4-7-2010

FCIC Transcript of Commission Hearing

Phillip Angelides

Bill Thomas

Brooksley Born

Byron Stephen Georgiou

Keith Hennessey

See next page for additional authors

THE FINANCIAL CRISIS INQUIRY COMMISSION

Official Transcript

Commission Hearing

Wednesday, April 7, 2010

Rayburn House Office Building, Room 2123

Washington, D.C.

9:00 A.M.

COMMISSIONERS

PHIL ANGELIDES, CHAIRMAN
BILL THOMAS, VICE CHAIRMAN
BROOKSLEY BORN
BYRON GEORGIOU
KEITH HENNESSEY
HEATHER MURREN
JOHN W. THOMPSON
PETER WALLISON

Reported by: Cassandra E. Ellis, RPR

Pages 1 - 371

C O N T E N T S

P R O C E D I N G S

CHAIRMAN ANGELIDES: Good morning. The meeting of the Financial Crisis Inquiry Commission will come to order.

I want to welcome everyone on behalf of Vice Chairman Thomas and the rest of the Commissioners. We're honored to welcome you as we begin three days of public hearings focused on the role of subprime lending and securitization in the financial and economic crisis that has gripped our nation.

I want to thank Vice Chairman Thomas and all my fellow Commissioners for all their hard work and dedication as we strive to fulfill our mission on behalf of the American people. And I particularly want to thank Commissioners Murren, Georgiou, and Wallison, who are the lead Commissioners in preparation for this hearing and for our investigation into subprime lending practices.

This hearing is one of a series that will focus on key topics which this consider -- Commission must consider as we examine the causes of the financial crisis.

Over the next several months, we will look at the role that, among other things derivatives, credit ratings agencies, the shadow banking system, too-big-to-fail institutions, regulatory failure, and speculation played in bringing our financial system to its knees. These hearings are just part of a research and investigation effort we are undertaking to under -- to conduct a full and fair inquiry that this nation deserves.

In each of these hearings, we will examine the larger forces, policies and events that may have shaped the crisis. And we will also undertake a series of case studies of companies and government agencies so we can see what happened on Wall Street and in Washington as the seeds of this crisis were sown and as it developed and spread across the nation and the globe.

As we meet today, the mortgage and housing crisis is still very much with us over two million American families have lost their homes to foreclosure. Another two million homes are in the foreclosure process; and an additional 2.5 million households are more than 90 days behind on their home loans.

One in four homeowners owe more on their mortgages than the value of their homes. And American households have lost almost 7 trillion dollars in residential home value.

Over the next three days we will look at how we got to where we are today. We'll examine the role of the Federal Reserve in the mortgage crisis and in subprime lending. We'll explore Citigroup's activities and losses related to subprime loans and mortgage-related securities. We will probe the actions of the Office of the Comptroller of the Currency as it oversaw Citigroup and other financial institutions engaged in the subprime market. And we will look at what happened at Fannie Mae and its regulator as the crisis unfolded.

As we have noted before, this Commission is a proxy for the American people, perhaps the only opportunity to have their questions asked and answered. On their behalf, we hope to take stock of what happened so we can learn from it and restore faith in our economic system.

As always, we welcome your thoughts and input. In that regard, we have posted, on our web site, draft preliminary staff reports for review and comment. Those can be found at FCIC.GOV. These reports have not been adopted by the Commission and we invite you to submit your comments by May 15th.

Today's hearing is another step along the road in our inquiry. We hope it will further our and the public's understanding of what has happened. We need candor about the past so we can face the future.

I'd now like to ask Vice Chairman Thomas to make some opening remarks, along with me, this morning. Thank you.

VICE CHAIRMAN THOMAS: Thank you, Mr. Chairman. I, too, want to thank all of the participants in the hearing. I want to underscore the fact that everyone we have worked with have been extremely cooperative and, therefore, none of the statutory tools that we have available, which will allow us even with uncooperative folks to get the story, have been necessary.

The people who are here before us today have a story to tell, it isn't necessarily the exclusive story of those who are telling it, especially when we look at a corporation like Citicorp.

We're not singling out anyone, but as we examine the fundamental, systemic crisis, we thought it was useful and valuable, frankly, to have examples so that we could, with the public, in these public hearings, examine, in some depth, the questions that we will be asking others: Other corporations, other government agencies, other important players, a little bit like just showing the tip of the iceberg with seven-eighths behind the scenes in terms of what we're doing.

As we did in the first hearing I'm going to ask each witness if they would voluntarily allow us to continue our communication with them, in writing, since this is the journey of education for us as well as the American people.

And at any one time the questions we may think relevant, of the various witnesses, may very well be, but not the kind of follow-up questions that we would very much enjoy continuing to get answers to, which are impossible only in the setting of a hearing.

So, Mr. Chairman, it's a pleasure to be here. I thank the Chairman for kicking this off for us, with the full understanding that we're ju- -- just dealing with one-eighth of what it is that we're going to be looking at, and seven-eighths will go on behind the scenes, as it has for several months.

Thank you, Mr. Chairman.

CHAIRMAN ANGELIDES: Thank you, Mr. Vice Chairman.

Now, Chairman Greenspan, as we have done with all witnesses, and we will do with all witnesses through the course of our hearings, I'm going to ask you to stand so I can administer 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?

MR. GREENSPAN: I do.

CHAIRMAN ANGELIDES: Thank you very much.

So, Mr. Chairman, first of all, let me start by saying thank for being here; thank you for your extraordinary years of public service.

And, with that, I would -- I know you've submitted written testimony to us, and I would ask if you would like to make opening remarks of no greater than ten minutes in terms of oral testimony to us, if you would like to commence now.

MR. GREENSPAN: Thank you very much. Thank you very much.

CHAIRMAN ANGELIDES: Can you pull the microphone toward you?

VICE CHAIRMAN THOMAS: Is there an on/off button, there?

MR. GREENSPAN: I thought I had it, I missed it. Chairman Angelides?

CHAIRMAN ANGELIDES: Yeah, let's stop for a minute, see if we can pull that a little closer. Can it get --

VICE CHAIRMAN THOMAS: No, it's not on.

CHAIRMAN ANGELIDES: And it's not on?

MR. GREENSPAN: What about this one over here?

CHAIRMAN ANGELIDES: All right, hang on a minute. Is that -- here comes our technician and -- good morning, sir. How are you doing?

MR. GREENSPAN: I can talk loud, if necessary.

CHAIRMAN ANGELIDES: We -- we don't want to strain your voice. We'll -- tell us, sir, when we should roll. All right.

VICE CHAIRMAN THOMAS: Mr. Chairman?

CHAIRMAN ANGELIDES: Yes, sir.

VICE CHAIRMAN THOMAS: In the interim, I do want to thank Chairman Henry Waxman, Chairman of the Energy and Commerce Committee, in whose meeting room we're meeting today.

I noted to the Chairman that we've been in this relationship a number of times but never in this particular room.

I will not say that our first hearing in the Ways and Means Committee had the microphones working. So I'm going to read the contract you have with the Chairman in terms of what it is that we get when we get the room.

CHAIRMAN ANGELIDES: Here we go. No?

VICE CHAIRMAN THOMAS: We're on -- we're on the track. I'm going to blame it on them scrambling over there, the reporters.

CHAIRMAN ANGELIDES: Live television. All right.

Good morning, this is -- welcome to the meeting of the Financial Crisis Inquiry Commission. All right, thank you very much.

And with that, Chairman Greenspan, of no more than ten minutes, an opening statement.

MR. GREENSPAN: Thank you very much, Mr. Chairman. Good morning to you, Vice Chairman Thomas and members of the Commission.

I want to thank you for the opportunity to share my views on important issues raised in the Commission's invitation to appear today.

As I noted in my prepared remarks, while the roots of the crisis were global it was securitized U.S. subprime mortgages that served as the crises' immediate trigger.

The rate of global housing appreciation was particularly accelerated beginning in late 2003 by the heavy securitization of American subprime and Alt-A mortgages, bonds that found willing buyers at home and abroad, many encouraged by grossly inflated credit ratings.

The search and demand for mortgage-backed securities was heavily driven by Fannie Mae and Freddie Mac, which were pressed by the Department of Housing and Urban Development and the Congress to expand affordable housing commitments.

During 2003 and 2004 the firms purchased an estimated 40 percent of all private label subprime mortgage securities newly purchased and retained on investors' balance sheets.

The enormity of these purchases was not revealed until Fannie Mae in September 2009 reclassified a large part of its prime mortgages securities portfolio as subprime.

And yet the effect of these GSE purchases was to preempt 40 percent of the market up front, leaving the remaining 60 percent to fill other domestic and foreign investor demand.

As a consequence, mortgage yields fell relative to ten-year treasury notes, exacerbating the house price rise, which in those years was driven by interest rates on long-term mortgages.

I warned of the consequences of this situation -- to testimony -- in testimony before the Senate Banking Committee in 2004, and specifically recommended that the GSEs need to limited in the issuance of GSE debt and in the purchase of assets, both mortgages and non-mortgages, that they hold. I still hold that view.

The U.S. subprime market -- subprime market grew rapidly in response to this demand, from global investors, GSEs, and others. For years subprime mortgages in the United States had been a small but successful appendage to the broader U.S. home mortgage market, comprising less than 2 and a half percent of total home mortgages serviced in the year 2000.

At that time almost 70 percent of subprime loans were fixed rate mortgages. Fewer than half had been securitized, and few, if any, were held in portfolios outside the United States.

By early 2007 virtually all subprime originations were being securitized and subprime mortgage securities, outstanding, totaled more than 900 billion dollars, a more than six fold rise since the end of 2001.

The large imbalances of demand led mortgage originations to reach deeper into the limited potential subprime homeowner population by offering a wide variety of exotic products, products that lowered immediate monthly servicing requirements, thereby enabling previously untapped, high-risk, marginal borrow- -- borrowers to purchase a home.

Consequently, subprime loan underwriting standards rapidly deteriorated, and subprime mortgage originations swelled in 2005 and 2006 to a bubbly 20 percent of all U.S. home mortgage originations, almost triple their share in 2002.

The house price bubble was engendered by lower interest rates but not the overnight rates of central banks. It was long-term mortgage rates that galvanized prices.

And by 2002 and 2003 it had become apparent that individual country long-term rates were, in effect, de-linked from the historical tie to central bank overnight rates.

In 2002 I expressed concern to the Federal Open Market Committee noting that our extraordinary housing boom financed by very large increases in mortgage debt cannot continue indefinitely.

Yet it did continue, despite the extensive two-year-long tightening of monetary policy that began in mid-2004.

In addition to tightening monetary policy and warning of GSE risks, the Federal Reserve exercised oversight of consumer protection risks under the Home Ownership Equity Protection Act and its general supervisory authority.

In 2000 the Board held hearings around the country on implementing its HOEPA authority, focusing on expanding the scope of mortgage loans covered by HOEPA, on prohibiting specific practices, on improving consumer disclosures, and of educating consumers.

Thereafter, we adopted rules that lowered the trigger for HOEPA coverage and increased consumer protections, including limitations on flipping, the use of balloon payments, and the sale of single-premium credit insurance.

More broadly, the Federal Reserve carefully monitored, in the subprime market, and adjusted supervisory policy to meet evolving marketplace challenges. In March 1999 the Federal Reserve issued its first inter-agency guidance on subprime lend- -- lending, which addressed a variety of subprime mortgage risks, including the importance of reliable appraisals and the need for income and other documents, documentation.

In October 1999, in 2001, and in 2004, the Federal Reserve issued detailed guidance addressing many of the loan features that have received recent attention, including prepayment penalties, low introductory rates and low down payment loans, among others. A summary of these initiatives is included with my written testimony.

The supervision of the federal banking agencies, including the Federal Reserve, is an important reason why banks and bank holding company affiliates were not as significant originators of the most controversial loan products as non- -- as non-bank affiliated companies that operated outside the jurisdiction of federal bank regulators.

The recent crisis reinforces some important messages about what supervision and examination can and cannot do. The forecasts of regulators have had a woeful record of chronic failure. History tells us regulators cannot identify the timing of a crisis or anticipate exactly where it will be located or how large the losses and spillovers will be. Regulators cannot successfully use the bully pulpit to manage asset prices, and they cannot calibrate regulation and supervision in response to movements in asset prices.

Nor can regulators fully eliminate the possibility of future crises.

What supervision and examination can do is promulgate rates that are preventative and rules that are preventative and that make the financial system more resilient in the face of inherently unforeseeable jobs. Such rules would protect automatically without relying on a fallible human regulator to predict the coming crisis.

Concretely, I argue that the primary imperatives, going forward, have to be, one, increased risk-based capital and liquidity requirements on banks and, two, significant increases in collateral requirements for globally traded financial products irrespective of the financial institutions making the trades. We will also need far greater enforcement of -- of misrepresentation and fraud than has been the case for decades.

If capital and collateral are adequate and enforcement against misrepresentation and fraud is enhanced, losses will be restricted to equity shareholders who seek abnormal returns but in the process expose themselves to abnormal losses.

CHAIRMAN ANGELIDES: Mr. Chairman, could you also -- could you try to wrap up, at least in terms of --

MR. GREENSPAN: I will in just a moment, one sentence.

Taxpayers will not be at risk, and financial institutions will no longer be capable of privatizing profit and socializing losses.

