't see what the alternative would have been, unless we could have somehow stopped the run through some kind of cheery words of some kind. I don't know how to do that.

COMMISSIONER HOLTZ-EAKIN: If you figure that out, let me know. Thank you.

WITNESS BERNANKE: I'll let you know.

(Laughter.)

CHAIRMAN ANGELIDES: Senator Graham.

COMMISSIONER GRAHAM: Thank you, Mr. Chairman, and thank you, Mr. Chairman, for your excellent insights today.

I'll have to say it seems to me that we sort of have three options in looking at this issue of what to do when the too-big-to-fail institutions get in trouble, one which the legislation has provided apparently as a somewhat neater and cleaner funeral service as to how to bury the body.

The others are steps that might be taken to keep the institution healthy, such as the kind of more rigorous oversight and regulation that you have discussed.

Or, the third option, might be the option of the late 19th and early 20th Century with a similar situation. And that is, to try to change the basic structure of the too-big-to-fail institutions.

Beginning shortly after the Civil War, the growth of the commercial and industrial trust became a source of concern. And at both the federal and the state level there were a number of efforts made to try to contain their more predatory policies.

Finally, people despaired of that, and then in the early 20th Century they moved towards breaking up the trust as the only way to keep them from fundamentally damaging our capitalist system.

Apparently this legislation has decided that is not going to be the option that we will use, and in fact the statistics are that these institutions are growing rapidly as an even more dominant force within our economy.

You indicated some optimism about the ability to supervise these institutions, and you stated that there will be indicators that will indicate--that will be indicative of whether this more strenuous regulation is accomplishing its intended purpose.

I will have to say I am not that optimistic. First, I'm not optimistic domestically. For the last three decades, the American People have elected governments, both Republican and Democratic, which have tended to support looser and looser standards of regulation. Some of the most significant occurred during a Democratic Administration.

At the international level, we see the influence of these largest institutions. It's been reported currently that in Basel that the Committee is under a great deal of pressure to weaken the standards for collateral and liquidity that had originally been proposed.

So what is your--what is the basis of your optimism that domestically there is the political will for sustained stronger supervision; and that there will be international support for that kind of effort, so that stronger supervision at home is not seen as a means of neutering our ability to be an effective competitor in the global financial markets?

WITNESS BERNANKE: Well, Senator, you've raised some good issues there. I think if there's a lack of political will, there is probably no solution that is sustainable.

I think that the combination, as I said before, ideally we would like to see firms restructured in a way that makes economic sense, and that is consistent with market forces. And the best way to do that, at least in principle, would be to combine tough oversight and regulation, including such things as surcharges for--capital surcharges for firms that are systemically critical, which would both make them safer but also make it more onerous to be a systemically critical firm. Combine that with the resolution regime, or similar things that create more market discipline. And in principle--and of course I recognize this may not happen; but I think we should try to work to make it happen--in principle that would give firms the incentives to break up, restructure, and change their form in ways that will respond to the market, respond to the size and complexity, which is what is really needed, and eliminate the incentive to become big, just to become too big to fail.

Now you said that the bill doesn't give us the authority. In fact, it does give us the authority if we despair of these other methods and we believe that a firm is, its size and complexity is dangerous. We have both the living will requirement, but in addition we also have the authority of the regulators collectively to break up firms, if necessary.

You may ask if there is political will to do that? And I don't know the answer to that question. But certainly that is the charge that Congress has given the regulators, and we take very seriously that charge.

So I think we have put in place some reasonable approaches, but I certainly appreciate your historical perspective which says of course that over the long run you have to take into account the political influence of these large institutions. I think that is an issue.

COMMISSIONER GRAHAM: Well, and in terms of the will of the institutions themselves, there has been quite a division in American industry. Some industries have adopted levels of self-regulation which have provided a defense-in-depth against unacceptable behavior.

For instance, the nuclear power industry has developed some very impressive processes within the industry, nongovernmental, for best practices and enforcement of those best practices.

On the other hand, the deep-water oil and gas drilling industry has had almost none of that, and we have just seen one of the manifestations of the failure to have any kind of internal controls.

Is there any indication that within the financial community, are they more like the nuclear power industry? Or are they more like deep-water drilling in terms of their indicated willingness to provide defense-in-depth by their own actions?

WITNESS BERNANKE: Well it's an interesting question. Historically, again to go back to the historical analogies, there was a lot of self-regulation in the financial industry.

There was a time when the principal regulatory agency was the clearinghouse of the banks themselves within a city, and they monitored the health and stability of the other banks because they recognized if one bank failed that they were at risk as well.

Clearly we have gone a long way away from that model, and we are now primarily in a government regulatory model. And I think that is the dominant factor.

I hope, again, though, that regulation itself is not going to be adequate. We need to have market discipline. We need to have incentives in place for firms to manage their own risk, to take their appropriate decisions based on the market signals and the incentives that they are receiving.

And it's the combination of those two things that I see as having the best chance of managing the risk in this sector. But it is, I think--you know, I don't think we're really at the nuclear power type of model at this point.

COMMISSIONER GRAHAM: Mr. Chairman, could I have two additional minutes for a question?

CHAIRMAN ANGELIDES: How could I say no to you? Two minutes for the Senator in the deliberative body with no time limits.

(Laughter.)

COMMISSIONER GRAHAM: I was very intrigued with your statement that there are going to be some indicators, some markers of whether this more rigorous supervision is accomplishing its objective.

What would you put down in the vertical column as the--what are those indicators, particularly that have some capacity to be quantified, that you'll be looking at to answer the question: Is the tougher regulation working?

WITNESS BERNANKE: Well certainly one important set of indicators relates to the cost of capital for these firms. If they're not too big to fail, then an important source of their market advantage will be eliminated.

So for example you would expect to see wider risk spreads, or higher CDS spreads, reflecting the increased conviction of the market that they could fail; and that those spreads should be more responsive to market developments.

So that would be one set of things. And then we could also look at things like return-on-equity, which should not be artificially increased by too big to fail characteristics of the firm.

COMMISSIONER GRAHAM: And do you see the Fed developing this report card of indicators and periodically making it available to the public so that there will be the capacity for continued public monitoring of how well the supervisory system is functioning?

WITNESS BERNANKE: Well some of the indicators I just suggested are already obviously public, and anyone can look at them.

We have developed--we are well along in developing a quantitative surveillance mechanism which will be looking at a whole variety of financial and other indicators of individual firms, and using them as a supplement to the on-site supervision that the supervisors do.

I am not sure yet, you know, in what form we will communicate this information to the public, but we certainly want to make sure the public is confident that firms are safe and sound. So we will try to find ways to communicate that effectively.

COMMISSIONER GRAHAM: Well, just to conclude, going back to the importance of the public seeing that this is not only in their individual interest but also in the broader societal interest to have effective regulation so we reduce the likelihood of firms getting into the extremis situation where you have to plan the cleaned-up funeral, I believe that keeping the public informed is a critical element of building that support. So I would urge you to make this as communicative and as publicly available as possible.

WITNESS BERNANKE: Thank you.

COMMISSIONER GRAHAM: Thank you.

CHAIRMAN ANGELIDES: Thank you, Senator. Mr. Thompson.

COMMISSIONER THOMPSON: Thank you very much, Mr. Chairman. It's out of order today. I didn't realize that.

CHAIRMAN ANGELIDES: It's a little switch-up, you know, last session.

COMMISSIONER THOMPSON: Keep us all on our toes.

Thank you, Dr. Bernanke, for joining us. While this hearing is about too big to fail, I would like however to go back to the broader issue of the crisis, if I might.

So would you describe for us the role that the Federal Reserve plays in monitoring or managing credit standards in our country?

WITNESS BERNANKE: Well as I mentioned earlier, the Federal Reserve has had a role in consumer protection. So we have created rules, for example, on required documentation; escrow accounts; and other standards of underwriting that would apply to mortgages.

The other main area that I can think of is, like other bank regulators, we want to make sure that banks--while it's their decision what kind of risk to take, and what loans to make--that they are adequately capitalized in order to deal with any losses that might occur.

And so we are pressing for, on the one hand, strong risk-sensitive capital standards which will tie the amount of capital that banks have to hold to the risk of the loans that they make, and therefore if they make a riskier loan they need to hold more capital, and they have to judge for themselves whether economically it makes sense to do that.

And we also want to continue to work with the accountants and the SEC and others to make sure that banks have adequate reserves against losses.

So by providing adequate capital and reserves, banks have I think the right incentives to make adequate loans. We don't generally--some countries, and it's an interesting idea, some countries, the authorities actually intervene in things like loan-to-value ratios, down-payments, and things of that sort. You know, we haven't done that in this country, but I think we ought to look broadly at how we might ensure that we don't have a system where credit gets too easy in the boom and too tough in the downturn.

COMMISSIONER THOMPSON: In your written testimony you commented about the innovation that occurred in the market, primarily around originate-to-distribute model and what have you, which clearly was facilitated by lax lending standards.

Could the Federal Reserve not have stepped in as it saw this model being developed in this innovation really putting the economy at risk?

WITNESS BERNANKE: Well as I've said, I think we bear some responsibility there. And I think primarily in two areas.

The first was in the underwriting standards and the application of the HOPA regulations. The problem there, again acknowledging the concern, you know one of the problems there was that, although the Federal Reserve had the authority to write rules, we had no enforcement authority.

We would have had to rely on state and other regulators to enforce those rules. And it was partly because we weren't supervising these firms that we didn't see what was going on quite as clearly that we didn't respond as quickly as we should have. But that was an important failure, as I've agreed many times.

The other area where both we and other bank supervisors I think should have been more effective was in risk management more generally. The firms did not have enough information about what the brokers were doing on their behalf, what kinds of standards they were applying.

They didn't know their own exposures to subprime and other types of mortgages. As was pointed out, they relied too heavily on the credit rating agencies who themselves had flawed models that ignored correlated risks across housing prices across parts of the country.

So I think those were the two areas where the Fed could have--the Fed and other bank regulators--could have done more. One was at the underwriting level, and the second was just in the general risk management of the firms to understand their exposures both in terms of their own losses, but also their reputational and operational risks that they were taking as they were packaging these mortgages.

COMMISSIONER THOMPSON: Given my background the technology business, I have an appreciation for the value of innovation, and I have an even stronger appreciation for the role that technology plays in the financial services sector, perhaps the largest consumer in technology as a sector in our economy.

Given that, and given the role of innovation in that sector, what more should be done to manage the innovation process within the financial services sector in such a way that it doesn't create a systemic risk to the economy?

WITNESS BERNANKE: I think one of the lessons of the crisis is that innovation is not always a good thing. There are innovations that have unpredictable consequences. There are innovations whose primary purpose is to take unfair advantage, rather than to create a more efficient market.

And there are innovations that can create systemic risks even if from the perspective of the individual firm, you know, that risk is not evident.

So I'm not sure I would go so far as to say we need to have sort of a new product-approval safety commission, or something like that--although the CFPB will do some of that I'm sure.

But the new Financial Stability Oversight Council, for example, ought to pay close attention to financial innovations and regulators. As we look at the risk management and the systemic consequences of these decisions, we need to be assertive if there are developments that we find either counterproductive from the perspective of consumer protection, or systemically risky. I think we ought to intervene there.

COMMISSIONER THOMPSON: You made a comment in your opening statement about your long-standing background as a student of financial markets and financial crisis. And oftentimes in a crisis leaders are asked to do things they've never had to do before. Oftentimes that means asking for forgiveness, as opposed to permission.

In hindsight, would you have preferred now to have asked for forgiveness and done something to save Lehman in such a way that this crisis would not have unfolded the way it did in our economy and our country?

WITNESS BERNANKE: You know, it's really hard to know what would have happened. I mean, one possible scenario is that we would have--I mean, the only we could have saved Lehman would have been by breaking the law, and

I'm not sure I'm willing to accept those consequences for the Federal Reserve and for our systems of laws. I just don't think that would be appropriate.

So I wish we had saved Lehman, but--and we tried very, very hard to do so, but it was beyond our ingenuity or capacity to do it. And I don't think--I'm willing to be creative, but I'm not willing to--

COMMISSIONER THOMPSON: But you did see it coming.

WITNESS BERNANKE: We saw there were a lot of risks in Lehman and other companies as well, but the actual failure was not preordained. I mean, for example we were hopeful, maybe too hopeful, even up to the last day, that we had two potential acquirers--

COMMISSIONER THOMPSON: My reference was more to the consequences of their failure. You saw the consequences. You predicted that.

WITNESS BERNANKE: I was personally convinced. And I guess I would add that, you know, in our decision to rescue AIG I sort of gambled--I sort of--I was sort of taking a risk that, you know, it could have happened, I suppose, that after a few days of market upset that the market would have digested the Lehman event and people would have said, well what the hell were you doing with AIG?

In fact, I was very, very confident that Lehman's demise was going to be a catastrophe, and I knew AIG's demise would be a catastrophe, and therefore I did whatever I could to prevent that.

COMMISSIONER THOMPSON: So there was no way in our system that someone with your perspective and insight could have even influenced the White House to say, we cannot let this happen?

WITNESS BERNANKE: The White House was well informed, and they were very supportive as--both the previous Administration and the new Administration were very supportive. We thought of all kinds of creative things, but we could not find a way to do it.

And, you know, again, I'm not prepared to go beyond my legal authorities. I don't think that's appropriate.

COMMISSIONER THOMPSON: Understood. Thank you very much.

CHAIRMAN ANGELIDES: Thank you, Mr. Thompson. Mr. Wallison. I'm just full of surprises today.

COMMISSIONER WALLISON: Yes. This is called Chairman's discipline.

COMMISSIONER WALLISON: Prerogative.

CHAIRMAN ANGELIDES: It's called actually something simpler: working from the outside in today.

COMMISSIONER WALLISON: Like market discipline by the Chairman.

(Laughter.)

COMMISSIONER WALLISON: Okay, thank you very much, Mr. Chairman, and thank you for coming Mr. Chairman.

I would like to explore something called the discount window a little bit. My understanding of the purpose of the discount window for banks is that it is an opportunity for a bank to take assets that are not liquid and provide them as collateral to the Fed, and the Fed in turn monetizes them in effect and the bank can then use that cash to meet its obligations.

One of the purposes of it is to address--deal with runs. When a bank is facing runs, assuming that it is solvent it can present collateral, including loans, which are illiquid to the Fed, and if the Fed judges that those loans have some value, giving them an appropriate discount, it provides cash to the bank to meet the loans--to meet the obligations.

The fact that the Fed is doing that is very influential with the market. That is to say, people say, well, as long as I can make these withdrawals--that is, in a run--and the cash is always there, and the Fed has been lending the money, the Fed must think they're solvent, and that would be the only circumstances under which you would do that, then the run is supposed to sort of come to an end.

That's the theory. The market is quite satisfied that the cash is always going to be there. There's no point in continuing to run and take cash out of the bank.

Now Wachovia is an interesting case, because as far as I can understand the only thing that was considered for Wachovia--which again I would like your judgment on this of course--the only thing that was considered for Wachovia was an acquisition. Whereas, Wachovia, at least as far as we understand it, was solvent but was subject to liquidity problems. That is to say, there were runs.

Why was it, then, that as an alternative Wachovia was not able to use the discount window?

WITNESS BERNANKE: Well they were allowed to use the discount window. And you raise a good question, and perhaps I could come back with more information subsequent to this hearing. But their liquidity drains were quite serious, and they were--it was their judgment that they were not going to be able to open up within a day or two. They thought that the liquidity drains were such that they could not meet them even with the discount window.

COMMISSIONER WALLISON: This was Wachovia's judgment? They were the ones who said we cannot survive this?

WITNESS BERNANKE: Confirmed by the Richmond Federal Reserve Bank.

COMMISSIONER WALLISON: Okay. So it wasn't that they were--anyone considered them to be insolvent? It was simply a matter of their view, Wachovia's view, that they could not survive this run even if they were able to provide collateral to the Fed?

WITNESS BERNANKE: I think there was uncertainty about whether they were solvent or not, because even though they had regulatory capital, that capital was not very risk-sensitive. And what drove--I think what initiated the run on Wachovia was the failure of WaMu, which had mortgages that were similar quality, similar type to those that Wachovia had.

So part of my problem here is I don't recall exactly the discussion, and I would like to get back to you on that.

COMMISSIONER WALLISON: I'd like you to do that.

WITNESS BERNANKE: But your point is well taken.

COMMISSIONER WALLISON: All right, then let's move from there to the Lehman case, because the Lehman is slightly different in one sense. And that is that, although the media had said that the Fed had given investment banks access to the discount window, that was not exactly true, as I understand it from a discussion I had with Mr. Baxter yesterday.

What was done was that under 13.3, your special powers to deal with serious financial consequences, it enabled you to make available to investment banks funds from the Fed for which you would be getting some kind of collateral.

Now we were told by Mr. Fuld yesterday, and nobody really disagreed with this, that Lehman was solvent. Lehman had plenty of assets. It was solvent. It was subject to a run. And my question to him--and I'm hesitant to put words in his mouth when he responded--but my question to him was: Well, why couldn't the Fed do the same thing with Lehman as it does with the discount window for banks, as a matter of law? And that is, we'll take all of your illiquid assets, as long as we put a value on them, and we will monetize them. We will provide the cash so you can meet this run.

And Mr. Baxter said to me that there is a way for the Fed to do that, but only if the Fed Board adopts a resolution of some kind which changes the nature of what they normally do under 13.3 to make it more like, if you will, the discount window. That is to say, they can take assets that are not liquid and use them for the purpose of making a loan to an institution that is suffering a run.

Now you said that you were willing to do anything to save Lehman. Is Mr. Baxter correct? Could the Fed Board have adopted a resolution that said we will take any good assets that Lehman has and we'll monetize them? We'll provide liquidity so that Lehman can continue to meet the withdrawals, or the runs that people are referring to?

WITNESS BERNANKE: So Lehman Brothers had a holding company and it had a broker-dealer.

COMMISSIONER WALLISON: I'm talking about only the holding company. I should have made that clear. I'm only talking about the holding company.

WITNESS BERNANKE: All right, just for everyone's information, the holding company--sorry, the broker-dealer was eligible to borrow--

COMMISSIONER WALLISON: Right.

WITNESS BERNANKE: --from an existing facility, the Primary Dealer Credit Facility, and it was allowed to do so.

COMMISSIONER WALLISON: Yes.

WITNESS BERNANKE: So the question was: Should we create a new lending provision to allow loans to the holding company?

COMMISSIONER WALLISON: Yes.

WITNESS BERNANKE: We were allowed--we are able to do so under the law so far as we have sufficient collateral. And we were prepared to do that. And I was in Washington ready to call the Board together to do that, if that was going to be helpful.

However, what I was informed by those working on Lehman's finances was that it was far too little collateral available to come to our window to get enough cash to meet what would be the immediate liquidity runs on the company. And therefore, if we were to lend, what would happen would be that there would be a continued run. There was not nearly enough collateral to provide enough liquidity to meet the run. The company would fail anyway, and the Federal Reserve would be left holding this very illiquid collateral, a very large amount of it.

So it was our view that we could not lend enough to save the company under the restriction that we could only lend against collateral.

COMMISSIONER WALLISON: And you are saying, then, that even if the collateral was illiquid, you could have lent against it, but you concluded--or someone in the New York Fed concluded that there wasn't enough of such even illiquid capital, illiquid assets for you to make this loan?

VICE CHAIRMAN THOMAS: Mr. Chairman, yield the gentleman an additional two minutes.

WITNESS BERNANKE: That's correct.

COMMISSIONER WALLISON: Did you do a study of the collateral that was available? Does the New York Fed have a study of the collateral that was available so we could--

WITNESS BERNANKE: Well I would refer you to them. Remember, we were working with the SEC to do these liquidity stress tests that we did over the summer. And then over the weekend, there was 24-hour analysis going on that included not only the staff of the New York Fed, but also assistance from the private sector companies that were gathered there.

I don't have any--to my knowledge, I don't have a study to hand you. But it was the judgment made by the leadership of the New York Fed and the people who were charged with reviewing the books of Lehman that they were far short of what was needed to get the cash to meet the run. And that was the judgment that was given to me.

So that was my understanding.

COMMISSIONER WALLISON: Okay, since I have a minute, I'm going to ask another question on a somewhat different subject--

WITNESS BERNANKE: Sure.

COMMISSIONER WALLISON: --and that is, that Wachovia failed, or didn't fail but it apparently in the view of the Fed it was not viable and had to be combined with some other institution.

One of the things you said in your testimony is that there were vulnerabilities and weaknesses in the system. And one of those vulnerabilities that you identified was the fact that the investment banks were lightly regulated, or not sufficiently regulated.

Now investment banks were in fact lightly regulated, or not sufficiently regulated, but banks like Wachovia and WaMu and Citi were heavily regulated by the Fed, at least in the case of Wachovia and Citi by the Fed, I understand WaMu was regulated separately, but what's the real difference between the regulation of banks and investment banks when the outcomes seem to be the same?

That is, the banks get into the same kinds of trouble that the investment banks get into? And what does that say about the idea of providing yet more regulatory power to any agency, including the Fed?

WITNESS BERNANKE: Well, it's a good question. In the case of course, just for factual information, you know Wachovia was mostly a national bank, those regulated by the OCC, and the Fed was the holding company supervisor.

I think that part of what was happening there, frankly, is that--which is why some of the CEOs feel like they were hit by--blindsided by a truck, is that there was a systemic problem as well as an individual institutional problem.

There was a panic that went across--that went across a variety of firms. One of the sources of the panic was the subprime lending, which was something that was done both by banks and by nonbanks, and we all share some responsibility for that.

Another set of problems, though, had to do with this very high reliance on unstable short-term funding--repos, et cetera, and that was much more a situation in investment banks and other shadow banks. And that's why, if you look at the chronology of the crisis, what you see is that the firms that were hit first were not banks. They were Bear Stearns, which was under pressure during the liquidity crisis in March of '08. They were Fannie and Freddie, which had separate issues.

They were essentially all the investment banks, Lehman, Merrill Lynch, and so on, who came under very large stress early on, and then AIG. It was only when market conditions got very severe that banks began to face liquidity problems, as well, and banks like Wachovia, which had--and Citi also--which had some substantial reliance on non-core deposits as a liquidity source, came particularly under pressure.

But your point is right. We have to improve on all dimensions. And, while I would say that the subprime lending in particular was done more outside the regulated bank sector than within it, certainly I don't claim that there weren't problems and mistakes in the regulated bank sector as well.

CHAIRMAN ANGELIDES: All right, thank you.

COMMISSIONER WALLISON: Thank you.

CHAIRMAN ANGELIDES: Mr. Bernanke--Mr. Holtz-Eakin, you have a quick follow up?

COMMISSIONER HOLTZ-EAKIN: Yes, I just want to make sure I understand the answer to Peter's questions about Lehman and lending. Here's what I don't understand.

Mr. Fuld said, emphatically, that all he needed was a liquidity bridge, and that he had collateral. If he were to give you the collateral and you've got that, and then he turns out to be wrong, you are protected. Why replace his judgment of what he needed with the Fed's judgment of how it would work out?

WITNESS BERNANKE: Because in part that when we make these discount window loans, we really have two sources of protection. One is the collateral itself, which we really don't want to own. The second is the signature, if you will, of the firm.

So we generally don't--for example, we don't generally loan, in the banking sector we don't generally make loans to failing banks even against collateral because, you know, because we want to have the double protection of both the firm quality and the collateral itself.

So it was our sense that, again based on the information developed in New York, that--that Lehman was in fact far short of the amount of collateral that they would need to meet the--meet the run; that they were essentially making a Hail Mary pass at the juncture. And so what was going to happen was that, again, that we would lend to them on illiquid collateral, the firm would almost certainly fail anyway, but the other consequence would be that the Fed would have a large amount of illiquid collateral which would be, you know, certainly risky at least for the Taxpayer.

So that was the reason. It was our view that they did not have enough collateral, and that the runs, based on a whole variety of short-term funding obligations--the fact if they got downgraded there would be more collateral calls, et cetera; that there was not adequate collateral to meet the run, and therefore it would be needlessly exposing the Fed and the Taxpayer to, to make those loans.

COMMISSIONER HOLTZ-EAKIN: So that Taxpayer risk was larger than your perceived catastrophe--

WITNESS BERNANKE: Well, no--

COMMISSIONER HOLTZ-EAKIN: --when Lehman fails? Why not try the Hail Mary pass?

WITNESS BERNANKE: Well, because the--because the view was that the failure was essentially certain in either case.

CHAIRMAN ANGELIDES: Before we go to Ms. Born, Mr. Vice Chairman you had a quick--

VICE CHAIRMAN THOMAS: Just 30 seconds. We may be pounding this nail, but based upon yesterday and on ongoing discussion, the final point that you responded to to Mr. Holtz-Eakin is where I want to focus just a little bit more.

That if there wasn't sufficient collateral, the other thing I want to add to it, if you're able, is that it wasn't sufficient collateral by an inch, by a mile? Because you were looking at an ongoing process that you essentially decided wouldn't be worth starting. So that there was just no question about the shortfall? That it would be an ongoing consequence?

WITNESS BERNANKE: My general tone and attitude was, is there anything we can do? And I believe that that goal was shared by the other principals--by president Geithner, and Secretary Paulson, and Chairman Cox. And none of those folks had been known for timidity in previous episodes in terms of trying to find ways to prevent a worsening of the financial crisis.

And what I heard from them was just the sense of defeat. You know, that it's just way too big a hole. And my own view is it's very likely that the company was insolvent, even, not just illiquid.

VICE CHAIRMAN THOMAS: Thank you.

CHAIRMAN ANGELIDES: All right, Ms. Born.

COMMISSIONER BORN: Thank you very much, and thank you, Mr. Chairman, for being willing to appear before us today.

You previously have said that over-the-counter derivatives were a mechanism that transmitted shock during the financial crisis. And I would like to explore with you some of the ways that they did so, and their relevance to systemic risk.

As you've said today, the potential failure of AIG was caused by AIG Financial Products Division's enormous sale of credit default swaps without sufficient resources to post collateral as required by their contracts.

Was AIG considered to be of systemic importance in part because many of the world's largest and most important financial firms were AIG's counterparties on these credit default swaps and thus could have been impacted with AIG's failure?

WITNESS BERNANKE: So it's a subtle point, but I would distinguish just a bit from the actual financial exposure and the fact that the world knew that AIG was the counterparty of many of the world's leading global financial firms.

In some cases, you know, those exposures were manageable. In some cases, they would have been more--would have been more substantive. But at the time we were at the brink of a global run, a run on all financial institutions, and the progenitor of runs is uncertainty.

When people don't know whether a bank or a company is sound, then that's when they go take their money out. Years--I mean, two years later we are still not entirely sure what the net exposure of some of these companies to AIG was. Certainly on the day that AIG failed, if it had failed, investors around the world would not have known, you know, what the net exposure of a given bank was to AIG.

And so my sense was, over and above the direct losses and hits to capital, et cetera, that would have been experienced not only through these derivative counterparty agreements but also through just straight commercial paper, corporate bonds, and other vehicles, that this would have triggered an intensification of the general run on international banking institutions. So that was a very significant concern.

As I talked to the Commission when we met a year ago, there were a number of other features of AIG that were also of concern, but that was an important one.

COMMISSIONER BORN: So in other words, in addition to the real credit exposures and financial difficulties that might have been expected, there was uncertainty about what the exposures were, what institutions had them, how much they were, lack of transparency in this market, that in essence fueled the panic?

WITNESS BERNANKE: Absolutely.

COMMISSIONER BORN: I think you quite appropriately in your testimony distinguish between derivatives transactions themselves and the infrastructure for trading, clearing, settlement of those instruments. And exchange trading, of course, provides price discovery and transparency. Counterparty, centerparty clearing, and settlement allows for reduction of counterparty risk and adds to the transparency of the process and the safety through margins, and marking to market.

So in your view, was the trading in, of derivatives over the counter as opposed to exchange trading in derivatives a problem that posed some risk because of the lack of transparency? Because of the existence of counterparty risk in the over-the-counter arena?

WITNESS BERNANKE: Yes, certainly. And AIG of course is the poster child for that. It was not so much the losses that their counterparties experienced on the movements in the derivatives themselves, but rather the counterparty risk that was the problem.

I'm sure you know that the Fed was quite concerned about clearing of settlement arrangements for derivatives prior to the crisis. And the Federal Reserve

Bank of New York did a lot of work to try to improve the clearing arrangements for credit derivatives and also some other types of derivatives. And we were very supportive of the provisions in the recent financial reform legislation to standardize derivatives, put them on central counterparties, and the like.

A point that should be made, and I know you fully recognize, is that if you're going to concentrate counterparty risk in central counterparties, then they must be safe. And for that reason we also thought it was very important in Title 8 that the Fed and other agencies would work together to make sure that the prudential standards were imposed on those central counterparties as well.

But I agree with what you just said. One final comment is that another area where the Fed has been active is in trying to strengthen the so-called trading book capital requirements for banks, which essentially will make it more costly. To the extent that banks still use over-the-counter derivatives, the capital cost will be higher for selecting the underlying risks, both counterparty and fundamental risks. So that that's another incentive to put these instruments on exchanges.

COMMISSIONER BORN: We have heard from the Federal Reserve's staff yesterday about interconnectivity of large financial institutions through their counterparty exposures in OTC derivatives contracts, and the relevance of that in assessing systemic risk of those institutions.

And I wanted to ask you about Lehman Brothers, for example. You have said that if it had been--you knew before it was allowed to fail that the failure would be catastrophic. And Mr. Baxter said yesterday that there was a significant concern at the Fed that the OTC derivatives market would be severely impacted by the failure.

Was this a concern of yours with respect to Lehman Brothers? Did it also enter into your concerns about Bear Stearns, and Wachovia, and other large institutions with concentrated derivatives positions?

WITNESS BERNANKE: Yes. It's not the only aspect of interconnectedness. There's a lot of funding relationships and so on. But it certainly is an important one.

It's very difficult to unwind these positions quickly. And when you lose a counterparty, then you have to replace your protection. And so it was a significant concern. And one indication of our concern about Lehman was of course that we took a lot of steps to try to put foam on the runway, so to speak, as the expression went.

And one of those things we did was to work with the OTC markets to try to get them to address these concerns.

Another dimension of this, by the way, one of the things we got to work on very quickly was the credit default swaps in Lehman that others were trading and trying to arrange for settlement of those as efficiently as possible. And given the problems with counterparties and ambiguities of clearing and so on, that itself was a fairly complex process.

So the short answer to your question is that this was an important aspect certainly for the investment banks, for Lehman and Bear Stearns and to a significant extent also to the other institutions that had broker-dealers in those kinds of exposures.

COMMISSIONER BORN: May I just have time for one last question?

CHAIRMAN ANGELIDES: Would you like two minutes?

COMMISSIONER BORN: Yes, that would be fine.

With respect to these concerns, I assume that the concerns went beyond credit default swaps to all over-the-counter derivatives' interconnectivity. As you know, credit default swap were a relatively small amount of the over-the-counter world of derivatives at that point, and there were massive connections with other kinds of over-the-counter derivatives between the big dealers like the investment banks and their counterparties; and that the same problems of potential credit exposure, lack of transparency, potential concerns about what the exposures were applied generally to the whole over-the-counter derivatives market?

WITNESS BERNANKE: Yes. There were some types, like equity derivatives, that shared some of the problems, just the operational problems that credit derivatives had in terms of clearing and settlement.

But more generally, when are bespoke derivatives, for example, you had both counterparty risk and you also had the complexity of trying to value the positions. And that becomes serious when you're trying, in a crisis trying to figure out what exposures are, and whether a company is solvent or not. So, yes.