I thank the Commission for the opportunity to submit these thoughts and look forward to answering your questions.

CHAIRMAN ANGELIDES: Good. Thank you very much.

EXAMINATION BY CHAIRMAN ANGELIDES

CHAIRMAN ANGELIDES: So, Mr. Chairman, I will start with a few questions and then the Vice Chair and then we're going to go to the members, the lead members, on this hearing.

So, let me pick up on some of your testimony, both your written testimony as well as what you have talked about today. And I specifically want to focus on the area of subprime lending, which as you know and you've indicated, that exploded across this country from 2000 on, particularly in the later years.

And in your testimony, you pointed to the fact that the securitization of toxic, subprime mortgages was a key driver of the crisis. And, of course, that securitization could not have occurred without the origination of those products.

I want to focus very specifically on the actions that the Federal Reserve could have taken, did or did not take, with respect to reg- -- regulating subprime mortgage products across this country.

And, specifically, I want to touch on something you mentioned, the Home Ownership and Equity Protection Act, and I have other questions about other areas in which you could have acted.

So let me lay this out for you. I mean, first of all, there was a whole set of a pieces of public action urging the Federal Reserve to act, as well as public information, which would have urged you to do the same.

And starting about 1999, a set of community groups began to visit with the Federal Reserve, warning about predatory lending practices. In January of 2000, both HUD and Treasury urged the Federal Reserve to use its authority, under HOEPA to curb abusive lending. In 2002, Sheila Bair, then Assistant Secretary of the Treasury, worked hard to try to put in place best practices for mortgage -- subprime mortgage lending. In 2004, the FBI warned that there was an epidemic of mortgage fraud that if unchecked, could lead to losses greater than the S&L crisis. In 2005, the mortgage insurers wrote a letter to the Federal Reserve as well as other federal agencies, warning that it is, quote, deeply concerned about increased mortgage market fragility, which combined with growing bank portfolios and high-risk products poses serious potential problems that occur without -- with dramatic suddenness.

In addition to that there were a number of internal actions, some of which you referred to: A staff memo in 1998 to the Community and Consumer Affairs Committee, urging action in this area; a report by the staff called The Problem of Predatory Lending, in November 2000 in which the staff proposal urged that loans be banned to people who did not have the ability to pay and that there be broad prohibitions on deceptive lending; Governor Gramlich, of course, urged the promulgation of regulations.

You did note that you issued guidance, not regulation, which showed an awareness of the subprime problem.

And in our interview by our staff of you, you noted yourself that “I sat through innumerable meetings on HOEPA, the issues came up quite often”, and you noted also, at another point recently that we at the Federal Reserve were aware as early of 2000 of incidence of some highly irregular, subprime mortgage underwriting practices.

I mean very simply, Mr. Chairman, why, in the face of all that, did you not act to contain abusive, deceptive subprime lending? Why did you allow it to become such an infection in the marketplace?

MR. GREENSPAN: First of all, Mr. Chairman, we did. There is a whole series of actions that we take, which I've outlined in the appendix, which you have and which I repeated summarily in my testimony.

But, you know, let's remember that in a document that you sent to us, which is a Federal Reserve document, it says, in July 1998, the Federal Reserve board and HUD submitted a report to Congress on mor- -- mortgage reform. That report concluded that improved disclosures alone were unlikely to protect vulnerable consumers from unscrupulous creditors.

The report recommended that Congress consider the need for additional legislation. And the report made several recommendations to possible amendments to HOEPA, such as further restricting balloon notes, regulating the sale of single-premium credit insurance, and minimum standards for foreclosure.

Now, I sat through innumerable meetings on the issue of HOEPA. And we had, for example, detailed requests coming from a large group of representatives in 2000, and I think it was seven senators, about a month or so later, requesting that we do a series of things, I mean, including taking the HOEPA trig- -- trigger down from 10 percent to 8 percent, and a whole list of things, which I won't outline here, but they are in the appendix.

We did do almost all of the things that you are raising. And the consequence of that is that I think things were better than they would have been. Were they enough to stop the surge in subprime lending? They were not. And the reason for that is the extraordinary changes that were going in the marketplace and, indeed, the actions of Fannie and Freddie, which we didn't know about until September 2009, which altered the structure of that market from what was in, say, prior to 2002, a small, well-functioning group -- institution.

CHAIRMAN ANGELIDES: But I want to -- I want to press on this, because you didn't have the ability to regulate Fannie and Freddie. And, by the way, I've seen your numbers, and we're going to have a whole day on them, and clearly things did not go well at those institutions, given where they stand today and over a hundred billion dollars of taxpayer assistance to them.

But I just do want to note that you cited the numbers from `03 and `04. They were 13 percent of the private label security market in `05, and they were negligible in `06.

But what I really want to say is you -- you did have the ability to regulate the products currently in the marketplace. And so, you know, I do want to make sure we're not rewriting or forgetting history here.

And so I want to focus on what the result was of what the Federal Reserve did. You mention the guidance and, in fact, I know you issued guidance in 1999, 2001, 2004, 2006, 2007, of course that was guidance to examiners, not binding, and most importantly couldn't apply to the whole marketplace like HOEPA could. It could only apply to those institutions you regulated, not all the independent mortgage lenders across the country.

So it's good that you issued guidance, but I think that's more evidence that there isn't an awareness of the problem and a failure to act.

But I want to specifically focus on the 2001 regulations which you cited. And, in fact, I think you said in your interview to our staff that, quote, we developed a set of rulings that have held up to this day.

But here are the facts: The facts are you adopted those rules in 2001. And at the time that they were adopted, they were projected to cover 38 percent of the subprime lending activity in the country.

When it was all said and done and an evaluation was done of those rules in 2006, not 2009, 2010, what in fact had happened is the rules you adopted covered just 1 percent of the market.

And so I return to you, again, was there just a reluctance to regulate? Was there just a belief that regulation was not the right tool to kind of constrain this level of abusive lending that ended up leading to the origination of product and then the mass securitizations you talked about?

Because frankly, without the origination, you couldn't have the securitization. But comment specifically on that 1 percent. Are you aware that that finding was that the rules only covered

1 percent?

MR. GREENSPAN: Well, look, Mr. Chairman, I'll just go back to what I said in my opening remarks.

We at the board in 1998 were obviously aware of the nature of the problems. Remember that the Federal Reserve board is a rule-making; it is not an enforcement agency. We did not have the capacity to implement to the types of enforcement that the FTC has, HUD has, the Department of Justice, and consequently that -- we were -- we were extending what the rules should be and, indeed, we covered as much as one -- anyone could conceive of.

CHAIRMAN ANGELIDES: But if you had adopted those broader rules the FTC could have enforced them --

MR. GREENSPAN: No, but we did adopt --

CHAIRMAN ANGELIDES: -- and others could have enforced them.

MR. GREENSPAN: No, we did adopt a whole series of rules.

CHAIRMAN ANGELIDES: But as I said, they only covered 1 percent of the activity. I mean, you know, my view is, and I want to move on to another issue, is you could have, you should have, and you didn't. And I do think this is one area we have to explore, how this contagion could have been constrained.

Let me move on to a related issue, and it does; it's the same issue but it's a different take.

There was the issue of examination of non-bank subsidiaries. In January 1998, you formalized a policy not to conduct routine consumer compliance exams of the non-bank subsidiaries under your purview. The GAO criticized that policy in November 1999. Governor Gramlich proposed that there should be examinations of consumer finance lenders, which would have covered, depending on the calculation, anywhere between another 12 to 18 percent of the subprime originations. It wouldn't have covered everyone by any extent.

There was an August 2000 memo from Delores Smith and Glen Loney, I think, of your staff, called compliance inspections of non-bank subsidiaries of bank holding companies suggesting a pilot program. In 2004 the GAO weighed in again, urging action given, quote, the significant amount of subprime lending among holding company subsidiaries. But, again, no action, no willingness to go in and examine a non-bank subsidiaries.

Even though after your tenure, finally in 2007, the Federal Reserve with the FTC and the OTS and state regulators did launch a pilot and then, in 2009, began those examinations. Why weren't you willing to go in and at least examine these institutions?

MR. GREENSPAN. Well, first of all, let me just say, with respect to 2009, supervision and regulation evolves over the years. And I thought what the actions the Fed took, in recent years, well after I left, were appropriate given the changing conditions.

But let's -- let me take a second to give you a sense in how the decision making operations at the Fed took place.

We have, of course, this hundred large, very sophisticated, professional group in the division of consumer and community affairs, we have an outside consumer advisory group, we had 12 community groups within each of the Federal Reserve banks, and we finally had the subcommittee of the board, which is a committee on consumer and community affairs, which essentially oversaw a whole operation. That operation, as it worked its way through, would come to the board of governors with recommendations.

Now, all I'm saying to you is that with

respect to a number of the issues that, for example, Governor Gramlich, who is, frankly, one of the best governors I think the board has ever had and a very close friend of mine, he was the chair of that committee and, indeed, we always looked to him to decide which we should be doing and which we shouldn't be doing because he had the most knowledge.

He chose not to bring those issues to the board. So I can't say, particularly, why, in individual cases, but frankly I always thought his grasp of the situation was as good as anybody I had ever run into in the issue of consumer an affairs.

CHAIRMAN ANGELIDES: Well, he was one of -- he was one person, but there were also others and there were staff reports, I mean, would you -- let me just ask you -- would you put this under the category of, "Oops," should have done it?

MR. GREENSPAN: I'm sorry, of what?

CHAIRMAN ANGELIDES: Would you have put this all under the category of, "Oops," we should have done it?

MR. GREENSPAN: You know, I -- when you've been in government for 21 years, as I have been, the issue of retrospective and figuring out what you should have done differently is a really futile activity because you can't, in fact, in the real world, do it.

I mean, I think, I mean, my experience has been in the business I was in, I was right 70 percent of the time, but I was wrong 30 percent of the time. And there are an awful lot of mistakes in 21 years.

So I --

CHAIRMAN ANGELIDES: Would this be one of them?

MR. GREENSPAN: I'm not sure -- I'm not sure what good it does --

CHAIRMAN ANGELIDES: Would you put this in the 30 percent category?

MR. GREENSPAN: I'm sorry?

CHAIRMAN ANGELIDES: Would you put this in the 30?

MR. GREENSPAN: I don't know.

CHAIRMAN ANGELIDES: All right, let's do this, then.

MR. GREENSPAN: Certainly part of it I would.

CHAIRMAN ANGELIDES: Let's do this, then, I'm going to stop at this moment. I'll have additional questions, but what I would like to do is now move to Commissioner Murren -- oh, I -- to my dear friend, Bill Thomas. Bill Thomas?

VICE CHAIRMAN THOMAS: Thanks, to my dear friend the Chairman.

EXAMINATION BY VICE CHAIRMAN THOMAS

VICE CHAIRMAN THOMAS: You are in 21, `87 to `06, I was in 28, from `78 to January of `07. I used to think timing was really important. Now I think timing's everything.

And so, from your perspective and my perspective, looking back at it, and in this particular instance, probably more so than anyone I can think of, there are enormous number of would have, could have, should haves from an enormous number of institutions in government and in the private sector.

One of the things -- and you've written a book, the recent paper in front of Brookings, the crisis and your analysis here does a pretty good job of pointing out problems in a number -- and you focused, to a certain extent, on government and not -- and not the private sector, but it's easy to do in terms of risk management decisions that were made.

I want to try to focus in a slightly different way on your role as the chairman of the Federal Reserve. During a period that you and I shared in terms of an economy that in your attempts to stimulate you were beginning to run out of basis points in the cupboard, and we were real close to jawboning because that was all we were going to have left, and always when you approach a crisis you approach it from today looking at tomorrow.

It's unfair, as you said, but I would like you, for just a little bit, to turn around, because you've categorized concerns in the credit rating structure, risk management structure, obviously the GSEs, and I'm not going to ask you to assign a weighting, but I do want to ask you, since we're not going to be able to accomplish everything that we want to accomplish in the timeframe, as I said in my opening statements, would you be willing to respond to written questions, in part based upon this hearing, but in the other information that we might need, moving forward, understanding consideration of time, place, and manner.

MR. GREENSPAN: Most certainly, I would be delighted to do so.

VICE CHAIRMAN THOMAS: Thank you very much.

In your testimony you point to a lot of the causes, none of them, not the subprime mortgage origination, nor the housing bubble, nor the prudent regulation of large entities, like Citi, that we'll hear from, are really the narrow focus and even to a certain extent the broader focus of the Fed.

So, in your words, what, exactly, is the role and, therefore, the degree of fault that should fall on the Federal Reserve --

MR. GREENSPAN: Well --

VICE CHAIRMAN THOMAS: -- during that period?

MR. GREENSPAN: Yeah, statutorily we have a number of -- we had a number, and still do, have a number of different authorities. Fundamentally, it's monetary policy, and that's what a central bank does. We had supervision and regulation as secondary but major issue. And we even, as we specify in the -- some of our written documents, the third one was systemic risk.

So there's a very broad mandate that the Federal Reserve has, and it's structured according to meet those particular mandates.

We have an organization that is the best in the business, as I'm concerned, in the issue of monetary policy. I know of no better supervision and regulatory operation than exists within the total Federal Reserve system. And we are dealing basically with problems by its very nature which are insoluble that require us to make judgments about what the future is going to hold.