COMMISSIONER BORN: Thank you.

CHAIRMAN ANGELIDES: Great. Mr. Hennessey?

COMMISSIONER HENNESSEY: Thank you. Thank you, Mr. Chairman, for coming.

Yesterday Mr. Fuld argued that there was no capital hole at Lehman, and that the slow six-month counterparty pullback from Lehman which turned into a run in mid-September was unsupported by the reality of the health of his bank.

We heard the same thing from the heads of Bear Stearns, that their firm was fundamentally healthy and that they were brought down by whispers, rumors, and an unsubstantiated run.

I believe I heard you just say that you thought that Lehman was probably insolvent. In your view, did Lehman and Bear fail only because of unjustified liquidity runs? Or were there also genuine solvency problems at these firms?

WITNESS BERNANKE: So as I said before, one of the reasons that some of the CEOs felt so blindsided was that there was a general panic. There was obviously a general financial crisis that put companies under extraordinary strain.

That being said, there was certainly a hierarchy and the weaker companies were certainly the first to feel pressure. So Bear Stearns was widely viewed to be the weakest of the investment banks, and Lehman was widely viewed to be the second weakest, and so on. And there were clearly losses and liquidity issues at those companies.

In particular, in the case of Lehman they had raised some capital in the spring, but they had not succeeded in spinning off a substantial position that had a lot of embedded losses in it, and they had not succeeded in raising additional capital, which suggested that they were not able to persuade new investors to come in.

So it was a combination of general fear certainly, but also some legitimate concerns about both the asset position of the company--you know, its balance sheet--

but also I think some concerns about the longer term viability of the firm, the business model, and other issues that were concerning folks as well.

And it's just the nature of financial institutions that they live on confidence. When their counterparties and customers and creditors don't believe that they were sustainable, then the pressure mounts very quickly.

COMMISSIONER HENNESSEY: Good. I hear a lot more discussion about how to prevent failure of these firms than about what will happen if or when the next failure occurs.

Now the government has the new resolution authority, and at some point these large nonbank financial firms will have living wills. But those mechanisms are not yet in place. It takes time to implement them.

We were discussing before some of the international aspects of the resolution authority, which I imagine are nightmarishly complex. And at the same time, your 13.3 authority has been curtailed, and there won't be the TARP around.

Are you confident that the government, including the Fed, has the tools it needs to deal with a failure of a too-big-to-fail firm if and when it should next occur?

WITNESS BERNANKE: Well I'd prefer not to be tested in the next few days, if you wouldn't mind.

(Laughter.)

WITNESS BERNANKE: That being said--

COMMISSIONER HENNESSEY: We all hope that won't be the case.

WITNESS BERNANKE: That being said, the FDIC has embarked on this with admirable urgency, as Chairman Bair will tell you in a little while, and they are moving very quickly to try to set up the rules which will be needed to implement this.

It's not only a question of implementation, but I think the benefit of this--and I'm sure Mr. Wallison would agree--would be having some certainty in advance about how the process will be run and, you know, what the effects will be on particular creditors, and so on, of the firm.

So it is a work in progress right now for sure, but we are working very quickly to try to put it into operation.

COMMISSIONER HENNESSEY: Is it, if I could, is it just a timing thing in terms of getting these mechanisms up and running? If you don't have the ability to provide a firm-specific loan anymore, and the TARP isn't there to provide capital injections, is there a scenario on which you might need to put money into a firm where there is or is not a tool to actually do that?

WITNESS BERNANKE: Well remember that Treasury can provide a loan, as long as it's repaid, either from the company in receivership or, if necessary, from an assessment of the financial industry.

So if money is needed to prevent a disorderly failure, or to facilitate the bridging process, et cetera, then--then the government can provide that.

And the Fed, meanwhile, is of course very limited in our ability to go beyond just our normal lending to a sound company. But that was a change we were comfortable with as long as these alternative authorities were provided.

COMMISSIONER HENNESSEY: Good. Systemic risk. You hear a lot of people talk about it. I haven't heard a precise definition, other than people usually say it means risk to the system, which--

(Laughter.)

COMMISSIONER HENNESSEY: --doesn't--and I understand that there's always going to be discretion involved, and that it's been much more of an art than a science. Are there efforts underway, or has anyone done any good work in trying to turn this from an art to science to eventually some sort of engineering where you can measure this and analyze systemic risk?

WITNESS BERNANKE: Yes. There's right now an active academic research literature looking at some of these things, trying to identify, for example, what some of the criteria are; how big; how interconnected, those sorts of things.

There is some criteria involving things like correlation. You know, how correlated is the stock of company X with other shares of other companies, and what does that say about its systemic importance, and things of that sort.

So there is an academic literature underway. The Federal Reserve has to set up a set of rules that will govern how we recommend to the oversight council which companies are to be treated as systemically critical for the purposes of special oversight.

And so we're going to have to write a rule which puts down on paper in a way that is legally sensible what are the criteria we're looking at.

So to some extent it is going to ultimately remain subjective, and I think the systemic criticality of any individual firm depends on the environment. So our decisions vis-a-vis some of the firms we addressed might have been different in a more calm environment.

So the overall economic and financial environment also matters, not just the characteristics of the firm. But we are cognizant that we need to be more specific. And as I said, there is a literature to draw on, and we have a project at the Fed right now trying to write this rule that will govern our recommendations.

COMMISSIONER HENNESSEY: Good. I'll end with an easy one. Other than your own speeches, what do you think are the most important writings on the crisis as a whole? If you could recommend that people read two or three really good speeches, books, papers, whatever they happen to be, what are the most important or under-appreciated works out there?

CHAIRMAN ANGELIDES: And by the way, that is pre-December 15th when our report comes out.

(Laughter.)

WITNESS BERNANKE: Well, I think there's a lot of interesting work. I know you're familiar with sort of the narrative histories and so on, and I won't bother to go over those. But I think, again not to sound too professorial, there is some interesting academic work already looking at these issues, and I even made reference in my testimony to Gary Gorton's work where he is pretty clear to identify the analogies between what happened to the shadow banking system and classic bank runs, 19th Century style bank runs. I think that work is very interesting.

There's also quite a bit of interesting work by people like Markus Brunnermeier at Princeton, which looks at the dynamics of a panic in the repo market and how that cycle of increasing haircuts in margin worked. And he and others have also done some of the work I referred to a moment ago on trying to identify systemically critical firms by looking at their financial characteristics.

Maybe I can come up with a few other things, given a little bit of time, but there is some interesting work underway in this area.

CHAIRMAN ANGELIDES: Could you provide us "Chairman Bernanke's Fall Reading List"?

(Laughter.)

CHAIRMAN ANGELIDES: If you would give us--

WITNESS BERNANKE: Only if you take a test on it.

(Laughter.)

CHAIRMAN ANGELIDES: Well, we're taking a test.

WITNESS BERNANKE: I'll do that.

CHAIRMAN ANGELIDES: And we may just post it on the web, too, as our featured event of the day. But, no, all kidding aside, it would be great if there are a few pieces you think--

WITNESS BERNANKE: If you would like to understand that this is not the first time through, read The Lords of Finance book, which won the Pulitzer Price for its history of the Great Depression, and you will feel sometimes, doesn't this seem awfully familiar.

CHAIRMAN ANGELIDES: Right. Ms. Murren.

COMMISSIONER MURREN: Thank you. And thank you, Mr. Chairman, for your comments and for your time today.

My question begins actually in your written testimony where you reference the Gramm-Leach-Bliley Act as having limited the regulators' ability to really get a whole picture of any one enterprise's risks and financial position and activities.

And I was wondering if, when you think back to how the crisis unfolded--part of our charge is to determine what caused it--in your mind does this act rise to the level of causation? Or is it simply one of many factors that were part of the whole unfolding of the crisis?

WITNESS BERNANKE: I think it was one of many factors. And you could point to specific examples where it caused problems.

For example, the Fed was somewhat reluctant to examine nonbank subsidiaries of bank holding companies feeling that the sense of the law was we needed to defer to whoever was nominally the regulator.

And so for that reason we were probably not as aggressive as we should have been in terms of identifying some of the consumer protection issues that arose from mortgage companies and other nonbank lenders. So that would be one example.

Another example, which is more complex, has to do with the role of off-balance sheet vehicles. This turned out to be a big problem in that under the existing accounting--under the existing accounting rules at the time, if a bank did not have a majority ownership of an off-balance sheet vehicle, it didn't have to consolidate that vehicle with its own balance sheet, and its capital charges were limited only to explicit commitments of liquidity or capital to the vehicle.

And so in actuality it turned out that the exposures via these vehicles were much greater than understood, in part because the banks themselves didn't have good monitoring systems, and also because in the event, for reputational reasons, they often came to rescue these vehicles when they got into trouble, even though they were contractually obliged to, and that cost them money as well.

And so there was some, I think a little bit of uncertainty about, given that these off-balance sheet vehicles might have been sponsored by the bank which therefore would make them responsible in some sense of the direct bank supervisor, like the OCC, but they were also obviously a part of the overall holding company. I think there was a little bit of uncertainty about whose responsibility these were, and maybe there was not sufficiently aggressive attention paid to those off-balance sheet--I'm sure there was not sufficiently aggressive attention paid to those off-balance sheet vehicles.

So I do think that there were some problems there, and some things fell between the cracks. I wouldn't want to elevate it to a principal cause of the crisis, but it was one of the reasons that some of the risks that faced the overall companies on an enterprise-wide basis were not adequately appreciated.

COMMISSIONER MURREN: And with that in mind, with the new legislation that's recently passed, had that been in place at the time what actions would have been taken that might have been different? Or what would have been different about the body of knowledge that you and other regulators might have had about those enterprises that would have allowed you to act perhaps more preemptively?

WITNESS BERNANKE: Well, I think the clearest case was the nonbank subsidiaries where we, for example, did not--we only began a pilot program to look at nonbank lending subs in 2007 or so, working with the other regulators of those subs trying to identify consumer protection issues.

In the absence of GLB, I think we would have been earlier looking at some of those problem areas and been less reticent in going into those.

Again, the issue of off-balance sheet vehicles is more complicated, but I think that the situation in the legislation now, which rather than letting these issues fall between the cracks essentially gives multiple responsibility and says you have to both look at this, is more likely to identify those problems in the future.

COMMISSIONER MURREN: Thank you. Another question, just to touch back on something that came up earlier which is the housing bubble, can you talk about your feeling as to the relationship between securitization and the housing bubble?

WITNESS BERNANKE: I think there was a relationship. So securitization was the other end of the originate-to-distribute model. And there was a big demand for securitized products, which came in part from foreign investors, but not entirely of course.

To create the raw material for securitized products, you had to have lots of mortgages being made. And as a result, to expand the number of potential home buyers you had to lower the standards. And so you got increasingly weak underwriting, and more and more exotic mortgage instruments being used to expand the number of people who could get mortgages, and therefore buy houses.

And what this did was, I don't remember the exact number, but some very substantial fraction of the mortgages issued in '05-'06 were subprime or at least nonprime mortgages. And that obviously increased the overall demand for houses.

So you see a chain going from demand for securitized products, the demand for raw material, to pressure to weaken underwriting standards to expand the number of people borrowing, to increase house prices. And then it was a circle, because again as house prices rose lenders became even more comfortable making more risky loans, and that just was a self-fulfilling prophesy, at least until prices got to the point where they couldn't be sustained any further.

So there was indeed a connection there.

COMMISSIONER MURREN: And so your feeling is it was really more the demand that was driving the process, as opposed to the push from the originators who stood obviously to do rather well in an environment where they could continue to create and originate mortgages? Or do you think it's both?

WITNESS BERNANKE: So I think if there was a push, it may have come not so much from the ultimate mortgage-makers who themselves are agents of the banks, or investment banks. There was probably some push coming from the folks who were creating those securitized products--the salesmen going out and saying, here's an attractive investment vehicle, look, it's rated AAA.

So there certainly was some pressure coming from that side. But clearly there was an awfully strong demand, both domestically and abroad, for, given how low--in particular, you know, given that Treasury yields were pretty low, and given the demand for longer term safe, fixed-income assets, that demand partly from abroad drove Wall Street to, you know, to create these products to satisfy that demand.

COMMISSIONER MURREN: Terrific. Thank you.

WITNESS BERNANKE: You're welcome.

CHAIRMAN ANGELIDES: All right, Mr. Chairman, just a couple of quick wrapups. I have a couple of quick items and, I know, very quickly, that Member Georgiou and also Senator Graham have a couple of quick questions.

I want to ask you about something we talked about both historically and going forward. We've talked about the challenge of the fact that we have too-big-to-fail institutions, and going forward we have institutions that may be not only too big but too few to fail, fewer institutions, larger scale, and how there will be a challenge of political will for regulators to be as tough as they need to be.

But it seems to me there was and is an accompanying question. And that is one of resources. And I don't just mean resources in shear numbers. I mean, let's be blunt about it. A lot of the Wall Street guys are like greased pigs. They're hard to catch. And, you know, they're inventing new products. Sometimes you can call it "innovation," and as you noted that may be a kind word in many respects.

And I guess my question is: To what extent was the kind of mismatch here a problem? And what will it be in the future? And I don't just mean, look, there's been a diminution of the ethos of public service, there's been growing compensation gaps. Being in the public arena, as we all know, is no picnic. And I guess my question is: What's your confidence level that we can attract the resources?

You know, I saw almost no debate during Dodd-Frank about the resource level, the talent level, that you'd need to be able to have effective oversight. And to what extent was that a problem, and will it be a problem?

WITNESS BERNANKE: No, it's a very good question, and you're right that we can't outspend Wall Street in terms of hiring people, obviously. And they have very strong incentives to evade regulation in certain circumstances.

Just a couple of comments. One is that this is one of the reasons why having some market discipline will be very helpful. We need to have the additional set of eyes that comes form investors. And when we see spreads opening up, or stock prices going down, that's a signal we should pay attention to because clearly you have very talented people who are in the markets and are assessing these firms, and their information, you know, is transmitted to prices.

We should pay close attention to that.

The other comment--and I think one of the things we learned, and we learned this from our stress testing and some other areas, is that we really need to use all our resources.

So it's one thing to have experienced supervisors, and collectively among us, and the FDIC, and the OCC, we have a cadre of very experienced supervisors, but given the innovations in finance, and global capital flows and the like, we need to bring in other expertise as well.

And so at the Fed we have, as I said we've taken a much more multi-disciplinary approach to bring in economists, financial specialists, and other types of experts to support the supervisory work.

So I think that will be helpful. And, you know, Mr. Thomas mentioned how the Fed had retained a lot of the supervisory authority. I think one of the reasons for that was because we have a lot of those skills which are going to be necessary to make this work.

All that being said, you know, it's just simply never going to be the case that the government can pay what Wall Street can pay. And we're going to have to work very hard and watch very carefully to make sure that we, you know, that we are successful in oversight.

Again, we don't have to replicate every business decision, or evaluate every asset. We can't do that. But what we can try to do is make them convince us that they have systems and risk management in place that will plausibly deliver the right answers and give us confidence that they're doing the right thing.

But you're absolutely right, that this is an important issue as a practical matter as we try to implement this law.

CHAIRMAN ANGELIDES: All right. Final question from me, and it's something you talked about and we've talked about internally. I know my friend John Thompson and I have wrestled with this a little. You talked about the magnitude of subprime lending. I think you talked about the order of a trillion dollars.

You talked about the magnitude of this asset class. I think you talked in your testimony about some days we have fluctuations in the market that are as great.

WITNESS BERNANKE: Right.

CHAIRMAN ANGELIDES: And so, again, not to speak for my colleagues here, I clearly see that these toxic assets entered the pipeline and were pushed through it; that these toxic mortgages flowed through this pipeline.

But what I'm trying to get a sense of as we do our work is, as you know a healthy patient or a healthy person can get pneumonia and survive it easily. A frail, elderly patient gets pneumonia and it's the death knell.

To what extent--in this instance it appears this was the infection. I don't necessarily want to do "what if?s" but I'm going to ask it.

What was the dominant phenomenon here? The toxicity, or the fragility of the system? You know, the infection or the weakness of the body?

WITNESS BERNANKE: The theme of my longer testimony was triggers versus vulnerabilities, exactly what you're talking about.

Part of the reason--well, if we had had a healthy, strong, stable financial system, it could have accepted this problem without creating such a major crisis. So I believe very strongly that it wasn't subprime lending, per se--although obviously that was a bad thing and caused significant problems--but rather it was the fact that the system as a whole had structural weaknesses. And so, if you like, the e. coli got into the food supply and that created a much bigger problem.

CHAIRMAN ANGELIDES: But the fact that it was the housing asset, which was so broadly held by 67, 69--65 to 69 percent of the population, the middle class, it was the biggest asset, the fact that the e. coli got into the most widely eaten food product, was that--did that exacerbate it?

Or was it the nature of the securitization that exacerbated it?

I mean, what would have been--could it have happened with other asset classes? And again I don't know that we want to game it, but what were the unique features that allowed this to metastasize?

WITNESS BERNANKE: So if you were just to do a macro economic model and looked at the effects of the house price up and down, and ignored all the financial crisis effects, just looked at the effects on consumer wealth and the like, you would not find anything like the crisis that we've seen. The magnitude would not be big enough.

What caused the crisis was essentially, as--well, there are many things that caused the crisis, but it's the e. coli effect; that there was an awful lot of dependence on short-term, unstable funding, which is analogous to the deposits in banks before the period of Deposit Insurance.

Since these deposits were not insured, they were prone to run. And when people think there's something wrong with the assets they're lending against, even if it's only one percent, or two percent, they say, well, what the hell, I'm going to take my money out, and why should I lend against this potentially risky product?

And that panic, which in turn forced people to sell assets into illiquid markets, brought down asset prices, created more problems for other firms, it was that dynamic that was a very important part of this.

And so I still think of this as more of the trigger, the e. coli, than of the factor that itself would have caused the system to seize up.

CHAIRMAN ANGELIDES: Commissioner Georgiou, for your remaining--

COMMISSIONER GEORGIOU: Thank you. And to follow up on that, Dr, Bernanke, another problem we heard a great deal about during our hearings was this notion of regulatory arbitrage and capital arbitrage, where institutions held assets off-balance sheet to avoid capital requirements, and in some cases mischaracterized assets to put them into categories that required them to hold less capital under the rules.

You know, we talked about Citi at its peak. If you brought in all the dispersed assets, had some $3.3 trillion in assets with roughly $75 billion in capital, which was only a little over 2 percent. And, you know, a third of that got used in one liquidity put on one set of CDOs.

Obviously in hindsight almost everyone agrees, including your predecessor as Fed Chair, that more capital, less leverage would have ameliorated the financial crisis.

It may be facile to say that the system would have been safer had the financial institutions been required to raise and hold more capital, but the mere fact that it's facile does not necessarily make it untrue.

I wondered if you could tell us what the Fed's views are going forward regarding capital requirements, and what particular provisions you put in place to ensure that the financial institutions that have grown so large and are prone to be rescued are well capitalized on a go-forward basis?

WITNESS BERNANKE: Thank you. I think it's important, when you think about the situation going forward, to recognize that there are two big things happening.

One is the financial reform legislation recently passed in the U.S. Congress and signed by the President. The other is a substantial reform of international capital standards, which is currently going on, and I'll be attending the Basel meeting next weekend in Switzerland.

So the United States agrees--Secretary Geithner has talked about this--we agree, Chairman Bair, that stronger capital standards are absolutely essential as one of the key components going forward to assure the safety of the system.

And so what we are talking about with our international colleagues in Basel now is, first, having more capital; having higher quality capital that is not using intangible assets and other things that are not loss absorbing as capital; making capital more risk-sensitive so that it responds more to losses and absorbs losses more effectively; creating some counter-cyclicality in capital so that capital be built up in good times and run down in bad times; and finally, we're working with the accountants and others to--you know, we've gone beyond the situation you talked about where Citi had all these off-balance sheet assets which were not consolidated and has been very largely changed now by new accounting rules which will require consolidation where there is substantial ownership of those assets.

And on top of that, we are looking for international leverage standards, and international liquidity standards. So we expect to have some very substantial improvements in those regulations internationally, to create a level playing field, and I do believe that as we go forward that those rules and their implementation will be of the same order of magnitude of importance in assuring a safe financial system going forward as the changes, very important changes being made in the recent legislation.

COMMISSIONER GEORGIOU: Thank you, Dr. Bernanke.

CHAIRMAN ANGELIDES: Senator Graham, you had a quick closing question?

COMMISSIONER GRAHAM: Yes. Chairman--

CHAIRMAN ANGELIDES: One each, but very quickly.

COMMISSIONER GRAHAM: The Chairman answered the question that I was going to ask which related to what is the status of off-balance sheet items, but I cited earlier a report that there seems to be a weakening of resolve by the Basel Group in terms of liquidity and capital standards.

Does that coincide with what you're hearing? And if so, do you think that we can anticipate adequate resolve at the international level to get these standards where they need to be?

WITNESS BERNANKE: So when you're developing a complex set of capital standards, it is important to consult with the banks to understand, make sure you understand what the implications are for how much capital they'll hold, and how it will affect their business, and so on.

It is important to understand that. You're not making good policy if you don't understand the implications of your decisions.

That being said, that is not the same thing as weakening standards. We want to make sure the standards are rational and effective. And we are committed to very strong standards. And I think you will see, when they come out, that they will be a substantial improvement over the standards that we've had in the last few years.

COMMISSIONER GRAHAM: Thank you.

CHAIRMAN ANGELIDES: Mr. Wallison?

COMMISSIONER WALLISON: Thank you. Just one question.

Bank regulators have, for many years, been concerned about fair-value accounting, mark-to-market accounting, and some have said that that had something significant to do with what happened in the financial crisis.

What's your view of that?

WITNESS BERNANKE: Well I think that mark-to-market accounting at times increased the procyclicality of the system. There were times when markets were highly illiquid and it was very hard to value assets.

That being said, I think we should do our best to get appropriate market values of assets that do have market prices.

Now there is a somewhat different issue when you're dealing with long-term credit in the banking book where there is no secondary market, and appropriate valuation requires, you know, a model or some assumptions.

So I'm in favor of accurate accounting. I think there are sometimes problems when markets are very illiquid and the FASB tried to move in the direction of clarifying how to deal with so-called Level 3 assets in illiquid markets, but I'm also very cautious about applying mark-to-market accounting to the long-term loans, the bank loans in the banking book of the banks.

If I could say one quick thing about the Wachovia question you asked me before, I would just point out that the decisions there, the interventions there, were FDIC decisions.

They must have made--I'm sure they made independent judgments about the best way forward, and with their concern about protecting the Deposit Insurance Fund I'm sure they were trying to find the least-cost solution for that.

COMMISSIONER WALLISON: My question--thank you for that, but my question really was what importance do you think mark-to-market accounting might have had in the financial crisis as we understand it? That is, this huge decline in asset values.

WITNESS BERNANKE: I think it exacerbated it somewhat, but it's the nature of financial markets that asset prices move up in booms and down in crashes, and that is an exacerbating factor, but, you know, we don't want to sacrifice accurate valuations to eliminate that issue. I mean, I don't think you could.

So it was an issue, but I don't think we should conclude from that that we should abandon mark-to-market accounting.

CHAIRMAN ANGELIDES: Mr. Chairman, thank you very much for this second appearance before us during our deliberations.

I also want to reiterate something that the Vice Chairman and others have said. Douglas Holtz-Eakin I know mentioned it specifically. You and your staff at the Federal Reserve have been very forthcoming and very cooperative in terms of providing documents, information, making folks available for interviews, and we appreciate the way in which you have helped us conduct our investigation and our inquiry for the benefit of the American People and for history.

You have been very good in this regard, and we look forward to continuing to do work together as we do our final report. Thank you very much for being here this morning.

WITNESS BERNANKE: Thank you, Mr. Chairman.

CHAIRMAN ANGELIDES: We will now take a ten-minute break, members, and then Chairman Bair will be before us.

(Whereupon, at 11:41 a.m., the meeting was recessed, to reconvene at 11:55 a.m., this same day.

AFTERNOON SESSION

(11:55 a.m.)

CHAIRMAN ANGELIDES: The public hearing of the Financial Crisis Inquiry Commission on the subject of financial institutions that have become too big to fail, too important to fail, too systemic to fail, will recommence.

Thank you, Chairman Bair, for being with us today. We are going to start, as we always do, by swearing you as a witness. So if you would please stand and raise your right hand, I will read the oath to you:

Do you solemnly swear or affirm under penalty of perjury that the testimony you are about to provide the Commission will be the truth, the whole truth, and nothing but the truth, to the best of your knowledge?

CHAIRMAN BAIR: I do.

(Witness Bair sworn.)

CHAIRMAN ANGELIDES: Thank you. Chairman Bair, thank you for your extensive written testimony. What we would like to ask you for now is obviously to present to us orally. We will provide you up to ten minutes to do that. You know how the lights work, and the mikes work, you're a pro at this, so if you would start your testimony that would be terrific.

WITNESS BAIR: Chairman Angelides, Vice Chairman Thomas, and Commissioners:

I appreciate the opportunity to testify today on systemic risk and ending too big to fail. The events of September 2008 dramatically illustrated the flaws of our former regulatory and bankruptcy framework for responding to distressed large and complex financial institutions.

My testimony discusses two cases, Washington Mutual and Wachovia, that demonstrate the dilemma we faced between the risk of a wider financial crisis and the prospect of bailing out bank owners and creditors.

While the FDIC was able to resolve WaMu under our normal procedures without creating further disruption to the financial system, an accelerated time frame, a lack of information, and a complex organizational structure made the dilemma worse at Wachovia.

Because the risks and uncertainties of creating wider market instability were just too great, we invoked the Systemic Risk Exception for the first time, and were prepared to implement a resolution on that basis.

As events unfolded, however, that resolution plan was not carried out because Wachovia was sold in an intervening private transaction. But the problem was equal or even more pronounced for other large nonbank organizations that faced collapse at about the same time. Most notably, the critical shortcomings of the bankruptcy process as applied to large financial institutions was demonstrated by the market reaction to the September 15, 2008, collapse of Lehman Brothers.

The provisions of the Dodd-Frank Act provide new regulatory tools to preserve financial stability and protect Taxpayers from losses sustained by large financial firms.

Resolution plans mandated by regulators and created by the institutions themselves will specify how a systemically important institution could be resolved and will help to ensure that the complex structure of an institution does not prevent its orderly resolution.

Backup examination and enforcement authority will give the FDIC better information in advance about systemically important institutions, making it more likely that an orderly resolution can be achieved.

The FDIC has already updated its supervisory memorandum of understanding with the other federal banking regulators to enhance our existing backup authorities.

Finally, the new resolution authority will make the FDIC's liquidation process available for bank holding companies and nonbank financial companies to provide a means to unwind them without disruption, delay, and uncertainty usually associated with bankruptcy.

Had these authorities been in place in 2008, the FDIC would have already had a detailed resolution plan for Wachovia. We would have had better information about its structure and risk profile, and we would have faced fewer impediments to effecting its orderly resolution.

In short, Wachovia, or Lehman for that matter, could have been resolved without a bailout and without disrupting financial markets.

More importantly, had the current law been in place in 2008, investors and institutions like Wachovia or Lehman would have had every reason to expect losses in the event of failure and would have exerted more effective market discipline over their activities.

Finally, I would like to highlight what I see as three main areas of priority for implementation under the new law.

Under the new Orderly Liquidation Authority, the largest financial firms must develop credible resolution plans, working with the FDIC and Federal Reserve, so that we have the information and planning needed for an orderly resolution.

It is critical that Living Wills are not simply a paper exercise. This planning process should affect business decisions so that the companies operate more efficiently and reduce the possibility of any future collapse.

Under the law, they can be required to make changes if necessary to avoid creating undue systemic risk.

We are working with our international partners to achieve legal reform for a more cooperative international insolvency process.

These are all key steps in truly ending too big to fail. I view the Financial Stability Oversight Council as a forward-looking forum for members with diverse expertise to share their specialized knowledge, and to make recommendations on addressing emerging risks to the financial system. But regulators must have the courage to act on the Council's recommendations if we are to address systemic risks before they resolve any damage to our economy.

Reforms to bank capital requirements under consideration by the Basel Committee will serve to weed out hybrid instruments that weaken the capital structure, add new capital buffers so de-leveraging need not crush lending in a crisis, and place higher capital charges on the riskier derivatives and trading activities.

I urge a prompt finalization and implementation of new Uniform Global Capital Standards so that regulatory uncertainty can be reduced and investors can regain confidence in the long-term stability of our global financial system.

If financial reform is about anything, it should be about stabilizing the financial system so that it can meet the credit needs of the real economy and support long-term sustainable growth.

To be sure, as I've previously testified before this Commission, regulatory policy is but one component of restoring a more vibrant economic future. A fiscal policy that promotes the efficient allocation of resources is also essential.

In this regard, we hope the Congress will review the large level of government support provided to home ownership to determine whether it has resulted in the most productive allocation of resources.

For our part, we are working with our regulatory counterparts to promptly implement regulations in the areas of liquidation authority and the Financial Stability Oversight Council. And we are working with our counterparts on the Basel Committee with regard to international capital standards.

We are approaching these tasks with both the sense of urgency and a considered view toward the long-run effectiveness. Only if we create strong frameworks now for exercising our authorities under the Dodd-Frank Act can we succeed in putting our financial system on a sounder and safer path for the long term.

Thank you very much.

CHAIRMAN ANGELIDES: Thank you, Chairman Bair.

We will now move to questioning.

So let me start the questioning, per usual. One thing that struck me in the runup to the System Risk Exception for Wachovia is the extent to which there was really no look at the systemic implications or risk. And I know that folks say, well, that wasn't the role, but it does seem to me that in the context of safety and soundness that people can also look, or regulators could have looked at the larger risk to the system.

The Fed seeks risks as early as '07. The downgrades by the Fed and the OCC don't come until '08. I know you're not the primary supervisor--I think you've got one on-site examiner.

You yourself say, I believe in your interview with our staff, that you really didn't, I don't think you got notice of the run until Friday, which is when it occurred. And you don't really have real knowledge of their condition until Saturday. Is that an accurate statement?

WITNESS BAIR: Yes.

CHAIRMAN ANGELIDES: To what extent was this just a glaring hole in the system? Should regulators, as a whole, have taken the larger view? And could they have? Isn't it too simple to just say, well, that wasn't in our job description?

WITNESS BAIR: Well, we won't say that. I do think there were earlier warning signs. You're right. And in fairness to the other regulators, we were earlier in the week, we did see some escalating distress, liquidity distress with Wachovia. We were told Friday morning that it was under control, and it wasn't until Friday night when we were told there a liquidity crisis that could actually--that necessitated some weekend action.

So it was a very short timeframe to deal with this. And I do think, in retrospect, we were operating with imperfect information. We were relying heavily on the primary regulators, as we needed to.

As you know, we only had one of our own examiners, as a backup examiner, in Wachovia. And that is not to criticize the primary regulators. Everybody was working very hard and doing their job, but we have a distinct role. They had $265 billion of exposure in insured deposits. They had responsibility for an orderly resolution if the institution could not maintain its obligations.

We needed more information to make a decision, direct information and an ability for us to independently assess the situation, and make decisions that we were comfortable with.

So that is a lesson that I learned going forward, and this is one of the reasons why we renegotiated our Memorandum of Understanding with the primary regulators. We will now have five examiners full time at these very large institutions, with others on an as-needed basis. And that will be for any institution, regardless of its CAMELS rating or how healthy it is, given the size of the institutions and how quickly they can deteriorate and this will be an ongoing presence.