And as I mentioned before, if we get it right 70 percent of the time, that is exceptionally good. And I think that we -- what we tried to do is the best we could with the data that we had, and all I can say is did we make mistakes? Of course we made mistakes. I don't know of -- I know of no way that that can be altered under the existing structure.

And I make a special point, as you know, of trying to emphasize that the only type of regulation that works and, in fact, works sufficiently and adequately are those that do not require forecasts.

VICE CHAIRMAN THOMAS: Is it fair for me to indicate that the thrust of your testimony was that the crisis to a very great extent was caused by the demand for subprime securities; is that a fair --

MR. GREENSPAN: Well, the fundamental cause of the crisis goes back to the end of the Cold War, which is pretty obscure, but it's a global crisis.

You cannot think of the United States crisis in any form without looking at the global context.

VICE CHAIRMAN THOMAS: I'm going -- I'm going to get into that as we go forward, but the narrow focus -- and I do want to thank you for citing a book which I think is especially useful, Reinhart and Rogoff, in getting the context and taking us down memory lane on the history of bubbles.

But if you were focusing on subprime securities, weren't they certainly predicated, to a degree, on rising housing prices?

MR. GREENSPAN: First of all, let's remember that the subprime mortgage market was actually a very effective market in its early years. It served a limited population, homeowner, potential homeowner population, which couldn't afford the 20 percent down payment that prime mortgages required.

VICE CHAIRMAN THOMAS: I agree with you in the early history. I've looked at statements from 1999. As they were moving into this area, a number of people wanted it, isn't that the story of all bubbles, regardless of what it is, whether they all start out with good intentions and somehow they go awry?

MR. GREENSPAN: Well, I'm just trying to --

VICE CHAIRMAN THOMAS: And what we're trying to focus on is, in this particular bubble, what is it that went awry?

Would you feel comfortable saying that at least some of the concern with the housing bubble was the FED's monetary policy or not at all?

MR. GREENSPAN: I'll try to explain, in some detail. In the Brookings paper I go through a lot of econometrics and the like, that certain fundamental things changed in the world economy, which made monetary policy, essentially, ineffective in dealing with long-term asset prices.

So are you asking --

VICE CHAIRMAN THOMAS: I agree with you. I understand the argument. I'm just trying to move down a line.

MR. GREENSPAN: I would say --

VICE CHAIRMAN THOMAS: And clearly capital, the savings rate, the change in the movement of money, and that had you -- it wasn't monetary policy in terms of your argument because, frankly, longer-term yields would have been kept down by the inflow of capital and long-term rates were kept below -- low by international capital flows.

But isn't it a minimally fair statement to at least say that if you had raised rates, wouldn't longer rates, albeit suppressed somewhat, still would have risen and slowed the growth of the housing bubble?

MR. GREENSPAN: I'm afraid that's precisely what we found didn't happen. We --

VICE CHAIRMAN THOMAS: And so even more capital would be flowing in, and it would have left basically long-term rates unchanged?

MR. GREENSPAN: Well, you cannot explain --

VICE CHAIRMAN THOMAS: And that's your argument, isn't it?

MR. GREENSPAN: What I'm saying is, basically, you cannot explain long-term rates in the United States, other than what is being arbitraged in the rest of the world, is the data I produced in the Brookings paper demonstrates that between the years 2002 and 2005, the period when the bubble was emerging, that short-term rates, that is, the federal funds rate, over which we had full control, did not affect long-term rates.

And that, as a consequence of that, even though we tightened monetary policies, starting in mid-2004, for a considerable period of time, we had very little to negligible effect on inflations in the home markets which, of course, is what the bubble is.

So the simple answer to your question is --

VICE CHAIRMAN THOMAS: Give myself an additional five minutes, Mr. Chairman.

MR. GREENSPAN: Simple answer to your

question is that the evidence stipulates that we -- our endeavor to tighten monetary policy did not affect long-term rates as it always had at the beginning of tightening cycle or earlier.

VICE CHAIRMAN THOMAS: Okay. If the ten-year treasuries on which mortgages are based don't react to short-term rates, what was the argument for keeping the Fund's rate low?

MR. GREENSPAN: The Fund's rate --

VICE CHAIRMAN THOMAS: Wouldn't make any difference?

MR. GREENSPAN: Yeah, well --

VICE CHAIRMAN THOMAS: It was for another reason?

MR. GREENSPAN: Yes. The Fund's rate was kept low because even though monitoring policy de-linked from long-term interest rates in that period, it still had a significant impact on short-term rates. And short-term rates do have an impact on the economy.

The reason we pushed rates down was in 2003 there was a very considerable concern that the type of deflationary processes which were underway looked very much like those that were occurring in Japan and, indeed, similar -- similar to what is going on today, and we decided that we needed insurance against that, in the short end of the market. That was the reason we kept rates down until mid-2004, that is.

VICE CHAIRMAN THOMAS: As we're looking at attempts, I mean, obviously we're dealing with a situation in which a number of institutions failed, both in and out of government, and we're asking ourselves questions: Does it make sense to consolidate supervision to try to make sure that the left hand knows what the right hand is doing; is it better to decentralize it; what about transparency, the whole question of the rating structure, third-party analysis.

In terms of looking at where people in office and in positions of responsibility are going now, monetary policy, bubbles, making sure that certain things don't occur again, including, I think, the Fed, in terms of recent statements that are made, if they're moving toward regulatory instruments to target the bubble and interest rates to target economic activity, isn't that, to a degree, a -- maybe repudiation is too strong a term -- but isn't that different than the policy that you thought was appropriate, or is it that they're looking at that period of history that they went through and are talking about where they need to go, and what's your assessment of that?

MR. GREENSPAN: I think it's mainly the latter. It's difficult for me to know precisely what was going on in meetings which I was not at, but the markets are changing all the time.

And it is critically important for the Federal Reserve to keep up with those changes, and in many instances, they change in directions and require actions which previously would have been inappropriate.

VICE CHAIRMAN THOMAS: And then, just let me say, that in the last large paragraph of your testimony, are you really that -- in my opinion, that pessimistic about our ability to deal with the conditions we find ourselves in. Because inevitably it will always be something else, but to a certain extent, I mean, when you've got a river that overflows its banks, whether it's the Nile or the Kern River, building a dam seems to help in terms of allowing a more regulated release. I got out of that last paragraph, the only possible solution is capital and collateral at an adequate rate. And I take a look at Citibank, and we'll be hearing from them recently, and that every turn, they were, quote, unquote, adequately capitalized in all the categories.

So it's easy to say that, but what does adequately capitalized mean? And, yes, we're in the human condition and, yes, I cited a book which kind of puts us in a historical perspective of, this time it's different but it isn't, but I cannot believe that we can't get an understanding of how we can mitigate and, to me, it's always transparency; it's always someone who's disinterested slowing down the process and examining it, to a certain extent.

MR. GREENSPAN: Well, Mr. Thomas, you're raising exactly what the appropriate issue that should confront regulators is, what is adequate capital.

And the reason I say that is, leaving aside what that number is, and I might -- let me just say parenthetically, that you're quite right; Citi and everyone else was considered adequately capitalized. The major mistake in the system, that adequate capitalization issue is a function of what your risk management system is, and as I mention in both the Brookings paper and in the testimony, the written testimony, what we discovered is that there was a fatal flaw in that system. We did not recognize it until we saw the outcome of what happened to the markets after Lehman, the Lehman bankruptcy.

But the issue of adequate capital is important because, just think for the minute, if we knew what the actual number should be, and I have views as to what that number ought to be, it's higher --

VICE CHAIRMAN THOMAS: There will be a follow-up question, in writing.

MR. GREENSPAN: If we had adequate capital and liquidity, whatever else we do would be helpful but not critical. If we have everything else, but not adequate capital and liquidity, the system will fail to function.

In short, I'm saying we can solve this problem on the capital liquidity and collateral side as well as doing it in other areas. Like I said, fraud and misrepresentation, in my judgment, over the last decades, has been inadequately enforced. And that is a critical question.

But how you structure regulation is interesting, important, but not critical to resolving this crisis and preventing the next one.

VICE CHAIRMAN THOMAS: And I think we'll hear from a number of folks offering testimony that fraud or behavior should have consequences. And if it's illegal or criminal, something should result from it. And it has been, in my opinion, a failure from Main Street to Wall Street and here in the nation's capital. Thank you very much.

CHAIRMAN ANGELIDES: All right. Thank you, Mr. Vice Chairman. Now, we are going to go to Ms. Murren.

COMMISSIONER MURREN: Thank you, Mr. Chairman. And thank you, Chairman Greenspan, for your testimony. I enjoyed reading it.

EXAMINATION BY COMMISSIONER MURREN

COMMISSIONER MURREN: I'd like to focus specifically my line of questioning on the responsibilities of the Federal Reserve as it relates to insuring the safety and soundness of the financial holding companies and the bank holding companies and their supervisory role.

And, in particular, go back to a time period that you mentioned, 2005, which was the -- arguably, the peak of the housing bubble, and talk a little bit about the supervisory structure and examination staff of the Federal Reserve system.

It's my understanding that there were approximately 2600 people throughout the -- throughout the Federal Reserve system engaged in supervision and examination. And during that time, approximately 12 of those people were allocated to examining Citibank specifically, and a similar number were allocated to examining the other major banks, which, of course, represent the major concentration of assets within the banking system.

And I'm curious, in retrospect, as to whether you would say that perhaps there could have been better resource allocation within that framework towards those larger banks, particularly in light of the fact that the Federal Reserve is not constrained by the appropriations process, as are some of the other agencies.

MR. GREENSPAN: Let me go back to your original remarks. You were asking about the compensation issues that were involved recently and in history.

I think it's important to --

COMMISSIONER MURREN: Mr. Chairman, I'm sorry, I actually didn't mean compensation, but just the number of individuals that were assigned to each enterprise.

MR. GREENSPAN: Yes, and I thought you were.

COMMISSIONER MURREN: Okay.

MR. GREENSPAN: And I'll go to that.

COMMISSIONER MURREN: Got it.

MR. GREENSPAN: The Federal Reserve and all of the banking regulators have a fairly large cadre of permanent on-site examiners in all of the big institutions. And there is a very large contingent, not only, obviously, from the Office of the Comptroller of the Currency, which of course regulates Citibank, which is by far the largest institution in the Citi holding company system. But we had -- the Federal Reserve had a number of people involved.

It's not an issue of resources. It's not an issue of people. It's an issue that's an inherently rather difficult job. And you're not going to get it done materially better by just reshuffling the chairs. I think it requires a better understanding of the type of problems which arise and most specifically, in my view, the necessity of -- the reason I raise the capital so often is that, in a sense, it solves every problem.

Now, banks don't like the issue of having to put up more capital, but if they didn't and, indeed, this last crisis exhibits this, they are getting a subsidy unpaid for by the federal government which has to bail out the banks at the tail end of a crisis.

And I think what the point, the critical question here is to focus on something we can do something about, control, and generally have far greater effect than any changes we could make in supervision and regulation.

COMMISSIONER MURREN: Well, to the extent that allocations of capital are similar in certain respects to the management of an agency or a business in terms of allocating resources that may be precious, personnel, time, energy, intellect, when you think about that, as an individual who's charged with insuring safety and soundness for bank holding companies, in this case, Citigroup, in concert with other agencies, even when you -- if you look back at some of the commentary from within the Federal Reserve system, there is a review of the operations of the Federal Reserve Bank of New York, as it relates to their supervision of Citibank, which suggests that, it was done in 2005, and I quote, that it had insufficient resources to conduct supervisory activities in a consistent manner.

And I understand this may not have been brought to your attention in 2005, but that it is ongoing and has not been remedied as of the tail-end of 2009.

And I'm curious as to whether you think part of the accountabilities of the Federal Reserve is to insure that these resources are allocated in a manner that would be consistent with insuring safety and soundness?

MR. GREENSPAN: Well, I've heard those statements. And I must say I do not recall a single instance in which requests for funding for supervision and regulation was turned down by the board.

More specifically, I cannot imagine that if the Federal Reserve Bank of New York perceived that it had inadequate resources to do the jobs that it's required to do, that the president of the Federal Reserve Bank would have been on the phone with me, very quickly, and complained. No such telephone call or any other communication ever existed.

So I find this notion of inadequacy not verifiable. I do think there are always problems of turnover, and I think the New York Bank had a significant amount of turnover, which does create managerial problems. It's not a resource problem. In other words, it's not a lack of funds, as you correctly point out, importantly, the Federal Reserve is not subject to -- I should say -- the Federal Reserve uses its own funds, and it does not require funds appropriated by the Congress.

So we're not limited, ourselves, even though we try to restrict what we spend on, because we don't have appropriated funds.

COMMISSIONER MURREN: May I continue on this discussion of the supervisory responsibilities? And perhaps in this instance, working with other agencies, some of the -- some of the safety and soundness determinations for the holding companies were the results of a dependence on the -- the conclusions of other agencies; for example, the securities dealers, the broker dealers for some of these major institutions would be governed by the SEC.

And, if I'm not mistaken, in the legislative language, it suggests that you -- the Federal Reserve, should result -- rely on the results of their supervisions, their examinations.

And I wonder, in some respects, if this doesn't in some ways mirror a dependence, say, on a rating agency? I mean, essentially you're depending on the work of others to determine the safety, soundness, and security of an underlying asset?

MR. GREENSPAN: Yeah, that -- that's a very tough question to answer. And the reason, basically, is that this gets to the issue of centralization and the extent to which the pros and cons of having, for example, as we do now, a number of different regulatory operations within banking.

Since I came to the Federal Reserve, there has been all sorts of discussions about should we have a single consolidated regulator, including the SEC the Fed, the OCC, et cetera.

And there are arguments, and I think effective arguments, on both sides of the argument. I think the current system has worked as well as it can. I'm not sure that centralization, per se, moving the chairs around, will alter its effectiveness.

COMMISSIONER MURREN: Could you comment briefly on the composition of the board of the New York Federal Reserve Bank and your feeling about the constitution. If you have six of nine members who are themselves subject to the supervision of the entity, itself, do you think that that influences in any way the outcomes of their decision making?

And I would note that Lehman Brothers -- Dick Fuld was one of the members of the board. Do you think it makes them too close to the companies that they regulate?

MR. GREENSPAN: Theoretically, I think that's an issue that has to be thought through. I personally have seen no evidence that the members of the board at the New York Bank had any influence on policy, other than giving us advice.

They were an extraordinary valuable source of information because of their scope. But the notion that we in any way favored any of them or basically were influenced with respect to policy by what they said, other than facts they gave us, which we always evaluated, I saw no evidence of that in my tenure.

COMMISSIONER MURREN: And just a final question, on -- back to subprime origination that occurred outside of entities that were supervised by the Federal Reserve, is it your opinion that those entities should be supervised by the Federal Reserve now?

MR. GREENSPAN: Well, first of all, remember, you have to distinguish between supervision and enforcement.

A lot of the problems which we had in the independent issuers of subprime and other such mortgages, the -- the basic problem there is that if you don't have enforcement, and a lot of that stuff was just plain fraud, you're not coming to grips with the issue.

The Federal Reserve, remember, is not an enforcement agency. We don't have or didn't have the types of personnel, which that the SEC, the Department of Justice and HUD has, to do that, so I can't answer that question, fully, because I can't say as fully cognizant of all the possibilities I'd like to have.

COMMISSIONER MURREN: Do you think that, then, you should have those types of enforcement authorities?

MR. GREENSPAN: It would require a very significant set of revisions with respect to how our supervision and examination force would -- would be, because remember that what the Federal Reserve examiners are, are largely experts in examining concentration of assets, the bookkeeping, a whole set of issues which relate to how banks work and how banks work in an effective manner.

It's not a group who can ferret out embezzlement, fraud, misrepresentation. And, indeed, when we get such examples, what we tend to do is to recognize that we don't have the facilities, and we refer it to the Department of Justice, which we did on innumerable occasions on a lot of issues; in other words, we were requesting other enforcement agencies to rectify the problems that we, in our examinations, were able to unearth.

COMMISSIONER MURREN: Do I have one more?
Thank you.

When you look forward, one of the comments that you'd made in the past is that future supervision will, of necessity, have to rely far more on a banks' risk management information systems to protect against loss and then, further, technology and innovation, the development of sophisticated market structures and responses.

Do you still feel that that is the direction that supervision and regulation should go, or do you think that there should be some balance between that and what would perhaps be viewed as more old-fashioned auditing of the various assets that lie within an organization?

MR. GREENSPAN: Well, we are still working with the supervision structure and philosophy that existed a hundred years ago; that is, back, in say the year 1900, the examiners for the Comptroller of the Currency would go into a bank and be able to actually see the individual loan documents and review them in the usual manner.

The system has become so complex that there's no longer the capacity, except in very small community banks to still do it that way, which, incidentally, is the ideal way to actually do supervision and regulation.

So we are confronted with a problem that in order to vet the individual counter-parties of various banks which we supervise and oversee, we are reaching far beyond our capacities so that you have to rely, because there's no other real alternative to a sound risk management system on the part of individual institutions who, in my experience, know far more about the people to whom they lend than we at the Federal Reserve would know, so that they're -- they have to be the first line of defense. If they fail, and they did in this instance, it's not a simple issue of saying, Well, let's regulate better.

The old-fashioned regulation to which you refer was the best. It has been -- it has been largely a victim of the degree of complexity that a current complex division of labor society requires and the financial institutions that are required to support it.

So that you can't turn the clock back -- this is all interrelated and we have -- it's a different world. The standards of living are much higher, the complexity is awesome, and I wish I knew a simple answer to this problem.

But I do know that if you cannot depend on the counterparty surveillance of the individual banks, which we regulate, our ability as regulators would be far less effective, to the extent that it is.

COMMISSIONER MURREN: Thank you.

CHAIRMAN ANGELIDES: Thank you, Ms. Murren. Let's now go to Mr. Wallison. And you have 15 minutes, Mr. Wallison.

COMMISSIONER WALLISON: Thank you, Mr. Chairman.

EXAMINATION BY COMMISSIONER WALLISON

COMMISSIONER WALLISON: Mr. Chairman, it's good to have you here. And I look forward to the opportunity to talk with you today.

As you know, we are in the business of trying to find out what actually caused the financial crisis. And you mentioned in your opening statement and in your written statement, subprime and Alt-A mortgages, and I wanted to follow up a little bit on that.

It's not in the material that the Commission has put out, but it appears that there were as many as 27 million subprime and Alt-A, in other words, weak loans, in the us financial system, of which 12 million, according to the information that

Fannie itself put out, as you mentioned, in 2009, 12 million were held and guaranteed by Fannie Mae and Freddie Mac, and about 5 million guaranteed by FHA, so that would be maybe 17 million out of the total 27 million that were on the books of government agencies.

Now, what we've forgotten a little bit in this is that we were very happy, during the late `90s and the early 2000s, with the fact that these mortgages were increasing home ownership in the United States, something that is very important.

And we understood that these mortgages were subprime and otherwise weak. But the whole objective was to increase ownership among groups that had previously been underserved. And in fact the home ownership in the United States increased from about 64 percent in 1992, `93, to about 69 percent by the 2003, 2004. And this was -- this was a very significant thing in the minds of most people.

Now these mortgages, however, as you pointed out, drove a bubble, a very significant bubble, and when that bubble deflated, they began to deflate themselves, to default themselves, in unprecedented numbers.

And in 19 -- in 2007, as you're aware, the entire asset-backed market for mortgage-backed securities simply disappeared.

As far as I know, this is an unprecedented event in financial history where a market simply disappears. And as a result of that, a large number of financial institutions were simply unable to market or even value the assets they were holding.

Now, I would like to -- I would like to give you a chance to expand on what might have -- on what this whole series of events might have meant as a cause for the financial crisis and particularly what was the fatal flaw you spoke about after Lehman Brothers failed.

And I would like you also to focus in your remarks, perhaps, on the role of government policy in creating or at least demanding the creation of all of these weak and high-risk mortgages.

You've got a very broad experience in markets, worldwide markets, exactly the kind of problem that we've been looking at, the collapse of the worldwide market and, in fact, a worldwide financial crisis and, to me, your experience there would be invaluable to us in understanding the connections between government policy, on home ownership, and that crisis.

MR. GREENSPAN: Well, Mr. Wallison, as I

mentioned in my prepared remarks, government policy, as such, was very strongly related to the issue of enhancing home ownership for lower and middle income groups.

The way I put it, when Honda was a major issue, early on, to the Federal Reserve, and we were beginning to observe the extent of discrimination that was involved in a lot of mortgage-making, the thrust of policies were all acutely aware was very strongly to move towards increasing home ownership, a policy which I supported, because I think in a market-oriented capitalist economy, the greater the degree of ownership of property, the greater the participation of all people in that -- that type of economy.

The trouble, unfortunately, is that if you now go back and track policy, we started off from a point -- from the point where redlining was the real concern. And, indeed, what that implied was that there were a lot of banks which were leaving potentially profitable loans on the table, so to speak. And so we at the Fed were pushing for them to evaluate these loans in a more objective way and they were doing that.

The evolution of the subprime market goes over the years and then begins to accelerate, because it was the broad thrust of this government to expand home ownership, especially amongst lower and middle income groups. It was the policy officially of HUD which gave standards to Fannie and Freddie to significantly increase their participation in those types of loans.

And we look back now at the numbers, as you will -- as you point out correctly, that is, as often the case, we go from one extreme to the other. And if you take the extent of Fannie and Freddie participation in endeavoring to meet the HUD goals, the numbers are extraordinarily large and very -- so large, in fact, that they are preempting a major part of the market, and that which we learned only in retrospect, starting in September 2009, was a major factor in producing the bubble.

COMMISSIONER WALLISON: Let me -- let me follow up a little on that, and I'm delighted to have the time to do that, because I've wondered for a while. I wanted to get a little bit more of the flavor of what it was like to have sat in your seat for many years during this period. In 2003, 2004, maybe even 2005, if the Federal Reserve had tried to clamp down on subprime lending when home ownership was increasing in the United States, what would you imagine would have happened?

MR. GREENSPAN: Well, observe that at that time foreclosures were low, home ownership was expanding; the delinquencies in subprime markets were remarkably small. If the Fed, as a regulator, tried to thwart what everyone perceived in, I would say, a fairly broad consensus, that the trend was in the right direction, home ownership was rising, that was an unmitigated good, the Congress would have clamped down on us.

There's a presumption there that the Federal Reserve is an independent agency, and it is up to a point, but we are a creature of the Congress. And if in that midst of period of expanding home ownership no problems perceived in the subprime markets had we said we were running into a bubble and we would have to start to retrench, the Congress would say we haven't a clue what you are talking about.

And I can virtually guarantee, indeed, if you want to go back and look at what various members of the House and the Senate said during these periods, on the subject, I would suggest the staff do a little run and you will be fascinated by how different it sounded back then than the way the retrospective view of history has evolved.

I mean, I sat through meeting after meeting in which the pressures on the Federal Reserve and on, I might add, all the other regulatory agencies to enhance lending were remarkable -- the less -- right now we have, as you point out, a nonexistent subprime market. There's also a nonexistent Alt-A market, as well. And we have a lot of regulations for subprime, especially HOEPA, which are non-operative, at this stage. There is no market.

I certainly trust it comes back, but the private subprime market shows no signs of moving, and it's not self-evident to me that it's coming back, so we could argue what the rules should be. The rules over what? There's nothing left.

And I -- I am merely saying that having gone 18 and a half years before the Congress, there's a lot of amnesia that is emerging currently.

COMMISSIONER WALLISON: Let me follow up a little bit more, too, on one other part of this whole process.

When the market collapsed, it was impossible, as I said, for financial institutions that were holding these instruments to value them or to sell them; in other words, this had a major effect on their liquidity but also on their financial statements.

And I would like your views on the significance of the elimination, the end of this asset-backed market for mortgage-backed securities on the accounting that financial institutions were required to pursue, the rules of mark-to-market or fair value accounting, and what effect those might have had on the financial crisis.

MR. GREENSPAN: Yeah, this is a major dispute within the accounting profession and in, obviously, the banking industry, as well.

I've always held the view that on fundamental straight loans, commercial loans or personal loans, which you do not expect to sell prior to maturity, that book valuation with amortization, as is usually done, is the probably sensible thing to do.

But there are an awful lot of assets out there which fluctuate in the value and you do sell. And the accounting profession says that those, definitely, have to be mark-to-market.

Now, this is a dispute which we could take two hours on, and I don't want to get involved in it, specifically, but there is no simple solution for -- if you don't have a market value, as poor as it may be, how else do you value these things? So you really have fundamentally either book or market. There's nothing, really, in between.

COMMISSIONER WALLISON: What about cash flow valuation? Many -- many institutions attempted to use discounted cash flow because these -- many of these assets, as I understand it, and we'll talk about this later, when we get to Citi, were continuing to flow cash. Is that not a valid way to do it?

MR. GREENSPAN: Well, as I said, there are pros and cons to all of this, and there is no general agreement within the accounting professions or the banking professions.

And I think it's a very important and useful discussion because it points out the fact that our books of account are not necessarily sacrosanct merely because they're printed and published.

We do not know exactly what the consequences of mark-to-market was, although, as you remember, I guess, following the Lehman default, there were very major arguments that the accounting process of acquiring mark-to-market was a factor in exacerbating the price declines.

That's a hard argument to make. It sounds plausible but the question is always, relative to what? And so I'm not -- I -- I have not taken a position that I feel fully comfortable with on this issue. I'm still learning.

COMMISSIONER WALLISON: I have one more question, my final question, and that is, the National Community Reinvestment Coalition reported in its annual report, in 2007, that banks had made over 2 -- 4 and a half trillion dollars in CRA loan commitments in connection with obtaining approvals for mergers, principally by the Federal Reserve, and that is because the banks had to meet certain standards in their CRA Community Reinvestment Act lending.

Do you recall these commitments, in connection with approvals of mergers by the Fed, and would you refer to that and describe that to us if you do?

VICE CHAIRMAN THOMAS: Mr. Chairman, I yield Commissioner Wallison three minutes.

CHAIRMAN ANGELIDES: So done.

COMMISSIONER WALLISON: I've got three more minutes so you have three more minutes.

MR. GREENSPAN: All mergers and acquisitions that are under the auspices of the Federal -- that is, the Holding Company Act, require us to evaluate CRA in conjunction with coming to a decision. It can only be made by the full board, in other words, it cannot be made -- it cannot be done in any other place in the Fed.