And we also have the additional authority now for holding companies, as well. This is Wachovia, and like WaMu Wachovia had a significant amount of securities activities that occurred outside of the insured depository institution, which we had no information about at all because prior to Dodd-Frank our backup authorities only extended to what was going on inside the insured depository.

CHAIRMAN ANGELIDES: All right. You clearly had--we, as you know, put on the record yesterday the transcript of the FDIC Board meeting in which you considered the System Risk Exception for Wachovia. And you clearly had significant reservations.

You've said: Well, I think this is one option of a lot of not-very-good options. I would note for the record that both Treasury and the Federal Reserve Board weighed in early for us to provide a System Risk Exception. You say: I've acquiesced in that decision. I'm not completely comfortable with it.

I'm looking for my notes, but I think you also in interviews with the staff indicated that this was something that the White House and the Federal Reserve wanted to move on.

Were the reservations just ones of you're trying to absorb it Saturday and you've got to make a decision--

WITNESS BAIR: Right.

CHAIRMAN ANGELIDES: --early Monday morning? Or were there some fundamental reservations about, for example, apparently--not getting into the gossip of who was mad at who--but there did seem to be, according to your interview, a philosophical difference when then New York Reserve--Mr. Geithner, how's that, it's been a long series--Federal Reserve Board of New York president, Mr. Geithner, a disagreement about whether creditors, bondholders, should be fully protected.

What were the reservations?

WITNESS BAIR: Well, I think--I don't think there was any question in my mind we had to do something that weekend. And we had--the system was highly unstable. We had a very successful, I felt, resolution of WaMu.

But other things were going on. The TARP bill was in flux. Lehman I think served as a catalyst for all of this. We had had a stabilizing event with Indy Mac earlier, where we'd had a bank run before and after the bank closing. So we had redoubled our efforts to assure insured depositors that their money was safe.

But my worst--we were guaranteeing about $5 trillion of insured deposits, and my worst nightmare was that bank depositors would start losing confidence in the system and pull their money out.

We had already lost wholesale funding. The shadow sector had completely seized up. Insured deposits were staying, but if that changed we would have truly had a cataclysmic situation.

So I didn't feel that we could afford on Monday morning any risk that Wachovia would open and run out of money, or have a disruptive situation. That was just not a risk that we could tolerate.

So it was clear to me over the weekend we needed to do something. Really the issue was whether we did the System Risk Exception and provide what we call Open Bank Assistance to them, or whether we tried to put it through a normal resolution process.

That was the discussion I wanted to have more of, but the time just did not permit it. And at the end of the day, I don't second-guess what I did. The statute clearly says that this needs to be a collaborative decision with the FDIC, the Fed, and the Treasury, in concurrence with the President. And the other parties had spoken on this and felt strongly that a Systemic Risk determination with Open

Bank Assistance would provide the greatest amount of stability.

So there was a philosophical disagreement over, you know, bondholders. We don't feel--I felt and still feel that equity shareholders and term bondholders know their money is at risk, and should understand they take losses, especially with insured banks where the process has been around for a long time and should be, and I think is, clearly understood by the market.

So there was a philosophical disagreement. That isn't to say I'm right, or anyone is wrong, it's just that it was, and it was a factor in these discussions. But I don't look back. We had a discussion. We made a decision. We moved on. And the good news was, on Monday the decision we took over the weekend did stabilize the situation for Wachovia.

CHAIRMAN ANGELIDES: And I guess on reflection, and this isn't second-guess, but with respect to WaMu you did not fully protect bondholders, right?

WITNESS BAIR: We did not. We did not.

CHAIRMAN ANGELIDES: And you think that was the right decision?

WITNESS BAIR: I absolutely do think that was the right decision.

CHAIRMAN ANGELIDES: For market discipline purposes?

WITNESS BAIR: Yes. Absolutely. WaMu was not a well run institution. I think that was clear from our supervisory perspective.

CHAIRMAN ANGELIDES: When the OTS let you in, right?

WITNESS BAIR: That's right. And Permanent Subcommittee investigations in the Senate did a very good review, as well. And there were a lot of troubling things going on at that bank. And we can debate about whether regulators should have been more on top of it, but, you know, it shouldn't be just regulators; it should be shareholders, and creditors putting pressure on those institutions, too, for better risk management. And that was not done.

And so that's where the losses should have been, and I think it was a very appropriate resolution. And it was consistent with our statutory process. That is the process Congress told us to use.

CHAIRMAN ANGELIDES: Right. I'm going to surprise my fellow members by saying this is my last question to you, at least for now.

And that is, as I have read the materials prepared for this hearing, this portion of our investigation, not only interviews with all the principals, but also historical materials. Our staff prepared an excellent staff report for us, which has now been posted on the Web, in which they traced the history of bailouts over time.

And there's this pattern of institutions growing like a weed, using high leverage, taking on enormous risks. I think we've seen it all along the path. I mean it is, as I've said, it's almost like financial groundhog day again and again.

You look at this, and it's hard not to come away with a view that what Wall Street has needed is not a series of bailouts but a financial intervention.

(Laughter.)

CHAIRMAN ANGELIDES: But what I'm concerned about at this point is, how do you break this repeat pattern? And it is something we asked Chairman Bernanke. The fact is, we have fewer, bigger banks now. It is going to be an enormous test of will of the regulators to be able to constrain--you know, it's always hard.

I think you said in your interview the job is to take the punch bowl away. And that is the job of prudential regulators. But tell me the risks you see here and the challenge of that. And to what extent was that a failed challenge in the run-up to this crisis?

Everything was good. People were booking profits--

WITNESS BAIR: Yes.

CHAIRMAN ANGELIDES: --very hard to be the ones to say: This is spiraling out of control.

WITNESS BAIR: Right. Well, that's right. It is the job of regulators to take away the bunch bowl. You need to do it when times are still good. You don't want to wait, once things start turning bad. It's just going to be too late.

But that requires political support, as well. And I think in the early 2000s there were efforts to try to rein in some of these really questionable mortgage lending practices that we were seeing when I was at Treasury, and there was just no political will to do that.

So I think that has to be--I think the new Financial Stability Oversight Council is the vehicle where Congress has placed accountability for making those decisions with that Council. And it will be our job, and we need to have the courage to exercise the decisions, and do so even if we get pushback from it. Because you need to act when things are still profitable.

If you wait until the losses start occurring, it is going to be too late. I think I do not under-estimate the importance for increased capital standards. Excess leverage--the combination of excess leverage with too big to fail was a toxic combination in feeding this crisis.

And, you know, the private sector held the up-side, with the assumption being that the government was going to take the down-side. That in and of itself fed risk-taking.

So getting rid of too big to fail, restoring market discipline through effective resolution authority, and increasing capital requirements to de-leverage, making sure that there are bigger cushions there so when the next cycle comes--there will be another cycle. We can't do away with cycles.

But when it comes, there is more of a capital cushion to absorb the losses so you won't have a situation where you've got to do a government bailout or confront a failure situation.

So I think the tools are there. The regulators have to use them. But the Congress and the political leadership need to support the regulators when they need to make unpopular decisions.

CHAIRMAN ANGELIDES: I'm going to break my own rule, because you just said something that I've got to follow up on. Do you really believe at this point that the market believes that the too big to fail doctrine has been broken?

WITNESS BAIR: Well, I think it's up to us to effectively inform the new authorities that Congress has given us. I think if they think it is still around, I think they should read the statute itself. The statute--and we pushed for this language--the statute very specifically prohibits any kind of open-institution assistance.

So what happens, it's going to have to be Congress doing it. Because the regulators simply have no authority to do bailouts anymore, and we think that is a good thing. We don't think we need it, if we have resolution tools, which Congress also gave us.

CHAIRMAN ANGELIDES: Thank you very much, Chairman.

Mr. Vice Chairman?

VICE CHAIRMAN THOMAS: Thank you. I am tempted, but I guess I won't ask you if the scope of the legislation extends to Kabul, Afghanistan, based upon this morning's--

WITNESS BAIR: Well, no it doesn't, but we have made a high priority of--we have a lot of education and training that we do with developing countries. I don't think Afghanistan has been one of them, but I think this is a key issue of having deposit insurance systems, and credible deposit insurance systems, in developing countries as well.

VICE CHAIRMAN THOMAS: I do want to thank you for your written testimony, especially because--I don't know if

I've been reading as widely as I normally do, but I have not really seen--let me say, I thought your testimony, the written testimony, was very good in a succinct way on where we were, where we are, but more importantly where we can go. Now I don't know whether we will go, but that we can go.

WITNESS BAIR: Right.

VICE CHAIRMAN THOMAS: One of the difficulties, especially in these very complex areas today, we used to just go ahead and bite the bullet and make law. And then of course you have a statute that you have to deal with, and then you get to promulgate regulations from a narrow opportunity.

I think it does make sense, once we come out the other side of these, to pass law with significant regulatory capability in fleshing it out, because it makes it not only timely and appropriate but I think the better value is that there can be adjustments over time without having to go back through.

The problem with that course is, you have this big splash about having passed the law, and then you've got to roll all the regulations out.

What was your reaction, and how should we read the--it's in the SEC's jurisdiction, not yours, but it was the first one out of the chute in terms of the rating agencies.

WITNESS BAIR: Right.

VICE CHAIRMAN THOMAS: It's kind of like Bear Stearns and then Lehman. That was an aberration, and hopefully the next few that role out will be well done, done in a way they don't get flipped or put on the spot like we did with the rating agency adjustment attempt.

What was your take on that event? You had preferred something else rolling out first?

WITNESS BAIR: Well I think actually the legislation itself really eliminates the ability of regulators to use ratings in any way.

VICE CHAIRMAN THOMAS: Right.

WITNESS BAIR: And so certainly with structured financial products the ratings were a terrible failure, and definitely fed the crisis. That's not to let investors off the hook. Investors should have been doing their own due diligence, too. But the ratings were not good.

I think--and for corporate debt, there's a better record, frankly. And to eliminate our ability to use them at all, especially in more traditional areas, for the ratings to perform better is going to create some unique challenges for us. Especially for the smaller banks, we rely on ratings of certain types of investments that they hold, in terms of the risk weighting, how much capital they have to hold against those exposures.

And so if we can't use ratings at all, we have to find something else. And I'm not sure that there are alternatives out there that are going to be any better, or cost effective, especially for smaller banks.

So that said, Congress has told us they don't want us to use ratings as all. So we are going to do our best to make that work. We have an ANPR out, an Advanced Notice of Proposed Rulemaking out, asking for comments on what kind of alternatives we can use for banks in setting capital standards, where we do rely on ratings a lot.

And so I'm hoping we can get some good thinking on that and move forward in a way that's consistent with Congressional intent. But it was quite sweeping in its elimination of the use of ratings.

VICE CHAIRMAN THOMAS: And it was pretty reactive in terms of the Street's reaction to that, at least on an initial basis in terms of the rating agencies.

WITNESS BAIR: Right--

VICE CHAIRMAN THOMAS: I mean, they weren't going to rate.

WITNESS BAIR: There was, but I think the SEC acted very quickly to provide the relief that's necessary.

VICE CHAIRMAN THOMAS: But if you don't want to have that repeated 232 times, or it's going to be a long time getting where we need to go.

WITNESS BAIR: That's right. And I think we are all committed to being very careful, deliberative, and transparent about this, as well.

VICE CHAIRMAN THOMAS: And then a specific point, because you have a--you're in front of us, and you had a unique role on the Wachovia weekend.

On page 10, as you run through what happened and the choices, I was struck--and I've mentioned this over the two days of the hearings--that when you look at September 28, 29, and then 30, and as the chairman indicated the minutes, it was clear that you had to take an extraordinary position--i.e., an extraordinary measure--which it was assumed would not put you at risk, but there was a potential for risk.

I imagine it was fairly animated in terms of behind-the-scenes discussions with all the players to reach that point, not withstanding you came out with a unanimous decision--that's what happens when you break a huddle;

WITNESS BAIR: That’s right (laughter)

VICE CHAIRMAN THOMAS:

-- everybody's now on the same page, and that was an indication that you decided that was where you were going to go--and it isn't so much the decision you made on the 29th, given the options available to you. What kind of floored me was that one day later the Internal Revenue Service decides to put out the 83 Notice, which changes two decades of IRS Code tax behavior.

And then, three day I guess--two days after that, the deal which apparently was very difficult to come to a conclusion that would be offered to save Wachovia, is gone and Wells Fargo offers a no-strings-attached arrangement.

And what I have heard from some folk is that, not withstanding that very interesting timing, that the Tax Code change which was made by IRS, which was repudiated almost as quickly as Congress could get itself focused on removing that because it was a rifle shot for banks only, had no consequence in the decision between your difficult motion to take extraordinary action and Wells Fargo wrapping up a deal that had no involvement by the FDIC, or frankly virtually anyone else on a financial commitment.

Was that all coincidence, circumstance, interesting string of events that had no relationship?

WITNESS BAIR: Yes, sir. We had no--we had no knowledge of anything going on over at the IRS. It was not a factor on decisionmaking at all. It came as a complete surprise to us.

VICE CHAIRMAN THOMAS: But it was fortuitous, right, because--

WITNESS BAIR: It was.

VICE CHAIRMAN THOMAS: --it relieved the FDIC of any responsibility. And of course the Fed had no stake in the game, so the only folk that potentially were at risk now was, once again, a loss of revenue if in fact it was as big as some people say, ten times the amount that otherwise would have been available.

WITNESS BAIR: Right.

VICE CHAIRMAN THOMAS: So it is just all coincidental.

WITNESS BAIR: It was--yes--

VICE CHAIRMAN THOMAS: From your perspective.

WITNESS BAIR: From my perspective, we didn't know anything about it. We were surprised by it. And we had no say in this. So once Wells came in, it was a private transaction.

So, no, it was not a factor at all.

VICE CHAIRMAN THOMAS: But it was a public change in the law by an Executive agency which, even in their IG's statement, probably wasn't lawful, and in most of the tax expert academia was clearly an over-reach.

WITNESS BAIR: Right.

VICE CHAIRMAN THOMAS: And there was no discussion at Treasury in looking at options, or provide alternatives in which they decided to go ahead and go forward?

Why in the world--and I know you--

WITNESS BAIR: I don't know.

VICE CHAIRMAN THOMAS: --to answer, but I'm looking--why in the world would they pull the trigger on the 30th based on the difficult decision you reached in your minutes?

WITNESS BAIR: I don't know if the IRS was aware of what we did. They were completely different things going on. And I'm not a tax lawyer. I will defer to you in terms of you obviously are very expert in tax matters, given your former chairmanship of House Ways and Means.

VICE CHAIRMAN THOMAS: Those don't necessarily follow, but--

(Laughter.)

VICE CHAIRMAN THOMAS: --but I appreciate the comment.

WITNESS BAIR: I can't speak to it. I don't know what was going on at the IRS, and I assume they were completely devoid of what we were doing.

I don't think there was any knowledge on their part, not that I'm aware of--I don't know. Again, we were surprised by it. It just happened.

VICE CHAIRMAN THOMAS: I just wanted to ask you that so we could put that on the record.

WITNESS BAIR: Yes, absolutely.

VICE CHAIRMAN THOMAS: It was an amazing series of events, as far as I'm concerned, that led to a completely different resolution.

Were you surprised by the Wells stepping up to the plate--

WITNESS BAIR: Yes, I was.

VICE CHAIRMAN THOMAS: --and making that move?

WITNESS BAIR: Yes, I was.

VICE CHAIRMAN THOMAS: Okay, that's good. That's a nice niche I can put that in. Thank you, very--well, I think a lot of us were surprised. Thank you, very much. I really appreciate, once again, the help that you have given us early on and your continued willingness, obviously, if we want to ask you some questions after this I know you will respond--

WITNESS BAIR: Yes.

VICE CHAIRMAN THOMAS: --and provide us with that additional information.

WITNESS BAIR: Absolutely. Thank you.

VICE CHAIRMAN THOMAS: Thank you.

CHAIRMAN ANGELIDES: Mr. Holtz-Eakin.

COMMISSIONER HOLTZ-EAKIN: Thank you. And thank you for spending this time with us.

First, just for the record, we ask everybody all the time, and in particular Mr. Bernanke, if he could rerun history would monetary policy look different? Would regulation of mortgage origination look different?

Looking back, what should the FDIC have done differently in the runup to, and the crisis itself?

WITNESS BAIR: Well that's a good question. I think we should have been more attentive to our backup authority, and our resolution functions. I think, when I came to the FDIC in June of 2006 we were heavily focused on the supervisory side. Primarily smaller banks we were the primary regulator of.

We had just gotten authority to risk-adjust our own insurance premiums from Congress, which was very helpful because there had been an extended period of time where under the law we basically couldn't charge banks anything for their deposit insurance. So we weren't building up the Fund as we should have been. And we weren't adjusting those premiums on the basis of risk.

So we implemented those authorities very quickly. And I think we also eliminated--there was something called the "Merit System" that had been put into place before I came.

That basically was a very streamlined examination process, which I didn't think was prudent. I think any bank, even if it's a perfect CAML picket one, picket fence rated one institution, should have its loan files looked at. And so we got rid of that.

So we did try to turn course a bit and start providing more supervisory vigor. And in retrospect, though, I think we should have focused more on our backup authority and getting better up-to-speed on the large institutions.

So I think in terms of the FDIC's role, I wish we had moved on all those issues earlier.

COMMISSIONER HOLTZ-EAKIN: I want to now talk a little bit about the WaMu episode. Chairman Bernanke just testified, and if I remember how he said it correctly, he said the failure of WaMu caused Wachovia's liquidity runs.

You just said the WaMu resolution was very successful--I think those were your terms?

WITNESS BAIR: Yes.

COMMISSIONER HOLTZ-EAKIN: Do you have any regrets about the way it was done? And what were the other options that you felt were inferior?

WITNESS BAIR: Well I think there was a culmination of events that led to Wachovia's liquidity problems. And if there was a connection between WaMu and Wachovia, it was now how the resolution of WaMu was handled; it was the fact that WaMu had failed for reasons related to a very large Option ARM portfolio on the West Coast, which Wachovia also had because of its Golden West acquisition.

COMMISSIONER HOLTZ-EAKIN: And he said that, just to be clear.

WITNESS BAIR: So that would be--no, I don't think that the way that, you know--with WaMu we put that out for competitive bidding. We were able to get a bid where all the uninsured depositors were protected, and most of the general creditors, the services providers, et cetera. So it was really term debtholders that will have some recovery, and equity shareholders that took the losses.

But Wachovia was losing uninsured deposits; they were losing transaction accounts; they were losing derivatives counterparties. It was part of a larger escalating--I would use the word "panic," but it was a near-panic situation from a whole series of events--Lehman, AIG, the uncertainty of the TARP legislation. And the market was confused. The market was absolutely confused.

And even though Lehman--excuse me, the WaMu process shouldn't have surprised anybody, because for banks we did have a statutory process in place that's been around for a long time and should have been well understood by the market.

It was a financial institution, and that was different from what had happened with Lehman, with what had happened with AIG, with what had happened with Bear Stearns, and I think the market was confused.

So that's why I think it gets very important to have this resolution authority, so the market will now understand: it will be bankruptcy, or it will be this resolution. But under both processes, the claims priority is pretty much the same.

COMMISSIONER HOLTZ-EAKIN: Let me ask a little bit about that. When they conducted the stress tests, it was announced that the 19 large banks would not be subject to prompt corrective action--

WITNESS BAIR: Um-hmm.

COMMISSIONER HOLTZ-EAKIN: --based on the discovery in the stress test, despite the fact that in FDICIA prompt corrective action is not discretionary; it's nondiscretionary. How do you feel about that?

WITNESS BAIR: Well, I think--I'm not sure--I don't recall that we specifically said we would not follow prompt corrective action.

I think what was said was that the Treasury would stand behind--to the extent these banks' capital deficiencies were identified at these banks, they would be given time to raise private capital, if they could, and the Treasury would come in with the TARP capital investment.

So either through TARP or through private capitalizations they would stay above their PCA levels. The government was not going to let those 19 banks become insolvent. So I think that was--so I don't know that that is really inconsistent with PCA, because it really involved a commitment to keep them above PCA through TARP investments, if necessary.

COMMISSIONER HOLTZ-EAKIN: I guess the reason I asked was, looking forward, you know, the new resolution regime and, you know, the Dodd-Frank legislation, is described as nondiscretionary.

WITNESS BAIR: Um-hmm.

COMMISSIONER HOLTZ-EAKIN: Will market participants really believe that, in light of this episode?

WITNESS BAIR: Right. Well, again I think the--I don't think it was inconsistent with PCA. I also--you should also--we should focus also on the fact that PCA only applies to insured depository institutions. Those 19 institutions were not just banks with holding company structures, major investment banks. But again, I think the commitment was through the TARP to keep them above--so they didn't go below PCA. The government would not let them hit that 2 percent trigger.

So I don't know if that's inconsistent with what the PCA constrains. You know, the law is what the law is. And we pushed very hard for very explicit statutory language that says we can't provide, and the Fed can't provide, open institution assistance anymore. They have to go through a resolution process.

The only time the government can step in is where a system-wide support--and perhaps that type of situation can be viewed as system-wide support, I don't know, but we would not want individual institutions to ever be bailed out, and I think the statute is very clear on that point.

COMMISSIONER HOLTZ-EAKIN: So I'm fundamentally evil, so I--

WITNESS BAIR: Okay, that's fine.

COMMISSIONER HOLTZ-EAKIN: --I think of things all the time, so imagine the Fed--we won't use the FDIC--but the Fed in principle can open up facilities eligible to everybody under the law, and then an individual bank could show up, and they could assess their collateral and say we can help you, and everyone else they could decide their collateral is not good enough.

Does the law really restrict actions to open, individual institutions?

WITNESS BAIR: Well, I think the 13.3 restrictions are not as stringent as they are on us, and frankly we push. We thought that the 13.3 restrictions should be just as stringent as they are for us. And we will have to--well actually now we have to go to Congress, as well, for any kind of debt-guaranty program.

Congress did not restrict the Federal Reserve Board so significantly. But it does have to be generally open to everybody. I believe it's supposed to only be to solvent institutions. I believe there's an express provision that says if the government takes losses on those facilities, that immediately triggers either a bankruptcy or a resolution. So they will have to be closed, and the shareholders and creditors will have to take the losses, with the government having the first-priority claim.

COMMISSIONER HOLTZ-EAKIN: Okay. To switch subjects just a little bit, I've always wondered, the role of this in the financial crisis. One of the unique features of Fannie Mae and Freddie Mac, among many others, is the fact that there are no restrictions on the amount of their securities that banks can hold in their portfolios.

WITNESS BAIR: Yes.

COMMISSIONER HOLTZ-EAKIN: And so question number one is, in terms of transmission of the crisis how significant do you think that was?

And question number two: The decision to wipe out the preferred holders, many of which I believe were your insured banks, how much did that impact the FDIC directly and the transmission of this crisis?

WITNESS BAIR: Right. Well, I think the internalization of risk in the financial sector is a huge problem. And this is one of the things that we want to focus on in our resolution plan, is requiring all of these large bank holding companies and other nonbank systemic entities to give us in detail who are their counterparties, who does hold their debt, who does hold their debt equity.

Because nobody has a big picture now. And it was difficult for us to try to project who was going to take--who could potentially be put over the cliff with Fannie and Freddie and the preferred being wiped out.

It turns out, we did on an inter-agency basis, obviously this was not a result that the Treasury wanted, and I on the margin did increase our losses, too. But I think for the most part the failures occurred with banks that were pretty weak and probably wouldn't have made it anyway.

And we did provide additional time, which we are allowed to under statute in prompt corrective action to give them an additional time to have capital restoration plans, and a lot of them did. Some of them were not able to do so.

But I think it does--you're right. It underscores a broader problem: there's too much internalization. I mean, one of the Basel Accord provisions will also eliminate the ability to count as capital equity held by another financial institution. That is extremely important. Because if you have the--you know, if you're faced with the situation where, by closing one entity and imposing market discipline, you may precipitate the closing of five others because they all have such tremendous exposure, then you've got a real problem.

So I think this is something we've been very focused on. And again, we will want to have--I think the Basel Capital rules are addressing it in part, and we will work through our resolution plans that we require these large satellite institutions to have more more transparency across the board for all of them.

COMMISSIONER HOLTZ-EAKIN: Thank you very much. Thank you, Mr. Chairman.

CHAIRMAN ANGELIDES: Can I ask for just a quick clarification? And maybe I missed it when you spoke. When the GSEs were put in the conservatorship, was there a consultation with you with respect to how it was done such that it wiped out the preferreds?

WITNESS BAIR: We were asked by Treasury to try to give them an analysis of how many banks would fail. And we did that analysis. And we were operating under imperfect information. We thought the number was fairly small.

It did turn out--there were some that were affected--but it did turn out to be fairly small.

CHAIRMAN ANGELIDES: And do we have that analysis? I would just ask that we get that analysis.

WITNESS BAIR: Okay.

CHAIRMAN ANGELIDES: Okay, thank you. All right, Mr. Georgiou.

COMMISSIONER GEORGIOU: Thank you, Mr. Chairman, and thank you Chairperson Bair.

A problem that we've heard a great deal about during our hearings was this notion of regulatory arbitrage and capital arbitrage when institutions held assets off-balance sheet to avoid capital requirements, and in some cases purposefully characterized assets in particular ways to put them into categories that required less capital to be held under the rules.

And now, with your authority extended I suppose to really all these institutions that include a depository function, even at Citi we found at its peak that if you'd brought everything on balance sheet they had something like $3.3 trillion of assets, and about $75 billion of capital, which was just a little over 2 percent net/net.

You know, obviously we've heard from other people in hindsight that everyone agrees that if there were more capital and less leverage that the prices might have been ameliorated.

I wonder if you have a view as to what the--how to address this issue on a go-forward basis?

WITNESS BAIR: Well I think both the accountants, as well as the Dodd-Frank help with this. FAS 166 and 167 requires a lot of assets that were off-balance sheet to now be counted on balance sheet. We also in terms of arbitrage and capital standards that were generally higher inside the bank and outside the bank, we supported very strongly Senator Collins' amendment to require that the capital levers for bank holding companies, as well as nonbank systemic financial entities, has to be at least as high, the capital has to be at least as high as what we require generally applicable to any bank, large or small.

So this will help--I think this will help a lot in terms of ending the regulatory arbitrage that exists between doing things in the bank or doing things outside the bank where you could have greater leverage. It now has to be uniform. So the generally applicable standard for banks will come before for bank holding companies as well as for other nonbank systemic entities. I think this will be a tremendous help to us.

COMMISSIONER GEORGIOU: Can you give us an example of how that might impact a particular institution? I mean, how much additional capital, either as a percentage--as a percentage would that customarily require?

WITNESS BAIR: Well, we have actually run some aggregate analysis. I'd be happy to get the aggregate numbers to you. I don't know them off the top of our head, but it will increase capital levels at holding companies. We've done it for bank holding companies. We haven't--since the Council has not designated any particular nonbank financial entities yet as systemic that would be subject to this, we wouldn't have that. But for the impact on bank holding companies, we could share some information with you on that.

COMMISSIONER GEORGIOU: I'd appreciate that, if you would provide that.

We have heard, pardon some people's skepticism, that we've ended the too-big-to-fail problem. I hope we have, but it's not entirely clear.

WITNESS BAIR: Right.

COMMISSIONER GEORGIOU: A lot of institutions have grown enormously. We have these statistics that have been brought to our attention by our staff that the top six banking institutions held roughly--their assets were roughly 17 percent of US GDP in 1995, gone up to 38 percent in '02, 58 percent in 2007, and given the disappearance of some entities and the merger of some entities into the larger ones, they've actually gone up from 58 percent to 63 percent of GDP in 2009.

So these six institutions at least--Bank of American, JPMorgan Chase, Citigroup, Wells, Goldman Sachs, and Morgan Stanley--all appear even today to be institutions which, if they were stressed as they were two years ago, would be candidates for assistance of some sort from the government, not withstanding the prohibition on particular assistance to single institutions that's in the Dodd-Frank bill.

I wonder if you could speak to that: If you really believe, if push comes to shove, these institutions will be allowed, with the new resolution authority, to dissolve themselves?

WITNESS BAIR: We do. I think over time there will be market pressures to downsize. I think increasing capital requirements will create some pressure to downsize.

I think increased market discipline through new resolution authority will also create pressure to downsize. But I do think that with the tools we have available we can do an orderly resolution. We can do it more effectively once we have their own living will plans. But for the largest entities that have dominant depository institutions, there's a lot of information about them already.

So I think, yes, we can use this resolution mechanism if we need to for institutions even of that size. And we have the capacity to move the key functions of the entity into a bridge bank and fund it temporarily to keep the franchise available as we market and sell it off. And this is a tool that we have used for many years, and it works quite successfully.

So we do think it will be a system that will work better than bankruptcy, and it certainly is a much better alternative to bailouts.

COMMISSIONER GEORGIOU: Okay. I think really, if I could, Mr. Chairman, I would like to reserve time and perhaps I will come back afterwards. Thank you very much, Chairwoman Bair.

CHAIRMAN ANGELIDES: Thank you. Senator Graham.

COMMISSIONER GRAHAM: Thank you, Mr. Chairman. Thank you, Madam Chairman.

I am concerned with the statistics that Commissioner Georgiou just stated about the increasing level of concentration in our largest financial institutions.

Why do you think this is happening? And what's the argument that it's in the public interest?

WITNESS BAIR: I think it happened because of too-big-to-fail. I think the bigger you got, the more you had an implied government backstop. And the more investors were willing to pump money into you to get highly leveraged returns. I think it's a combination of the implicit government backstops for very large financial institutions, combined with capital standards that were not high enough.

So I do think over time--I will also say under Dodd-Frank that the new Financial Stability Oversight Council has the ability, at the Fed's initiative I believe, to start requiring divestitures if it's determined that this institution poses a systemic risk currently.

We also, the Fed and the FDIC jointly, if these institutions do not submit a living will--i.e., resolution plan--that we think is sufficient to show they can be resolved in an orderly way, we also have the power to start ordering divestiture.

So those are pretty extraordinary tools, but those are tools that are available to us in the new law.

COMMISSIONER GRAHAM: Do you believe there is the political support, both in the Executive Branch and in the Congress to implement these available powers to begin the process of restraining the growth of these large institutions?

WITNESS BAIR: Well we'll find out soon. I think we certainly are forging ahead, and I think everybody else is just as committed.

I think you heard Chairman Bernanke is highly supportive of resolution authority, and working with us in the areas where we have joint rulemaking authority.

So I think it needs to be done. It needs to be done in a measured, and transparent way, but also in a timely way.

Our plan is to have a general framework out for resolution authority in the very near future, and we will use that as an interim final rule to solicit more detailed comment, and have a more detailed plan finalized over the next several months.

On the living will piece, the statute gives us an outside marker of 18 months. I'd like to get the rule out much earlier than that, if possible. So I think--you know, the markets in the United States are resilient, and I think if they understand what the rules are they'll be able to live with the rules. But I think the important thing is to get the rules out and have clarity.

COMMISSIONER GRAHAM: Chairman Bernanke talked some about the possibility of coming up with a report card indicating whether these large institutions were in fact responding to some of the new incentives.

Do you see the utility of something like that through your agency?

WITNESS BAIR: Yes, I do. I think I--that's the first I've heard of that, so I don't know exactly what the proposal is, but I think it's a good idea. It might be something we'd want to do jointly with the Fed, as opposed to having--we wouldn't want dueling report cards, probably.

But the Fed though is--we have resolution authority over nonbank systemic entities. The Fed will be the lead supervisor obviously for bank holding companies, as they are now for the nonbank systemic entities. So I assume, in terms of developing that type of institution-specific report card, the Fed would have the lead.