So every merger that we authorized was always accompanied with an evaluation of CRA and the degree of meeting CRA requirements.

The law is pretty specific on that, and I think that there were innumerable cases which we turned down mergers and acquisitions that are far greater, in which the staff initially said the board would not, under its existing various procedures, is not likely to agree with this merger unless you altered your CRA commitments.

And so most of the mergers that occurred I say probably had some CRA adjustment either directly, in threatening to say no to the merger, or indirectly, by anticipating that we would say no and therefore change.

So in that regard, I think it was a fairly heavy CRA commitment in the banking industry, and it is working because you don't hear about it.

COMMISSIONER WALLISON: Thank you.

CHAIRMAN ANGELIDES: Thank you, Mr. Wallison. Now we will go to Mr. Georgiou. Fifteen minutes.

COMMISSIONER GEORGIOU: Thank you.

EXAMINATION BY COMMISSIONER GEORGIOU

COMMISSIONER GEORGIOU: Dr. Greenspan, let me just follow up on one thing Commissioner Wallison began on. At page 12 of your prepared testimony, you state that, in my judgment the origination of subprime mortgages, as opposed to the rise in global demand for securitized -- securitized subprime mortgage interest, was not a significant cause of the financial crisis.

Could you elaborate on that, briefly, please?

MR. GREENSPAN: I'm sorry, would you repeat that, again?

COMMISSIONER GEORGIOU: It says, you say, let me respectfully reiterate that, in my judgment, the origination of subprime mortgages was not a significant cause of the financial crisis, as opposed to the rise in global demand for securitized subprime mortgage interest, the bottom of page 12?

MR. GREENSPAN: Yeah. The actual originations of subprime mortgages, when the subprime mortgages were evolving from the early 1990s through, say, the year 2002, was a contained market, largely fixed rate, and that mortgage -- that market worked well.

It, in and of itself, was not the problem and would not have been the problem, because it's only when we went to adjustable rate subprime dipping deep into the potential of home ownership that the problems began to emerge because the defaults of foreclosures were not a major problem early on.

So it's the securitization, which, in turn, is a consequence of the demand coming largely from Europe. I mean, there was a remarkably large demand in collateralized debt obligations in Europe which were funded by subprime mortgages.

And the reason the demand was so large is the prices, I mean, the yields were high and the credit rating agencies were giving the tranches of these various CDOs Triple-A.

COMMISSIONER GEORGIOU: Well, you just turned me directly to where I wanted to move to.

You know, one of the things that you said at the end of your testimony, your prepared testimony, again, is that you have a number of suggestions to ensure that financial institutions will no longer be capable of privatizing profit and socializing losses.

And those suggestions are largely in the area of increased capital requirements and liquidity requirements, which you suggest might have avoided some of the most significant problems that we've had. You know, you served the better part of two decades as the most important banker in the world, which was 20 percent of the time the Federal Reserve has been in existence, and ultimately the Federal Reserve is the ultimate prudential regulator responsible for the safety and soundness of all of our financial institutions, all the principal bank holding companies and financial holding companies in the United States, which are some of the most important financial institutions in the world.

I would ask you if your suggestions that more capital and more -- more focus on liquidity could have been implemented during your tenure in a way that could have avoided the financial crisis?

MR. GREENSPAN: Not by the Federal Reserve, by itself, because, remember, that where most of the problems existed is in the so-called shadow banking area, that is, investment banks and others not directly supervised and regulated by the Federal Reserve.

COMMISSIONER GEORGIOU: Well, except that the capital requirements, frequently, were established by the Federal Reserve.

MR. GREENSPAN: That's only --

COMMISSIONER GEORGIOU: Let me just --

MR. GREENSPAN: That's only for bank holding companies and banks. We had -- we did not have capital requirements which we could enforce on the investment banks. That's not -- it's an SEC --

COMMISSIONER GEORGIOU: Well, understood, but the -- of course, in many instances, the banks that you supervised were facilitating the creation of securitized assets by the investments banks that were within their -- their groups.

For example, let me just give you an example here. The -- the securitization rule in 2001, which addressed early forms of capital arbitrage through securitization, established risk weightings, as you may recall, based on the credit ratings of each tranche of a securitization.

And, soon after, regulators allowed liquidity puts on asset-backed commercial paper tranches to get 10 percent risk weighting resulting in a capital charge of only eight-tenths of 1 percent in liquidity puts.

And one of the Citi executives has told our staff that Citi made a decision to support their growing CDO business with its own capital because the regulatory capital associated with holding the super senior Triple-A tranches was close to zero.

How -- who how did your supervisors, if at all, go about identifying and addressing the prob- -- problems of capital arbitrage in the -- in the marketplace?

MR. GREENSPAN: Remember that the so-called basal accord, which was the consolidated international system of determining, for example, what risk weights to put on various assets and the various other issues which determine risk-adjusted capital.

I -- it's not clear to me what that has got to do with, for example, any of the large investment banks, whether it be Bear Stearns, Lehman, others. It's not clear to me how we could have regulated specifically their capital.

Remember, their tangible capital got to levels well below that requires -- as is required by banks. We had no capability --

COMMISSIONER GEORGIOU: But some of the activities of the -- of the -- the investment bankers ho- -- affiliates, that were within the financial holding companies and within the bank holding companies have -- were impacted. The bank itself was significantly impacted by the commitments that they made.

Let me just give you an example, here, again. We found from our investigation of Citi that these credit default -- credit collateralized debt obligations, where ultimately Citi, the bank itself had to come up with 25 billion dollars on liquidity puts that they had committed to bring these assets back onto their balance sheet when the crisis hit and they were basically illiquid and unable to deal with them.

Now that had a significant impact; that was roughly 30 percent or more of the capital that was being held at that time by Citi and certainly that eventuality is something that as a prudent safety and soundness regulator at the Federal Reserve, somebody ought to have known about and had some impact on.

MR. GREENSPAN: Well, I think you're raising a legitimate question in the sense that, while we didn't have any control over the capital of investment banks, hedge funds, insurance companies, to the extent that banks lend to those entities, obviously that is an issue which does impact on the overall financial markets.

But that is a question of supervision and regulation on -- it's even, I would say, the old-fashioned regulation.

Is -- are the loans that you're making sound and do they have the capacity of being repaid.

COMMISSIONER GEORGIOU: Well, but, again, here, what we had is the bank, the ultimate bank holding company backstopping and taking -- undertaking, effectively, the risk of the securitized -- the securitized, in this case, collateralized debt obligations of the investment bank.

Because the -- you know, and this is -- it strikes me, frankly, as I study these things, you know, I consider myself a reasonably intelligent person. It takes considerable study, I'm not a trained economist, to understand these extraordinary exotic financial structures.

And you've pointed out in your testimony that we run real risks in that frequently they're misunderstood and exceedingly difficult to value.

And just to take this one example. It seems to me that they were essentially engaged in something akin to the medieval or the mythical medieval alchemy in that they were able -- they were claiming the ability to turn Triple-B mortgage-backed securities into, effectively, Triple-A-plus senior prime securities through the collateralized debt obligations.

And, in fact, as it turns out, they weren't able to sell these to anybody. They held them on their trading books. And part of the reason we're told by people within the Fed and within the Citigroup are that they held them on the trading book because on the trading book, the capital requirements -- that the leverage was essentially 700 or 800 to one because there was, essentially, no capital requirement while they were held on the trading book.

And the liquidity puts themselves were only rated at 10 percent. So -- so -- so what -- what effectively is going on, it seems to me, is a capital arbitrage which puts the safety and soundness of the ultimate bank in jeopardy in order to support -- in order to support exotic financial instruments, which we now know didn't deserve the ratings that they ultimately received, and ought not to have been regarded as so risk-free and should have been very significantly greater capitalized.

And I guess I'm just pointing out to you, really, one of the consequences of your own testimony, which is that I think that isn't it -- isn't it true that the Fed could have and should have understood these linkages better and required greater capital on the part of all the bank and financial holding companies in order to avoid the crisis that we -- we face.

MR. GREENSPAN: Well, ultimately, I can't speak in specific detail, but I do know what the problem is. The problem is that the bank supervisors and examiners would be looking at the Triple-A ratings that they see in a lot of these securities.

And we have a fundamental problem that the credit rating agencies gave Triple-A valuations to certain tranches of collateralized debt obligations, which in retrospect were nonsense, as you point out. They couldn't sell them.

And my impression is, but I don't know because I wasn't there, and I don't know what was going on, specifically, in certain areas, that a bank examiner would be looking at whether a loan was being made which was backed up in some form or another by an inappropriate credit rating agency, because when you're dealing with the size and complexity of the types of things that people have to evaluate, there is a tendency, especially of an average pension fund manager, to seek the --

COMMISSIONER GEORGIOU: The safety.

MR. GREENSPAN: -- the safety --

COMMISSIONER GEORGIOU: The safety of a credit rating agency, understood. And we have a whole `nother hearing that we'll be doing in the future with regard to credit rating agencies, but the OCC examiners that we talked to suggested to us that they regarded these liquidity puts as essentially outside of their purview because they were only supposed to be looking at the -- you know, this was a principal business that was existing within the investment bank, and they regarded that as something that wasn't -- wasn't their responsibility, essentially, to -- to -- or not only wasn't their responsibility, they were affectively precluded from examining it. So I think some of these linkages, as you look at the fragmentation of the -- of the regulation, these linkages between various units within the holding companies put the banks' safety and soundness at significant risk.

And that, seems to me, to be an area where the Federal Reserve could do a much better job in its role as the ultimate prudential regulator and the systemic risk regulator.

MR. GREENSPAN: Well, let me just say this. Not knowing the details of the particular transactions that you're working on, I mean, I certainly agree with

you, in principal, that there have been failures,
because you can't account for what happened without
supervision failure occurring as part of the problem.
But not knowing --

COMMISSIONER GEORGIOU: Well, the specific
detail basically in Citi's case is that they had to
come up with 25 billion dollars, they came up with 25
billion dollars for the liquidity puts, to bring
back -- to buy back, essentially, these -- these
assets that were -- were -- were standing behind the
commercial paper.

Rather than having issued a strict bank
guarantee, which would be customary in a commercial
paper asset-backed transaction, which you would have
to --

MR. GREENSPAN: Absolutely.

COMMISSIONER GEORGIOU: -- you would have
to provide capital to, in this instance they --
they -- they honored these liquidity puts to the tune
of 25 billion dollars, and that was roughly 30 percent
of their capital at the time, the bank did.

MR. GREENSPAN: Actually, what year -- what
year -- what year is this?

COMMISSIONER GEORGIOU: 2007.

MR. GREENSPAN: See, I -- I --

COMMISSIONER GEORGIOU: I mean, it was after you were gone, but it's just emblematic. I'm not trying to focus exclusively on Citi. I'm just trying to say this is an emblematic structure of the collateralized debt obligations which were these exotic instruments that really didn't justify the ratings that they had and -- and -- and caused additional risk to the system which might have been avoided by the capital.

CHAIRMAN ANGELIDES: I'll yield another additional three minutes.

COMMISSIONER GEORGIOU: Thank you. So I guess my point really -- and, you know, I'm sorry that I've run close to out of time.

CHAIRMAN ANGELIDES: No.

COMMISSIONER GEORGIOU: But my point is to focus, again, on your fundamental obligation to enforce an adequate safety and soundness of the institutions.

And at the end of the day, really, I understand your suggestion, and I think your suggestion is a sound one that at this point we need to have additional capital and liquidity requirements on all of these financial intermediaries in order to avoid a crisis in the future, because none of us can predict precisely what exotic financial instrument that's next devised will fail and not perform as represented by the originators.

I note one thing, you testified in front of the Waxman committee, back in October of `08, and one thing I noticed that you said was that, as much as I would prefer it otherwise, in this financial environment I see no choice but to require that all securitizers retain a meaningful part of the securities they issue. This will offset, in part, market deficiencies stemming from the failures of counterparty surveillance.

I take it by that, you mean that that would be a -- that would provide confidence to the market if they were to retain a portion of those securities, that those securities -- that they believed those securities actually to be sound and worthy of investment, is that -- was that your point?

MR. GREENSPAN: That's correct.

COMMISSIONER GEORGIOU: Right. And isn't that the case, really, with regard to part of our focus here is on securitization, and isn't it the case that we -- we've created a situation in which a number of the parties involved in the origination of these securities are all paid in cash as the securities are issued and retained no ultimate interest in the ultimate -- in the ultimate success or failure of the security, ranging all the way, if you count, you know, the originators of the mortgages, the mortgage brokers, the investment bankers, the lawyers who write the prospectuses, the auditors who audit the books, the credit rating agencies that rate the agents -- that rate the securities, and at the end of the day, they've left -- they've left all their -- they have no skin in the game, they have no obligation to have a financial consequence to their -- their creation.

And isn't that a problem that needs to be addressed?

MR. GREENSPAN: Well, yeah, and I agree with you in that the regard. The -- the major source of that problem was that because of the complexity of the types of products that were being issued, that otherwise sensible people, in despair, relied on the credit rating agencies issued by the -- issued.

And if they were otherwise, in other words, of, instead of giving Triple-A designations to a lot of these things, they gave them B or Triple-B, which many of them were, people wouldn't have bought them. The problem further is that you are raising wouldn't have happened.