COMMISSIONER GRAHAM: I also asked the chairman about the difference in some other areas of the economy in terms of whether the private entities have come together to provide some effective voluntary oversight and enforcement of their best practices, using the nuclear industry as the good example, and maybe the not-so-good example being the deep-water drilling industry.

From your perspective, are the institutions that you supervise in terms of their willingness to come together to provide a voluntary early line of defense against inappropriate activities, are they more like the nuclear industry, or the deep-water drilling?

WITNESS BAIR: Right. Well I think most are trying to do the right thing, I really do. We just had a roundtable discussion on resolution authority, and wanted to start the dialogue on living wills, too, and I was impressed.

We had many very large institutions present, and they had all, it was clear to me, already given this some serious thought. So I think they are taking it seriously; they do understand the mandate.

They do understand that if they don't adhere to the statutory requirements there will be other, more adverse consequences in terms of the potential for forced divestiture. And that wouldn't be in anybody's interest, but it is there and could be used if it needed to be used.

So I was encouraged by that roundtable. Again, there is still a lot of work ahead, but I was encouraged.

COMMISSIONER GRAHAM: I would suggest that that movement towards a greater degree of acceptance of independent responsibility might be an appropriate item on your report card.

WITNESS BAIR: I think that's right. Accountability--you know, we can't do this all, and if we don't have responsible management taking ownership and accountability for the changes that need to be made, it is not going to work. I couldn't agree more.

COMMISSIONER GRAHAM: Thank you, Mr. Chairman.

CHAIRMAN ANGELIDES: Mr. Hennessey.

COMMISSIONER HENNESSEY: You really are mixing things up.

(Laughter.)

CHAIRMAN ANGELIDES: No, that's the fairness doctrine. Outside in/inside out.

COMMISSIONER HENNESSEY: Thank you, Mr. Chairman.

I want to follow up actually on two of Doug's questions and just ask you to drill down a little bit more.

One is on banks holding GSE. In particular, I'm interested in debt. And I just want to review kind of for the record and make sure I understand it. So if I'm an FDIC-insured bank, I can't hold more than a certain portion of my assets in the debt of General Motors, or IBM, but I can hold 100 percent of my assets in the debt of Fannie or Freddie? Is that basically right?

WITNESS BAIR: I think that's right. I don't have our capital expert--that is right, yes.

COMMISSIONER HENNESSEY: And who sets those rules? Are those FDIC rules?

WITNESS BAIR: Well, those were rules--no. Those would be set on an interagency basis. And I think it's a point well taken.

COMMISSIONER HENNESSEY: So is it sort of a common set of rules that FDIC and OCC and the Fed all agree and say here are the rules?

WITNESS BAIR: That's right.

COMMISSIONER HENNESSEY: And is that an area that should be looked at going forward to say, you know what, we're going to treat these guys the same as others, given--

WITNESS BAIR: Absolutely. Absolutely. I think, you know, while we're on the subject, we'll just go a little further and, you know, there's a lower risk waiting for GSE debt, too, than there was for corporate debt. And was that right? No, I don't think it was, either.

So, yes, I'm not going to disagree with you on any of that.

COMMISSIONER HENNESSEY: And looking back, I mean my recollection during the crisis is, once you got to the point where Fannie and Freddie were failing, sort of the risk waiting is a long-term problem, but the real systemic transmission risk was the fact that, if we broke the line into GSE debt, there were banks that would fail because they had bet too heavily on GSE. It was that concentration--

WITNESS BAIR: Right.

COMMISSIONER HENNESSEY: --of firm-specific risk. Is that right?

WITNESS BAIR: This is a two-year-old conversation, but I don't frankly recall when Treasury started engaging us on this. I think they had already made the decision that they weren't going to go above preferred.

COMMISSIONER HENNESSEY: Right.

WITNESS BAIR: I'll go back and check that, but I don't think--there were others. It wasn't just banks that held a lot of GSE debt. So you should probably ask Treasury, too, but I don't recall that they had ever considered going--

COMMISSIONER HENNESSEY: Let me try a smooth transition, then, into Basel. Should that be a topic of discussion for Basel, as well? Because agency securities are held all over the world.

WITNESS BAIR: That's true. That's very true. And I would have to--there are limitations on the ability of financial institutions to hold equity in other financial institutions. On the debt holdings in terms of the risk weighting, I don't--I will check. If it has been considered, it hasn't risen up to the principal level, but I can check on that for you.

COMMISSIONER HENNESSEY: Related to that, I've seen some of the same press reports about pushback within the Basel discussions that the capital levels are too stringent. Who is pushing back?

WITNESS BAIR: Well, those conversations are confidential. So I know that's an issue with some, but those are the rules--

COMMISSIONER HENNESSEY: Can you tell us what Continent it is?

(Laughter.)

WITNESS BAIR: Well, I wouldn't disagree with any of the public reports, I'll put it that way. I mean, I am just really hoping we can all go with a consensus. I think it troubles me if individual countries, you know, want to adhere to too-big-to-fail as a basic tenet of their banking system. Because that's really the alternative. If you allow excessive leverage with your banking sector, knowing those capital levels will not be sufficient to cover losses if you get into a downturn, you're really just saying you're going to be bailing them out.

And so that's not good for anybody. And so we do need to all do this together. I think in terms of a competitive disadvantage, it's more of an issue among countries in Europe than it would be the U.S. versus Europe.

But I do hope that we can all come to agreement on that. It's in everybody's interest to get rid of too-big-to-fail, and an important component of that is making them have capital high enough to absorb their losses so they can stand on their own two feet.

COMMISSIONER HENNESSEY: Good. Nonbank financial institutions and FDIC-insured banks, and the FDIC model of course is since the deposits are insured, or at least up to a certain level depositors don't have to worry about it. And one thing we heard from Chairman Bernanke and others is that you had liquidity runs which were parallel to the old pre-FDIC bank depositor runs.

WITNESS BAIR: Right.

COMMISSIONER HENNESSEY: Reading your testimony, it sounds like the same sort of liquidity runs were occurring with at least Wachovia and WaMu.

WITNESS BAIR: Uninsured depositors, they were, absolutely.

COMMISSIONER HENNESSEY: Uninsured depositors. But were Wachovia and WaMu experiencing the same sorts of liquidity runs that we hear about--

WITNESS BAIR: Yes.

COMMISSIONER HENNESSEY: --the nonbank financial institutions?

WITNESS BAIR: Yes. Wachovia was--yes, Wachovia was, yes.

COMMISSIONER HENNESSEY: So the nondepositor liquidity problems were--

WITNESS BAIR: Also impacted in some banks. That's right. That's exactly right, yes.

COMMISSIONER HENNESSEY: Okay. And then could you take a minute just to drill a little more maybe into explaining--because I hear so much about the way FDIC did the Washington Mutual resolution--can you just simply explain kind of--

VICE CHAIRMAN THOMAS: Would the gentleman like an extra minute for her to explain it?

COMMISSIONER HENNESSEY: Thirty seconds for the response--for my question, and whatever time she needs to respond.

VICE CHAIRMAN THOMAS: Okay.

COMMISSIONER HENNESSEY: Thank you. Can you just explain--

CHAIRMAN ANGELIDES: He says 'yes.'

COMMISSIONER HENNESSEY: --where you drew the line, why, and what that complaint is of what your response is to it? Because I'm not sure I understand.

WITNESS BAIR: Well, you know, I think--I'm sure everybody would of liked to have gotten bailed out. I mean that's, you know, if you're holding debt or equity you're going to want to prefer that you'd gotten bailed out. So I think--

COMMISSIONER HENNESSEY: Actually--actually, if I could, the concern I'm hearing is that the way FDIC did it was in some way upending the traditional capital structure, or it sent signals to others who held bank debt.

WITNESS BAIR: No, no.

COMMISSIONER HENNESSEY: And I'm sorry, because I'm confused in what I'm hearing.

WITNESS BAIR: No, that is not. And if you would like a walk-through from our Receivership staff, I would be happy to provide that.

COMMISSIONER HENNESSEY: Yes.

WITNESS BAIR: But, no, we had been on top of that for several months. We did have time there working with OTS and the bank. There were a lot of efforts to get more capital into it.

They went through two different bank runs and were hemorrhaging deposits badly. Their lines of credits were being pulled. They had a very, very bad Option ARM portfolio. Their immediate failure was triggered by liquidity, but I think all of our examiners think there would have been a capital insolvency. The market just already knew that.

So we gave the bank as much time as we could to get their recapitalization. It couldn't come through. But fortunately as part of that recapitalization, they had talked to other investors. There were a number of other investors that had already been into the bank, the thrift, doing due diligence.

So that when we had to start our own process, we had folks who were familiar with the institution and were prepared to bid. And that is the same process we use for small banks now. That's the same process we use every Friday.

COMMISSIONER HENNESSEY: Thank you.

WITNESS BAIR: You're welcome.

CHAIRMAN ANGELIDES: Heather? Ms. Murren.

COMMISSIONER MURREN: Thank you.

Thank you, Chairman Bair. I would like to actually focus on the traditional bank examination process for a couple of minutes.

WITNESS BAIR: Okay.

COMMISSIONER MURREN: It's been told to me that that process has actually changed post-crisis; that after the crisis it's gotten much more intense; that the examiners are at the banks longer, and perhaps are a little tougher in their judgments than they had been previously.

And I'm curious as to whether you think that's fair, or whether you think that that's simply by virtue of the environment that we're in?

WITNESS BAIR: Well I think our examiners overall have tried very hard to take a balanced approach, and we've encouraged them in Washington to take a balanced approach.

It is a more distressed environment. We do have a lot of banks out there--it's a minority, but still a significant number that have some very troubled loans still on their books that they're still working through.

And those types of banks take more time for examiners to go in and to work with them. But we've made it clear that we want banks to lend. We want them to make prudent loans. We want them to lend. We don't want the banks or the examiners over-reacting and battening down the hatches and just not extending credit. That's the worst possible thing that we could have for the economy or for the banking system.

So I think overall our examiners have set the right tone. We have issued multiple pieces of guidance encouraging them and banks to lend, to work with borrowers when they do get into trouble whether it's a mortgage holder, whether it's a commercial real estate borrower, if they get into trouble to try to work out the loan, if that's going to present better value and typically it will in a distressed environment like this to try to do some type of loan modification.

And so I think that's overall been as successful as it can be, given the current environment. But I know there are still particular cases where we hear complaints, and we have an ombudsman here, and banks can engage the--that's what the ombudsman is for. If they feel like the examiner is not following articulated policies, they have recourse.

COMMISSIONER MURREN: Thank you. To follow on this, in your written testimony you talked about the fact that sometimes it is difficult to see, particularly in the larger, more complex institutions, things that may not be apparent prior to failure, such as exposures and systemic linkages.

And I'm curious as to whether, when you think about the ability going forward to evaluate that, has the fundamental bank examination process also evolved to include those things as the portfolio of things they look at? Or is that more the--

WITNESS BAIR: That's a really good question. So I think the answer is, I would like to see that. We are pushing--I'm chairman of the Federal Financial Institutions

Examination Council, otherwise known as FFIEC, which is an interagency group focused on bank examination practices.

And we would very much like to update our CAMELS rating process and expand the types of questions that examiners traditionally ask to get more focused.

Right now the examination process is very, very focused on credit quality on the asset side. So how well are those loans performing, not so much on the liability side. You know, where's your liquidity coming from? What is stable? What's not?

So getting more information along those lines I think would be extremely helpful for all banks. And so I would like to see that as part of our examination process.

For the larger institutions we've also been working with the New York Fed on more detailed information on liquidity for the very largest institutions. That is very much an area of focus right now.

COMMISSIONER MURREN: Great. I have one question that's a little bit off of this topic, but has anyone done, to your knowledge, an analysis of what the capital ratios--what would they have had to have been post-mortgage crisis to allow some of these firms to have actually survived? Was it possible?

WITNESS BAIR: We do have those numbers, and they're part of the aggregate analysis that we were doing of how much additional capital would come in under the new capital standards. And I would be happy to provide it to you.

COMMISSIONER MURREN: Do you happen to recall what the general numbers look like?

WITNESS BAIR: I think economists, different people, agree, I think for Tier One Common Equity, which is true loss-absorbing capital, the range is from 8 to 13 percent.

COMMISSIONER MURREN: Great. Thank you.

CHAIRMAN ANGELIDES: Just to follow up on that very quickly, 8 to 13 percent on Tier One?

WITNESS BAIR: Um-hmm.

CHAIRMAN ANGELIDES: How does that compare to--

WITNESS BAIR: Tier One Common.

CHAIRMAN ANGELIDES: Tier One Common?

WITNESS BAIR: Yes.

CHAIRMAN ANGELIDES: How does that compare to pre-crisis?

WITNESS BAIR: Well, there was not a Tier One Capital in the U.S., especially for holding companies, that included a lot of things that--

CHAIRMAN ANGELIDES: Excuse me? For what kind of companies?

WITNESS BAIR: For holding companies.

CHAIRMAN ANGELIDES: For holding companies. I just didn't hear you.

WITNESS BAIR: It involved a lot of things that were not true losses through capital, a lot of hybrid debt. So when I'm talking about Tier One Common Equity, true loss-absorbing capital. We did not have a requirement for the--the current requirement for risk-based capital is 8 percent, for Tier One for adequate, like 10 percent for well, but there was just a predominance of that had to be Common Equity.

So the actual amount of true losses that were in Common Equity was significantly lower. So that the focus of Basel right now is to get the Tier One Common Equity levels up.

CHAIRMAN ANGELIDES: But do you know where it was functionally?

WITNESS BAIR: Functionally?

CHAIRMAN ANGELIDES: True loss-absorbing capital was at what level?

WITNESS BAIR: The--I don't know off the top of my head. I'd like to get the written analysis for you, if I could.

CHAIRMAN ANGELIDES: Okay, if you would, please.

WITNESS BAIR: But it would probably be around 4 percent. Between 4 to 6 percent would be my guess.

CHAIRMAN ANGELIDES: Thank you. That was the range. So you're talking about 4 to 6, now up to 8 to 13.

WITNESS BAIR: Well, again, this is being debated right now. And it's not just my decision. It's part of an international community. But the ranges of estimates I've seen have been 8 to 13 percent, yes.

CHAIRMAN ANGELIDES: Terrific. Thank you. Ms. Born.

COMMISSIONER BORN: Thank you. And thank you very much, Chairman Bair, for appearing before us. I think you are the only witness to have appeared publicly before us twice, so I think our thanks are particularly necessary.

WITNESS BAIR: My pleasure.

COMMISSIONER BORN: I would like to explore with you a little bit how over-the-counter derivatives played a role in creating financial institutions that are too big to fail, the topic of our hearing today.

And more specifically, whether the interconnections between large financial institutions through counterparty relationships in over-the-counter derivatives, and whether the concentration of over-the-counter derivatives' positions in the largest institutions played a role and were significant factors in rendering those institutions too-big-to-fail.

WITNESS BAIR: Well I think with AIG clearly that was the problem. I think derivatives played a role in this crisis in a number of ways. Concentrations was clearly a problem. The lack of transparency in the market was clearly a problem.

So nobody knew where the risks were. Nobody knew where the exposures were. So everybody seized up because nobody knew where the losses would fall next.

I think CDS in particular created an illusion of risk-free transaction, when it just simply wasn't the case because of the concentration of who was holding--who was going to have to pay if there was a credit default.

So I think all those factors played in and were major contributors to this crisis. And I am very glad, thanks to your leadership, early leadership on this, that Dodd-Frank has got a number of key provisions to move so much of this on to exchanges and through central clearing now. It will be a big help.

COMMISSIONER BORN: Do you think those provisions will reduce the systemic risk from the over-the-counter derivatives market?

WITNESS BAIR: I think it will certainly reduce the risk. I think there's still a fairly large flexibility for end users, as you know, and we'll see how that plays out.