COMMISSIONER GEORGIOU: Well, of course, and they wouldn't have bought them because many of them were prohibited by either the statute or their own requirements --

MR. GREENSPAN: Precisely.

COMMISSIONER GEORGIOU: -- for not buying them. And of course the problem, further, is that the credit rating agencies frequently are only paid if they -- if the securities were sold. They were paid as a portion of the issue.

So they obviously had an incentive to create a Triple-A rating which might not otherwise have been justified. Thank you.

CHAIRMAN ANGELIDES: Thank you very much. Let's do this -- we're going to take a --

VICE CHAIRMAN THOMAS: Mr. Chairman, just please let me, for the record, Mr. Chairman, I noticed that you were nodding your head at the final statement that the gentleman made.

Were you in agreement with his assessment in terms of the behavior of the credit rating agencies, to a certain degree?

MR. GREENSPAN: The credit rating agencies, as such? All I will say is what I can say for myself is that the rating -- the ratings that were developed by the credit rating agencies were a major factor in the cause of the problem.

VICE CHAIRMAN THOMAS: Thank you.

CHAIRMAN ANGELIDES: Thank you. We'll take a five-minute break -- ten -- let's be back here in five. Thank you.

(Recess.)

CHAIRMAN ANGELIDES: Reporters, please depart the well, please, but do not disconnect the mics this time.

All right, let's start again, we are starting with Mr. Hennessey. Your turn, Mr. Hennessey.

COMMISSIONER HENNESSEY: Great. Thank you, Mr. Chairman.

EXAMINATION BY COMMISSIONER HENNESSEY

COMMISSIONER HENNESSEY: Chairman Greenspan, I want to focus on Fannie Mae and Freddie Mac's role in creating or exacerbating the explosion of bad subprime mortgages and specifically on their portfolios.

Now, it's possible that not everyone watching has read your written testimony, so I want to, if I can, try to summarize how I understand that part of your testimony, and then I want to ask about specific House action, from 2007, which I think contributes to this.

As I understand it, Fannie Mae and Freddie Mac held huge portfolios of securities that they issued, on the order of about 6- or 700 billion dollars each. These portfolios were undercapitalized and they ultimately led to Fannie and Freddie's collapse.

In October of 2000 the Department of Housing and Urban Development significantly raised the affordable housing goals they set for Fannie and Freddie.

Fannie and Freddie chose to meet those new goals by dramatically increasing their purchase and holding of securities backed by subprime, adjustable rate mortgages.

Your testimony says that in 2003 and 2004 they bought about 40 percent of this market, five times more than they did in 2002, and at the time Fannie classified these mortgages as prime, in September of `09 they reclassified much of that portfolio to be subprime.

Now, as I understand it, this huge increase in demand from Fannie and Freddie in 2003 and 2004 contributed to a decline in long-term mortgage rates relative to treasuries. That decline in long-term mortgage rates helped fuel the rise in housing prices. And then when that housing price bubble burst, it hurt not just people who owned adjustable rate mortgages, but also fixed rate mortgages, as well.

Now, in February of 2004, and what we're talking about here is we're both talking about the GSEs' holding huge portfolios, this in effect multi-hundred-billion-dollar hedge funds on top of their guarantee and securitization business combined with new affordable housing goals set in the fall of 2000.

Now, in February of 2004 you testified that, quote, GSEs need to be limited in the issuance of GSE debt and the purchase of assets, both mortgages and non-mortgages that they hold. That was in 2004. In 2007, the Congress considered the Housing Finance Reform Act. And the bill that came out of Chairman Frank's committee gave the new housing finance regulator certain authorities.

And because it's important I want to read the language. What that language said is that the director shall consider any potential risks posed by the nature of the portfolio holdings. That's it. Okay. So the new regulator should consider the risk of these multi-hundred-billion-dollar portfolios when he or she is evaluating Fannie Mae and Freddie Mac.

Now, there was an amendment; it was House Amendment 207; it passed the House on May 22nd, 2007, on a 383 to 36 vote. That is an overwhelming bipartisan vote.

And what that amendment did is it limited the new housing regulator's authorities. It said that the new housing regulator can only consider the risk that these portfolios place to the safety and soundness of Fannie Mae and Freddie Mac, not to the financial system as a whole.

What I want to do is I want to read to you language from the sponsor of the amendment, Mr. Neugebauer, he said, this legislation clarifies that when a regulator looks at regulating this entity that he looks at the safety and soundness of that entity and not external factors.

He later says, we shouldn't put things out there that the regulator is not able to quite honestly articulate, because what is a systemic risk? That becomes a point of order that sometimes the regulator cannot explain exactly the systemic risk is they believe it is. It is a way to limit their portfolios.

So, in effect, 221 House Democrats and 162

House Republicans voted to preclude the regulator from being able to consider systemic risk with the GSE portfolios, this is directly contradicting your recommendation of February 2004.

Suppose it had gone the other way. Suppose that Housing regulator had had the authority to limit the GSE portfolios in 2007 and had exercised that authority. What effect do you think that might have had on the crisis?

MR. GREENSPAN: Well, let's -- let's go back a number of years, because the original mandate of Fannie and Freddie was read as securitization solely and that the cumulation of portfolios of assets was not in their business plan with the onset of, I guess, a cynical view of the market that the presumption that Fannie and Freddie were not backed by the full faith and credit of the United States government, and that cynicism basically led to a 20 to 40 basis points subsidy in their divestitures in short-term debt, which, for a financial institution, is huge.

And so the -- the procedures that were involved with Fannie and Freddie were largely to build up the asset side of the portfolios. It didn't al- -- it almost didn't matter what they held just so long as they harvested the subsidy. That created huge profits, huge rates of return on equity, and set into place a very large component of potentially toxic assets.

And the failure of Fannie and Freddie was a major factor in the crisis, remembering it occurs prior to the Lehman default. And the result of that is that a combination of the system breaking down had extraordinarily large effects, which are difficult to judge, because you only have a single incident. You can't say, well, what could have happened "if," but there is no doubt in my mind that if Fannie and Freddie had held only those mortgages in its portfolio which were required to make securitization feasible -- they have to hold a certain amount of inventory, which is a very small fraction of what they actually held. If that didn't happen, they would not have failed.

And the lack -- that particular event, which is a very important event in the evolution of the crisis, may have headed it off. I don't frankly know. I don't know how one would know. But that would have been far better off, in my judgment, is unquestionable.

COMMISSIONER HENNESSEY: Thank you. And a secondary point, as I understand your testimony, part of what you're suggesting is that to meet the higher affordable housing goals set in October of 2000, Fannie and Freddie increased their purchase of specifically subprime ARMs. They classified them at the time as ARM as weak -- sorry -- as prime. They reclassified them later.

We have the former head of Fannie Mae coming in, and we have the former regulators coming in. What would you recommend we ask them about the interactions of these housing goals and the actions that they took in 2003 and 2004?

MR. GREENSPAN: Well, I would ask them, other than making profit for the corporation what was the purpose of accumulating the assets in their portfolio?

The reason I raise the issue is I never got a straight answer in the early years that I was involved with them. And I think this is an unfortunate event, which as far as I'm concerned, had it not occurred, namely the huge accumulation of assets, for a lot of different reasons, including potential distortions in the marketplace, we would have not have had, incidentally, the big affordable housing purchases by Fannie and Freddie because it's based on volumes. And the amount of Fannie and

Freddie, as it turned out, ARMs that they bought would have been very much less, and that would removed a very substantial amount of weight on the -- on the subprime market, because remember, that mandated demand. It's mandated, remember that mandated demand took out, effectively as the first tranche, 40 percent of the market. And when you do that to any market, it has extraordinary major impacts.

And I can't help but believe that even with the affordable housing goals with a far smaller Fannie and Freddie portfolio that we would have run into the extent of the types of problems we were to run into in 2008, for example.

COMMISSIONER HENNESSEY: Thank you.

CHAIRMAN ANGELIDES: Thank you very much. Ms. Born?

COMMISSIONER BORN: Thank you.

EXAMINATION BY COMMISSIONER BORN

COMMISSIONER BORN: Mr. Chairman, you long championed the growth of the over-the-counter derivatives market --

MR. GREENSPAN: Excuse me, can you put your microphone closer?

CHAIRMAN ANGELIDES: Is your mic on, Ms. Born?

COMMISSIONER BORN: It is on, yes.

CHAIRMAN ANGELIDES: Now we hear you.

COMMISSIONER BORN: You've longed championed the growth of the over-the-counter derivative market because of the risk-shifting opportunities that it provides. You've also taken the position that the over-the-counter derivatives market should not be regulated.

As chair of the Federal Reserve board, you endorsed a President's Working Group report in November 1999 calling on Congress to eliminate regulation of the OTC derivatives market.

You then welcomed the adoption of the Commodity Futures Modernization Act of 2000, which eliminated virtually all federal government regulation of the OTC derivatives market and also preempted certain state laws relating to it. So as a result OTC derivatives have been trading with virtually no regulation for a decade. And the market grew to exceed 800 -- 680 trillion dollars in notional amount by the summer of 2008.

In your view, did credit default swaps, which are a type of over-the-counter derivatives contract, play any role in causing or exacerbating the financial crisis?

MR. GREENSPAN: Well, first, let's remember that in the early years, credit default swaps were an extremely small part of the total notional value. And, indeed, the arbiter or the collector of international data, the bank for international settlements, didn't find credit default swaps in sufficient volume to show them as a separate category until the end of 2004.

And if you separate credit default swaps from the rest of the market and look at the rest of the market essentially as interest rate derivatives and foreign exchange derivatives, which it still is, you have the remarkable phenomenon of these unregulated derivatives having the most extraordinary stress test in 2008, 2009 with no evidence of which I am aware that they didn't work exactly as they were going to. It is certainly the case that credit default swaps did create problems, and indeed, the Federal Reserve Bank of New York was probably the very first group to really come to grips with the problems in 2005.

So as you go back to the earlier periods, credit default swaps were never discussed in president's working group, to my knowledge. When we talked about derivatives, we were talking about, essentially, interest rate derivatives and foreign exchange derivatives.

And they had been unregulated, to be sure, and no problems have emerged as a consequence of that. Credit default swaps are a more complex issue, but they were not on the agenda in the early years when we had these discussions at the president's working group.

COMMISSIONER BORN: Well, they certainly existed as of that time. I think there is an August 12, 1996, supervisory guidance for credit derivatives that were issued, was issued, by the Federal Reserve Board on the bank -- to the banking committee, the community, about the use of credit default swaps and other credit derivatives.

And certainly, if you've read Gillian Tett's book called Fools' Gold, it talks about the extensive activity in credit derivatives, including some very creative things that J.P. Morgan did in 1997.

Are you aware that the collapse of AIG was caused by its commitments under credit default swaps that it had issued? The taxpayers had to bail out AIG because of its exposure on credit default swaps to the tune of more than 180 billion dollars.

MR. GREENSPAN: Well, first, let me respond to your 1997 reference.

I can't give you an exact number, but my recollection was that there was credit default swaps were something like 1 percent of the total notional value of all derivatives. And that the mere fact that it was being discussed is something which is to be expected.

But if you're evaluating their impact on the economy and on the financial system, a 1 percent or less in notional value is not a big factor in anything.

With respect to AIG, it is correct that their offering and selling vast amounts of credit default swaps was the proximate cause of their problem.

But they were selling insurance. They could just have easily have sold and gotten into the same trouble by issuing insurance instruments rather than credit default swaps.

My understanding is that it had -- the reason that they did that was it was a capital -- differential capital requirements. But that was not an issue of the credit default swaps, per se.

The issue was the extraordinary behavior of investment officers at AIG who took unbelievable risks with essentially very little capital.

There is a difference between credit default swaps and, for example, interest rate derivatives in the sense that credit default swaps insure the principal as well as the interest. Interest rate derivatives, for example, only deal with interest and are, therefore, far less subject to the problems that exist when you're insuring the level of principal as well as interest.

COMMISSIONER BORN: Mr. Chairman, the market for credit default swaps had risen to 60 trillion dollars in notional amount equal to the gross national -- the gross domestic product of all the countries in the world by 2008.

Also, let me point out, that had these been being sold as insurance products, they would have been regulated by insurance regulators and supervisors. There would have been a requirement of capital reserves. There would have been a requirement that these contracts could only have been sold to entities that had an insurable interest, that is, held the bonds or securities that were being insured against.

There was no such regulation in the OTC derivatives market thanks to the action of the president's working group and Congress in 2000.

Let me go onto another subject. In your recent book, you described yourself as an outlier in your libertarian opposition to most regulation. Your ideology has essentially been that financial markets, like the OTC derivatives market, are self-regulatory and the government -- and the government regulation is either unnecessary or harmful.

You've also stated that as a result of the financial crisis, you have now found a flaw in that ideology.

You served as chairman of the Federal Reserve Board for more than 18 years, retiring in 2000, and became, during that period, the most respected sage on the financial markets in the world.

I wonder if your belief in deregulation had any impact on the level of regulation over the financial markets in the United States and in the world.

You said that the mandates of the Federal Reserve were monetary policy, supervision and regulation of banks and bank holding companies, and systemic risk.

You appropriately argue that the role of regulation is preventative but the Fed utterly failed to prevent the financial crisis.