I think in terms of, we were disappointed in terms of our own resolution process. We have a very short timeframe to decide whether to accept or repudiate derivatives contracts if a bank, or now a systemic financial entity fails. We were hoping--right now, for banks, if it's a weak bank, we can require that they have systems in place so that they can tell us on basically a moment's notice what their net exposures are per counterparty.

But for a healthy bank, we can't require that. And we were really hoping to get that. That's probably something we'll keep pushing for. Ironically, for nonbank holding companies we, with the other regulators, can institute a rule to require that they know, on a real-time basis, what their net exposures are by counterparty, which I think will be extremely helpful as well in terms of managing risk and risk concentrations.

But for banks, we still have this gap that we'll try to get fixed.

COMMISSIONER BORN: Let me just go back to one factor in the financial crisis and the panics that were created by--or that you were concerned would be created by a failure of Wachovia, the panic that was created by the failure of Lehman Brothers.

I know that you've said you were concerned as part of the systemic risk analysis for Wachovia about the counterparty relationships, including the over-the-counter derivatives relationships.

WITNESS BAIR: Right.

COMMISSIONER BORN: Was your concern limited to the credit default swap positions? Or was it--did it relate to the overall positions, which of course were much larger?

WITNESS BAIR: They had a lot of structured products in their trading book that we, again, just did not have enough information to get up to speed on. So, no, I don't think it was just CDS. John Corston, who's our lead examiner, here--it wasn't just CDS, yes.

COMMISSIONER BORN: And do you think that, as of that time, the over-the-counter derivatives market as a whole was playing a role in market uncertainty and panic?

WITNESS BAIR: I do. Because, again, because of the opacity of the market nobody knew where the risks were, who was going to take the losses, and that just--you know the wholesale sources of funding just completely dried up, just because nobody knew where the exposures were and who was going to take the losses.

COMMISSIONER BORN: Well let me just say, as a final thing, that I think that a lot of the steps that were taken on systemic risk in the Dodd-Frank bill and that are being taken administratively are in the right direction.

I certainly hope--I think one issue has been the institutional supervisor's focus on individual institutions and thereby--

WITNESS BAIR: Yes.

COMMISSIONER BORN: --the ignorance, or the lack of attention, lack of focus, to market-wide issues like the securitization process, like the over-the-counter derivatives market, and I very much hope that the Financial Stability Council will look not only at the systemically significant institutions, but keep an eye out for systemically relevant markets and problems in those markets.

WITNESS BAIR: I agree with you. I agree with you. The products and practices can be just as devastating as individual risk institutions, perhaps more so.

COMMISSIONER BORN: Thank you.

CHAIRMAN ANGELIDES: Mr. Wallison.

COMMISSIONER WALLISON: Thank you, Mr. Chairman. And thank you for being here, Madam Chairman.

I have been trying to explore a little issues associated with the discount window, which I know you don't manage or have any control over.

WITNESS BAIR: Right.

COMMISSIONER WALLISON: But some of the issues that have come up is, what was the significance of the discount window at the time that Wachovia ran into difficulties?

What we have heard is that the plan for Wachovia was to combine it with some other institution. That seems to have been the only plan. Now my understanding is that the discount window is available specifically for runs for solvent banks.

Was it the view of the FDIC, or any of the other regulators as far as you know, that Wachovia was in fact insolvent?

WITNESS BAIR: Again, I don't think we had the--no, at that point in time it was not. It was a liquidity crisis. Though I will say, under the FDI Act a bank can be closed if it becomes insolvent or if it cannot meet its obligations.

So the Fed has no affirmative obligation to fund an entity just because it's got a liquidity crisis. And actually the Fed is specifically prohibited from lending into a failing institution.

So I don't speak for the Fed. I don't know what the Fed's decision making was on that, but I will say this is a sensitive area for us. Because if the Fed does start lending, and that is government assistance going into that troubled institution, and that facilitates a lot of other counterparties, right, pulling their money out, the Fed is the secured lending and the Fed takes the highest quality collateral when it lends into an institution.

If that institution then subsequently fails, it will cost the FDIC a lot of money. That is why the statute specifically says that the Fed should not be lending into a failing institution. And actually I think can only do so if we agree to that.

So I don't know the specific situation about the Wachovia's use or not use of the discount window. I would defer to the Fed on that. But I would say as a general policy matter, this is a sensitive area for us. And we certainly support the Fed being very careful about when they use that.

Because if the institution ends up failing, it will definitely increase our costs.

COMMISSIONER WALLISON: Well when I raised this question with Chairman Bernanke this morning, he said that you--that is, the FDIC, not "you" specifically but the FDIC--had said, at least as I heard him, the FDIC had said that Wachovia was a failing institution and therefore the Fed could not make that loan to them because they would not normally lend into a failing institution. That's why I asked the question about the solvency.

WITNESS BAIR: Well it was--well, I guess we were acting on information from the OCC, which is not here, and the Fed were providing us, and the bank's own information suggesting they could not meet their liquidity needs. They could not meet legal demands and obligations that they had come Monday morning. And I think there was about a billion in paper that they had not been able to raise on Friday.

COMMISSIONER WALLISON: Well just to be clear, the whole purpose of the discount window is to solve liquidity problems.

WITNESS BAIR: Right.

COMMISSIONER WALLISON: And so it's not a question of whether they could meet their liquidity needs; the question is whether people thought they were insolvent.

WITNESS BAIR: Right. But I think, again I--at that point in time, it was not insolvent. Whether it would maintain capital solvency was an open question, depending on a lot of factors like what's going to happen to the housing market.

But there were certainly a lot of credit quality issues with Wachovia. I don't think anyone can suggest that it wasn't a perfectly healthy institution; it just fell victim to broader market events. Clearly the market was reacting to some very bad decisions the management had made.

COMMISSIONER WALLISON: Okay, well then unfortunately that leads to the next question. And that is, if you approved--that is, the FDIC--approved a combination between Citibank that was already a very weak institution, and an institution that apparently you thought was on its way to failure, and in that combination, as you said in your prepared testimony, Citi had to assume $42 billion of risk on Wachovia as part of that transaction, how does any of that make any sense?

I mean, we have Citi that's already weak and in trouble. They are being asked now to merge with an organization that I think you thought might be insolvent, or on its way to insolvency--

WITNESS BAIR: Well it was clearly failing. I mean, the FDI Act specifically recognizes liquidity failures are capital insolvencies. From a liquidity standpoint, it was clearly failing. And so, you know, I think at the time, based on the information we had, we thought that Citi was the stronger institution.

And obviously later they ran into their own set of problems. But at that point, I think it was the collective decision of everyone that this would stabilize the situation; that this would stabilize the situation that Citi was, even though it perhaps its own problems, was the stronger institution than Wachovia and that would stabilize the situation.

We had to do something. I mean, I think we had--we had to do something. And I think, you know, saying, well, the Fed should just lend, that, that also is a form of government assistance. Some may also view it as a form of government bailout.

And if all of the counterparties started pulling out of Wachovia, with the Fed left, with a huge exposure to Wachovia, and then it had failed later, I would be having a very different hearing with you right now. So I think, was it a perfect decision, Peter? No, it wasn't. But based on the information we had and the options we had available, I think it was the only course of action at that point.

COMMISSIONER WALLISON: All right. Thank you, Madam Chair.

CHAIRMAN ANGELIDES: Mr. Thompson.

COMMISSIONER THOMPSON: It's nice to bat clean-up, for a change.

CHAIRMAN ANGELIDES: I was going to say, the clean-up batter, for a whole nine months of hearings.

COMMISSIONER THOMPSON: I won't take you back through the past. I'd like to look forward, if we might, and focus on the new regulations. It must have been a hallelujah day when the Dodd-Frank bill passed and you now have more things to help you control this environment.

WITNESS BAIR: Right.

COMMISSIONER THOMPSON: But I was struck by the comment you made that says there's little discretion now in the hands of any of the regulators, particularly in an environment where innovation occurs so fast. It's a global financial system, not just a U.S. financial system.

And crises, as they erupt or emerge can't be anticipated in legislation and regulation. So do you really think it is reasonable that the Congress would give you no discretion whatsoever in the way they have outlined the current legislation?

WITNESS BAIR: Well, there is discretion in terms of providing system-wide support. The Fed has it through a 13.3 facility. I believe the Secretary of the Treasury has to approve their use of that. And we would have it with a Congressional approval process for providing system-wide guarantees of financial liabilities.

So if it is truly a system-wide crisis impacting all institutions, healthy and not, we do have the ability to provide some system-wide support. But we also have the resolution piece for the ones that are failing because they were mismanaged which will be put into resolution process.

So I think that the combination of--well, first of all, it's my fervent hope that, through greater market discipline and higher capital standards we will certainly have another cycle. But the kind of cataclysm we were facing, I hope we do not see that again. This was truly an extraordinary event.

We will have cycles, but I do think these combination of tools will be sufficient. And I think, you know, again, of the different options that are available, bailouts are just not acceptable going forward. And the bankruptcy, I think frequently will be the course used for the weaker institutions.

Where they have systemic functions, the government setting up a bridge and operating it as it's sold off for a period of time, I think that is an important tool for us to have as well.

COMMISSIONER THOMPSON: So there is room for some judgment to be applied?

WITNESS BAIR: Yes, in terms--if it's a true system-wide crisis, that's right; yes. But again, only for generally available assistance on a system-wide basis. Then, even if the government took a loss on those types of facilities, as we were discussing earlier, that would trigger either a bankruptcy or a resolution. So the shareholders and creditors would be taking the losses, not the government.

COMMISSIONER THOMPSON: I was also struck by the fact that you highlighted the Financial Stability Oversight Council as one of the three key important attributes as we move forward.

Quite frankly, my experience in the private sector has been that councils are places where people go to opine and pontificate, and nothing ever gets done.

WITNESS BAIR: Right.

COMMISSIONER THOMPSON: And with the limited experience, candidly, I've had in government, it's very true there. So what would lead us to believe--

CHAIRMAN ANGELIDES: You said "councils," not "commissions"?

(Laughter.)

CHAIRMAN ANGELIDES: He said "councils" not "commissions." There's a very fine distinction.

(Laughter.)

WITNESS BAIR: Okay.

COMMISSIONER THOMPSON: So why should--

VICE CHAIRMAN THOMAS: Reserving the right to object.

(Laughter.)

WITNESS BAIR: That's right.

COMMISSIONER THOMPSON: --why should we believe that this Council is going to be uniquely different and keep us out of trouble?

WITNESS BAIR: Well, you know, I think--I'm glad you're skeptical because that will put pressure on all of us to make sure that we don't just, you know, meet every quarter and look at each other.

I think one thing that's been helpful, though, is Congress has clearly given this new Council accountability. And if there's another systemic crisis, we can't go and say, well, the Fed had holding companies and, you know, the OCC had national banks, and the SEC had the investment banks. We're all put together in the same room, and it's our job to manage systemic risk and make sure there are no regulatory gaps.

So we have accountability. We have ownership. If we don't do our job, then we should be held strongly accountable. So I'm hoping that kind of pressure--plus, I think people keeping our feet to the fire will help us get the job done.

I think Congress also has prescribed specific statutory roles for the Council with time frames, so we have to move ahead if we're to comply with the statute, and we should comply with the law and we have to move ahead.

So I have high hopes for it. I do. It's not structured exactly the way we thought. We were thinking more of an independent council with an independent chairman with writing authority and more of a robust entity. But I think the structure that Congress approved can work, and we will do everything we can from our perspective to make it work.

COMMISSIONER THOMPSON: So final question. If you look back over the last three years, four years, and if you had one bullet that you could fire as a regulator that would have mitigated or, quite frankly, prevented this financial calamity, what would that have been?

WITNESS BAIR: I absolutely would have been over at the Fed writing rules, prescribing mortgage lending standards across the board for everybody, bank and nonbank, that you cannot make a mortgage unless you have documented income that the borrower can repay the loan.

COMMISSIONER THOMPSON: Here, here. Thank you.

CHAIRMAN ANGELIDES: All right. Thank you. Any more questions from Commissioners, compelling--yes. It doesn't have to be compelling, it just has to be a question. Go ahead, Mr. Holtz-Eakin.

COMMISSIONER HOLTZ-EAKIN: Following up on Mr. Thompson's question, why isn't the new Stability Council just the President's Working Group on Financial Markets with a coat of paint?

WITNESS BAIR: Well, I hope--you know, the President's Working Group has done some good work. It's been behind the scenes, and I think that's been an area of criticism, so perhaps it's not been--its contributions have not been as appreciated as much, but I think it has specific statutory responsibilities, unlike the President's Working Group.

It has specific jobs, and timetables to fulfill those jobs, and has specific accountability, too, whereas the President's Working Group is more of an ad hoc enterprise after the '87 market break.

So I think it will be--I think the President's Working Group has done a lot of good work. I think this will be a more robust, more comprehensive effort.

VICE CHAIRMAN THOMAS: On that point, I think it's also that you're out on point; that you're seen as a functioning structure.

WITNESS BAIR: Yes.

VICE CHAIRMAN THOMAS: Any of the ad hoc structures are inside change and you've got to cover over them. I like the exposure idea and the fact that you're supposed to be a team, and it will be apparent if you are or you aren't.

WITNESS BAIR: Right. I think that's right. I agree with that.

COMMISSIONER HOLTZ-EAKIN: Thank you. You know, the Working Group has been around a long time, but I don't think it has a terribly illustrious history of success.

WITNESS BAIR: Well the FDIC was not a member of the President's Working Group, and actually until 2008 I think. But anyway--

COMMISSIONER HOLTZ-EAKIN: You must explain.

WITNESS BAIR: I think it did. It has made some good contributions.

CHAIRMAN ANGELIDES: And we really don't need an empirical study of its effectiveness, do we?

COMMISSIONER HOLTZ-EAKIN: Can we request that?

(Laughter.)

CHAIRMAN ANGELIDES: Anyway, thank you very much, Commission members. Thank you very much, Chairman Bair, for being here not only twice before, but I might add I noticed in the work up here for being interviewed by our staff twice.

WITNESS BAIR: Yes.

CHAIRMAN ANGELIDES: So at the end of the day--

WITNESS BAIR: Well, we want to help and contribute to your success, as well.

CHAIRMAN ANGELIDES: And we'll sign a copy of the book for you.

WITNESS BAIR: Okay, great.

CHAIRMAN ANGELIDES: Or we'll present you with an enhanced e-version of the book that maybe links to some of your testimony.

VICE CHAIRMAN THOMAS: Mr. Chairman, I'm wondering if she's been so attached to us from an offensive or a defensive point of view?

(Laughter.)

VICE CHAIRMAN THOMAS: But thank you very much for your help.

CHAIRMAN ANGELIDES: And I want--

VICE CHAIRMAN THOMAS: And early on it was very helpful.

WITNESS BAIR: Good.

CHAIRMAN ANGELIDES: I want to make just a few thank-you here.

I want to thank, first of all, all the people around the country who did tune in to watch us on C-Span. I have been quite struck by the number of people who have walked up to me who have said they have watched these hearings, not because of us so much but because of this tremendous hunger to understand what's happened to our country.

I want to thank all our witnesses who came before us. I want to thank the Commission Members and the staff--let me start with the Commission Members for their preparation, for their seriousness, and I really think for the way in which we've gone about this set of hearings to try to learn information, and gather it not only for ourselves but the public.

I want to thank the staff, who has put in a tremendous number of hours and effort, a real testament to public service.

I want to thank Chairman Dodd for, once again, making this room available to us. And I want to remind everyone that, while this is our last hearing in the

Nation's Capital, we are going to be in four cities across the country: Bakersfield, Las Vegas, Miami, Sacramento, communities that are struggling with double-digit unemployment, and that are in the grips of some of the most severe foreclosure crises in this country.

So thank you all very much. This public hearing of the Financial Crisis Inquiry Commission is adjourned.

(Whereupon, at 1:20 p.m., Thursday, September 2, 2010, the hearing was adjourned.)