The Fed and the banking regulators failed to prevent the housing bubble; they failed to prevent the predatory lending scandal; they failed to prevent our biggest banks and bank holding companies from engaging in activities that would bring them to the verge of collapse without massive taxpayer bailouts; they failed to recognize the systemic risk posed by an unregulated over-the-counter derivatives market; and they permitted the financial system and the economy to reach the brink of disaster.

You also failed to prevent many of our banks from consolidating and growing into gigantic institutions that are now too big and/or too interconnected to fail.

Didn't the Federal Reserve system fail to meet its responsibilities, fail to carry its mandates?

CHAIRMAN ANGELIDES: And by the way, on this, I'm going to yield two minutes for the response. We're over time.

MR. GREENSPAN: First of all, the flaw in system that I acknowledged was an inability to fully understand the state and extent of potential risks that were as yet untested. We didn't see what those risks were until they unwound at the end of the Lehman

Brothers' bankruptcy.

And I had always presumed, as did virtually everyone in academia, regulatory areas, banks, presumed that risk potential was, having failed there, means that we were undercapitalizing the banking system probably for 40 or 50 years. And that has to be adjusted.

But the notion that somehow my views on regulation were predominant and effective as influencing the Congress is something you may have perceived. It didn't look that way from my point of view.

First of all, I took an oath of office to support the laws of the land. I don't have the discretion to use my own etiology to effect my judgments as to what Congress is requiring the Federal Reserve and others to do.

As far as I'm concerned, if somebody asked me my view on a particular subject, I would give it to them, and I express them in the book you're referring to, but that is not the way I ran my office.

I ran my office as required by law. And there's an awful lot of laws that I would not have constructed in the way that they were constructed. But I enforced them, nevertheless, because that was my job: That was built into my oath of office when I took over the FED's chairmanship in 1987.

CHAIRMAN ANGELIDES: Thank you.

MR. GREENSPAN: So, I know my time has run out, but I really fundamentally disagree with your point of view.

CHAIRMAN ANGELIDES: Thank you. Mr. Thompson?

COMMISSIONER THOMPSON: Thank you, Mr. Chairman.

CHAIRMAN ANGELIDES: Microphone, Mr. Thompson?

COMMISSIONER THOMPSON: Thank you, Mr. Chairman.

EXAMINATION BY COMMISSIONER THOMPSON

COMMISSIONER THOMPSON: Dr. Greenspan, I would like to go back to the line of questioning that Mr. Georgiou raised regarding regulatory arbitrage, if I might.

You said in the Brookings paper that regulators can, and I quote, prohibit a complex affiliate and subsidiary structure whose sole purpose is tax avoidance and regulatory arbitrage.

It's clear from our view of Citi that that was, in fact, part of what drove some of their decisions as they looked at opportunities.

So how should supervisors have prevented this regulatory arbitrage from occurring prior to the financial crisis?

MR. GREENSPAN: Well, it's -- to a large extent, it's caused by the legal structure of these organizations. You know, one of the problems that exists is that people are concerned about off-balance-sheet accounting, that's not what bothers me.

What bothers me is if you take something off your balance sheet you should be prohibited from bringing it back.

And I cannot believe that people secondarily thought that reputation risk all of the sudden emerged, that they didn't know about it, so I think there's a bit of dubious bookkeeping going on at that particular point.

But if you -- if the regulators can determine what type of subsidiary structures you can have in a large organization, you can eliminate a fairly significant amount of the regulatory arbitrage.

And it's not an economic issue, it's basically a means by looking at what the capital requirements or other requirements are and figure out how you would structure the various subsidiaries of your organization to avoid that. That is in nobody's interest.

COMMISSIONER THOMPSON: So financial innovation has been an important component of what's driven the contribution to GDP growth from the financial services sector over the last 20 years or so. If you were to think about other industries that have significant societal impact, pharmaceuticals, transportation, a range of others, they are required to test their products and have those products certified before they release them into the marketplace.

So if we were to now think about the societal impact of financial services and your views around collateral and capital, should there be a different scheme for new product introduction in this industry that would mitigate, perhaps, the societal impact that some of the risks that we are taking really represent today?

MR. GREENSPAN: Well, that's a good question. I think you first you have to start with the question of what's the function of our financial system. And basically it's to supply financial services to the non-financial sector, Main Street, so to speak, which facilitates the production and standards of living that emerge as a consequence of that.

When you -- for example, we have an extraordinary rise in the share of national income going to finance starting in 1947, year after year after year, and so what we're dealing with is a major problem in how to make judgments of what is innovation that works and what is it that doesn't work but that you need innovation to essentially keep up with the complexity of the non-financial economy, it goes without saying, all innovation, by its nature, is unforecastable with respect to how it will come out.

So I think what we find in finance, as well as in the non-financial area, is that a large number of innovations fail, but fortunately what causes progress and productivity is that more innovations are positive than otherwise. You cannot tell, in advance, which is which, so my judgment is the only way to solve that problem is to have enough capital that will absorb X percent of innovations failing.

We will never see SIVs or synthetic CDOs as far in the future as I can imagine. They're gone. The critical issue here is in investors who determine what products fail and what succeeded, it's not the banking system. The banking system can offer them, but if they don't buy them, there's no use.

So the non-financial part of our economy is the arbiter of what products fail and not fail.

COMMISSIONER THOMPSON: So would you, therefore, be an advocate of some form of incremental capital being put in place ahead of the release of these critical new innovations?

MR. GREENSPAN: As a general rule I'm not comfortable with variable capital changes, you know, whether it's for -- I mean, the main argument is usually that there's cyclically adjusted capital requirements. That would be fine if we could forecast where in the business cycle we were in real time.

We're always very thoughtful on the issue of where we were in the business cycle but it's another -- it's a wholly different issue when you're in real time and saying, are we in the beginning of the cycle or are we closer to the end. And I think to --

COMMISSIONER THOMPSON: Well, for new products we would clearly be at the beginning of the cycle.

MR. GREENSPAN: I'm sorry?

COMMISSIONER THOMPSON: For a new product innovation --

MR. GREENSPAN: Yes.

COMMISSIONER THOMPSON: -- we would clearly be at the beginning of the cycle.

MR. GREENSPAN: No, no, I'm referring to the business cycle, generally.

COMMISSIONER THOMPSON: Oh, okay.

MR. GREENSPAN: But I agree with you. In other words, that every new -- every innovation always starts at the beginning, and you don't really know where it's going to come out, and the non-financial system will tell you whether it's valuable to them. And I would just as soon not try incremental. I have nothing in principal against it; it's just that I feel it's not easy to implement.

COMMISSIONER THOMPSON: Well you commented this morning that the issue of consolidated regulatory scheme had been discussed for years within the Fed and, I guess, amongst the peer agencies.

And it's your opinion that the change that -- there's no evidence that would suggest the change to consolidating the regulatory scheme would, in fact, help.

So, therefore, should I conclude from that comment that you, as someone who sat over and was the standard bearer, if you will, for our financial system for almost 20 years, believes that no meaningful change is necessary now.

MR. GREENSPAN: I don't know the answer to that question because we've got so many overlapping jurisdictions and the like that are frankly kept that way for political, not economic or financial reasons. And I have no doubt --

COMMISSIONER THOMPSON: But politics aside.

MR. GREENSPAN: I have no -- I'm sorry?

COMMISSIONER THOMPSON: Politics aside.

MR. GREENSPAN: Politics aside, yeah, I have always thought that there are differing things that could be done.

But I wanted to emphasize that it's not the particular agency which does these things, but more importantly what is done than who does it.

COMMISSIONER THOMPSON: So you strongly believe that incremental capital and incremental collateral would help? I interpret that from your comments.

MR. GREENSPAN: I would say I'd be more inclined to just set absolute levels. There is a problem with it changing capital requirements largely because it creates an element of uncertainty in the marketplace, which, probably, I have no idea how big it would be, but it's certainly negative.

I think that you're far better off just fixing capital requirements at levels and just holding them there as permanent requirements. I think that would address, in my judgment, most of the problems I see that are out there.

COMMISSIONER THOMPSON: While I would tend to agree with that, it would also seem to me that combining the notion of supervisory as well as enforcement would also help, because you indicated that in many instances, while the Federal Reserve had supervisory responsibility, you really did not have enforcement.

So I'm not sure how the system works and improves without us making some changes not just in capital and collateral, but in how we execute on the rules and laws that we have in place.

MR. GREENSPAN: Well, I think in order to do that, if the Federal Reserve were required to enforce the rules and regulations that it promulgates, I think the staff would have to be vastly larger.

COMMISSIONER THOMPSON: But some other part of government would also have to shrink?

MR. GREENSPAN: Well, there's a -- right

now there's a great deal of discussion that's going on with respect to who should be supervising what, and the problems that -- I'm not sure that we solve any of the problems that have been properly identified in this crisis by moving the chairs around.

I do not deny that, and if you ask me, starting from scratch, would I have a different type of regulatory system focused on the areas where I think they can be most effective, the answer is I -- I -- I suggested that in the Brookings panel piece, where I went through the reasons why, what regulations can do and what they can't do. And if we emphasize what we can do, which can be very effective and, in my judgment, determinative, what you tend to do is to cause the losses to be concentrated in the common shareholders of institutions.

And if capital is large enough, all of the losses accrue to them and not to the debt holders and therefore they do not default. And therefore you don't have serial contagion which is caused by the faults of senior debt mainly, but debt in general.

CHAIRMAN ANGELIDES: Thank you very much.

COMMISSIONER THOMPSON: Unfortunately, we don't have the luxury of being able to start over from scratch. And so I think we're going to have to implement incremental changes.

And your knowledge of the system and what changes would be beneficial to the American public would be very helpful.

CHAIRMAN ANGELIDES: Thank you. All right. Now, Mr. Thomas, you and I have some remaining time. Do you want to -- should I go ahead and take my just cleanup items and then turn to you?

VICE CHAIRMAN THOMAS: I would advise you that setting politics aside, as chairman you should let me go first.

CHAIRMAN ANGELIDES: You go ahead, Mr. Vice Chairman.

VICE CHAIRMAN THOMAS: And then you get to close. Although I'm very tempted by that invitation.

CHAIRMAN ANGELIDES: Go ahead, Mr. Thomas.

VICE CHAIRMAN THOMAS: Thank you. I would just tell my -- my friend that setting politics aside is a sheer invitation for politicos to show you that you can't.

COMMISSIONER THOMPSON: And it's hard to do.

VICE CHAIRMAN THOMAS: And we have seen that over and over again, just the way the system works.

And if you're going to start with a clean sheet of paper, it means you have it turned over. You really need to turn it over because there is no such thing as a clean sheet of paper.

EXAMINATION BY VICE CHAIRMAN THOMAS

VICE CHAIRMAN THOMAS: Mr. Chairman, this is a question that I will ask you that I don't need you to answer now. You might want to do it on paper to me. If you don't and you can offer a reasonably short version, that's perfectly acceptable.

And the reason I put it in that context is that your mention of the book Reinhart and Rogoff, I serve at AEI with a colleague, who was the husband of Professor Reinhart, Vince Reinhart. And in discussions that we've had, he's indicated in his position -- I should give a bit of background -- he's the head of monetary affairs at the Fed from `01 to `09, and he's talked about the fact that he thinks, based on his knowledge and experience, that the Fed made a mistake signaling to the market that it was going to slowly raise short-term rates.

And the argument goes that this created a steep yield curve, because the market, as we saw over and over again, quickly adjusted to where they knew the rates would eventually go.

And the steep yield curve led to novel ways for firms to take advantage of borrowing very short-term and lending long-term.

Do you agree with that analysis? In retrospect, was the Fed's strategy the right one to take, or is it the usual argument at the time given the information we had and under the circumstances?

MR. GREENSPAN: Well, Vincent Reinhart is a first-rate economist and whose judgment I, for many years, relied on.

Let me answer that question in writing after I go over the particular details of the position I know he's taking.

VICE CHAIRMAN THOMAS: And I wanted to offer that to you because I am interested in -- in a more fundamental answer, because it will lead to other questions as we go forward, so thank you. And we'll submit it to you in writing.

CHAIRMAN ANGELIDES: Additional questions, Mr. Thomas?

VICE CHAIRMAN THOMAS: Not at this time, Mr. Chair.

CHAIRMAN ANGELIDES: All right. All right, couple of items just -- first of all, a couple of clarifications, because I just want to make sure we have the facts for the record.

Even by your own submission, and by the way, let me stipulate that Fannie Mae and Freddie Mac were disasters, but I just do want to point out, because you keep referring to 40 percent of the market, that if you'll look at that 2002 to 2005 period, the private market, Wall Street was anywhere from 59 to 92 percent of that private label security market. That's just a fact.

Secondly, I did want to just follow up on Ms. Murren's question of earlier.

I just wanted to point out, because when she referred to the review of the Federal Reserve Bank, and I don't think there's any expectation you would have seen this review from 2005, but this was not some third-party wild-eyed critic. This 2005 review, which Ms. Murren referenced, was a peer review by other Federal Reserve banks.

And I might say there was a second review in December 2009 where again the peer, other Federal Reserves, commented on the supervision of Citibank by the Federal Reserve Bank in New York, and they said, quote, the supervision program for Citigroup has been less than effective although the dedicated supervisory team is well qualified and generally has sound knowledge organization, there have been significant weaknesses in the execution of the supervisory program. So I just want to point out that these were internal reviews as to the inadequacy of supervision.

But I do want to return to just one line of questioning that I asked you that I want to follow up on, because you indicated that in many respects what was important was to go after fraud, embezzlement, illegal activities. And you've been very clear on that. So very quickly, there was the FBI warning in 2004; there was a sevenfold increase in the number of suspicious activity reports related to mortgage fraud by banks from 2003 to 2006; your own Federal Reserve in 2005 put out a white paper on the detection, investigation, deterrents of mortgage loan fraud.

Just very quickly, what was the most important thing you did to combat fraud, the single most important thing that the Fed did in light of the evidence that it was growing in mortgage.

MR. GREENSPAN: Well, first of all, the enforcement against fraud and misrepresentation is one of the key elements in any market society. You cannot have an effective market society if counterparties cannot trust individuals with whom they're dealing with wholly independently of what that contractual relationships and enforcement is.

The FBI, I believe they had 22,000 cases in 2005. That's important and critical. One issue of fraud is enough. But 22,000, when you have 55 million total mortgages outstanding, residential only, home mortgages as well as a lot of commercial mortgages, it's not a systemic problem.

CHAIRMAN ANGELIDES: But what -- but did you then make any actions? I mean, I could only count two referrals under fair lending laws from 2000 to 2006 by the Fed to Justice, just two: One for First American Bank in Carpentersville, Illinois, and one for Dessert Community Bank in Victorville. It seems pretty slim.

MR. GREENSPAN: Well, the issue was that this staff, in evaluating what was going on, which -- see, remember, a goodly part of supervision and regulation is to get things solved so that if somebody is in violation of something and you can get them to adjust so that the regulators are satisfied, it never gets to the point where it's a referral for enforcement in some form or another.

I agree with you in the sense that the number of actual referrals that were made to the Department of Justice were small and I believe a good reason for that is we were able to get compliance without doing that.

CHAIRMAN ANGELIDES: All right. Well, I want to -- here's my final observation. It really follows up on Mr. Georgiou's questions and Ms. Born's. And I'm going to ask you that in the remaining time just to, I think, deal with something that's very significant around which I think a lot of Americans have questions.

Their -- (Power outage.) all right. That's what -- that's what God thinks about the questions.

CHAIRMAN ANGELIDES: Stay. Stay. Hang on one second so we can get this back up. All right, let's do this, let's do this. Let's just finish up and see if there's any -- speak up a little and see if there's any other questions.

So here is my final question, which is, it does seem that there's a big issue here about this, and there's something, as I read all these documents which are coming through, something called the Greenspan Doctrine. I knew what the Truman Doctrine was. We see the threat of communism. The Bush Doctrine, but there seemed to me with the Greenspan Doctrine that even if you saw evident threats to the financial system, you took no regulatory action.

I think the one thing I want to ask, following up on Ms. Born, is looking back on the last decade, do you feel that there's a failure of regulation in our system?

MR. GREENSPAN: There was a -- there was a failure of regulation in the critical part of it, namely in the private counterparty risk management system, this is the system which evolved over 50 years, spawned numerous Nobel Prize winners, was accepted by academia, the regulatory agencies, and especially the Federal Reserve. That turned out to be a major mistake.

Is it an indictment of the total system? By no means, because it's not the conceptual framework of how to regulate, but the actual application of it. We did not have enough capital in the system to contain the type of crisis, which in my judgment, happens once in a hundred years. This financial crisis is, best I can judge, is the most severe in history. It's not the same thing as saying that it's the severest economic crisis. That was the Great Depression.

But there is no example that I've been able to find of a breakdown in short-term financial availability, which is the critical issue in a financial crisis, in any history that I can see on -- on our global scale that occurred within days following the Lehman Brothers' bankruptcy.

CHAIRMAN ANGELIDES: All right. And Mr. Vice Chair?

VICE CHAIRMAN THOMAS: On that statement, Mr. Chairman, I would ask you a follow-up question, and that was quite a contextual position for your statement that you do not, given your background, understanding, history, see any comparable collapse.

In that regard I'd have to say, notwithstanding the difficulties we're still in, the experiences that we had previously, in my opinion I want your reaction, allowed us to take some actions which mitigated, notwithstanding all of the damage that has been done, an even greater crisis; is that accurate?

MR. GREENSPAN: I'm sorry, may I answer that for the record, Mr. Thomas?

VICE CHAIRMAN THOMAS: We'll get that for the record, because I think at some point the whole concept of bubbles is, you didn't know, you didn't anticipate, this time is different.

If this is to the magnitude that you

indicated different than in the past, notwithstanding the damage, all of the understanding of what we need to lead to, it could have been worse.

MR. GREENSPAN: Well, this is the critical period that we're going to have to -- we're going to have to look at how this thing ultimately evolves before we fully understand what the consequences are. But let me respond to your question in more detail on the record.

VICE CHAIRMAN THOMAS: In writing, yes. Thank you. Certainly yield a minute to Commissioner Georgiou.

COMMISSIONER GEORGIOU: Just one question I would ask you, and ask you to respond to it if you could, in writing.

We, our capital, I think we've all come to the conclusion that -- and your advice has been -- that the capital and liquidity requirements historically haven't really -- weren't adequate to avoid the consequences of the financial crisis.

And I take it that means that we ought to implement some more significant capital requirements on a go-forward basis. Would that be fair to say?

VICE CHAIRMAN THOMAS: Mr. Chairman, these questions can be recorded but I think they ought to be answered in writing --

COMMISSIONER GEORGIOU: Right.

VICE CHAIRMAN THOMAS: Given the current circumstances.

COMMISSIONER GEORGIOU: I understand, but I thought he nodded his head yes. Is that correct?

THE AUDIENCE: No. No, the witness can't hear. We have to have a hard stop.

VICE CHAIRMAN THOMAS: I believe Mr. Wallison wants a question for the record and we'll submit these in writing if you can phrase it.

COMMISSIONER WALLISON: Quickly.

VICE CHAIRMAN THOMAS: Yes.

COMMISSIONER WALLISON: And my question is this: The unprecedented theme about our current situation is the total number, it seems to me, of subprime and Alt-A mortgages in our economy, 26 million, which as I said at the outset, is about half of all mortgages in our economy.

When you are responding in writing to the question of what caused this financial crisis I would like you also to consider whether, in addition to less capital than was required, what effect this substantial number of bad mortgages might have had.

CHAIRMAN ANGELIDES: So those would be

submitted in writing to Mr. Greenspan.

What I just want to say, Mr. Greenspan, you gave a lights-out performance today. I want to -- I want to thank you very much for your time; thank you very much for coming before us; thank you for your service to the country.

And we are going to adjourn for 30 minutes, and hopefully we'll have lights and power when we return. Thank you all very much.

MR. GREENSPAN: Thank you very much.

(Session ended at 11:53 a.m.)

CHAIRMAN ANGELIDES: The meeting of the financial crisis, lights power and all, will come to order. Thank you very much, witnesses, for joining us today.

What I'm going to ask you all to do at this time is please rise, because as we do with all witnesses, in the past and in the future, we'll swear you in.

Mr. Bowen, can we swear you in along with everyone else? Thank you.

Do you solemnly swear or affirm, under the 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?

MR. BOWEN: I do.

MR. BITNER: I do.

MS. LINDSAY: I do.

MS. MILLS: I do.

CHAIRMAN ANGELIDES: Thank you very much. This panel is about subprime origination and securitization, and we are going to ask each of the panelists -- you've submitted to us your written testimony, and we are going to ask each panelist to provide a five-minute opening statement. Please don't repeat your written testimony and please do keep this to five minutes.

There will be a light that comes on in front of you that at one minute will indicate one minute to go. And then red when the five minutes is there.

So with that, we are going to start with Mr. Bitner and then go left to right or right to left depending on where you're sitting.

And just so for the audience, one of the reasons we're doing that is certainly with respect to Mr. Bitner and Ms. Lindsay, they were on the end of selling mortgages to Citigroup, and so we thought we'd take this in order. So, let's do that. Mr. Bitner.

MR. BITNER: Thank you.

VICE CHAIRMAN THOMAS: Microphone, please.

CHAIRMAN ANGELIDES: Yes, and then punch your microphone.

VICE CHAIRMAN THOMAS: You have to turn it on at the base.

MR. BITNER: There we go. Is that okay?

CHAIRMAN ANGELIDES: Yes.

MR. BITNER: Good afternoon, members of the Commission. For the record, my name is Richard Bitner. I am a 15-year veteran of the mortgage banking industry, who owned a subprime lending company from the years 2000 to 2005.

Additionally, I am the author of Confessions of a Subprime Lender: An Insider's Tale of Greed, Fraud, and Ignorance, and I currently publish several housing, finance, and real estate-related periodicals, notably Housing Wire Magazine.

Arguably, securitization could be the single greatest innovation that has ever come into the world of mortgage lending. Before loans were securitized, a consumer relied on a bank to supply the money to fund a mortgage.

And that entire process, from origination to servicing, stayed with the same institution. Now, since banks owned every aspect of the loan and were heavily regulated, they were motivated to manage risk and to treat borrowers fairly.

In addition to creating a renewable source of capital, mortgage securitization also fragmented the industry. So instead of one institution that functioned in a true cradle-to-grave capacity, that functionality of the industry became diversified.

This fragmentation gave each player a claim of what I like to call plausible deniability. Mortgage brokers simply maintained that they only originated the loan, so any concern about the loan's quality were the lender's responsibility.

The lender underwrote the deal using the guidelines provided by the investment firms. So they merely delivered the final products investors wanted to buy.

The Wall Street firms who packaged the securities and the investors who purchased them claimed to be holders in due course, which protected them from any liability when lenders and brokers acted illegally.

And while the entire food chain contributed to the problems, fragmentation allowed each player to point an accusatory finger at someone else, effectively promoting what we now know is the originate-to-distribute model of lending.

With minimal barriers to entry and historically low-interest rates, loan originators entered the business by droves. By some estimates, the number of new -- the new -- excuse me -- new loan originators working for mortgage brokers increased by 100,000 between the years of 2001 and 2006.

During the early years of subprime lending -- subprime lending, very few states actually had licensing requirements, which meant that the barriers to entry were minimal. And even when states began requiring licenses, the typical prerequisites were disproportionately easy to meet, such as passing multiple choice tests and not having any felony convictions.

This ease of entry meant that the level of fraud we experienced as a lender when reviewing files originated by mortgage brokers was unprecedented. In my firm's experience, between the years of 2003 to 2005, more than 70 percent of all brokered loan files that were submitted for initial review were somehow deceptive, fraudulent, or misleading.

The issue is further complicated by the

fact that little could be done to rid the system of these violators. For example, if a lender found a broker was acting improperly, in fact committing fraud, the options for enforcement were minimal. Many states did not have licensing requirements, and those that did have weak enforcement standards.

Assuming there was a state licensing authority, a lender could submit documentation in an effort to rescind a broker's license. But in many cases, however, the path of least resistance was simply for the lender to place the broker on the "do not do business with" list, which meant the broker was effectively barred from doing business with that firm, leaving them to go somewhere else to conduct business.

Determining a property's value posed a number of challenges for firms like mine. Subprime lenders usually conducted a second-party review for most broker-ordered appraisals, because frankly, the majority of appraisals were considered to be unreliable. To put things in perspective, during my company's history, nearly half of all the loans we underwrote -- that we underwrote were originally overvalued, in our opinion, by as much as 10 percent.

Interestingly, our experience also showed that 10 percent was the most an appraisal could be overvalued and still be purchased by any one of our four major investors.

Another quarter of the appraisals that we reviewed were overvalued by anywhere from 11 to 20 percent. And the remaining 25 percent of appraisals that we initially underwrote were so overvalued that they defied all logic. Throwing a dart at a board while blindfolded would have produced more accurate results.

The implication of this trend becomes evident once doing the math. If multiple properties in an area are overvalued by 10 percent they, in turn, become comparable sales for future appraisals. Then the process repeats itself. And we saw this on several occasions.

We would close a loan, for example, in January and see the subject property show up as a comparable sale in the same neighborhood six months later. Except this time, the new subject property was being appraised for 10 percent more than the comparable sale six months earlier. In the end, I believe it was the subprime industry's willingness to consistently accept overvalued appraisals that significantly contributed to the run-up in property values that were experienced throughout the country.

To complicate matters further, the mortgage industry experienced a gradual shift between what was and what was not an acceptable form of risk. While credit score had been an excellent indicator of loan performance, its reliability was predicated on holding other credit factors constant, these included, but were not limited to, a borrower's rental history, job stability, and cash reserves.

Unfortunately, the industry's inability to apply logic when underwriting a loan file would serve as its undoing. No other example is more prevalent to illustrating this point than identifying how a borrower's housing payment history was verified.

During this time period many lenders moved from requiring a borrower to provide 12 months' cancelled rent checks or verification or rental history from a management company to simply allowing for a private verification. In other words, when a note from a borrower's mother became an acceptable form of rental history, there should be no surprise that loans defaulted at an alarming rate.

CHAIRMAN ANGELIDES: Thank you very much. And there will be plenty of time for questions. Thank you.

Ms. Lindsay? And if can pull those mics

towards you and put them on, thank you.

MS. LINDSAY: Okay. Good afternoon. Thank you for inviting me to participate this afternoon. My hope for today's session is that I can bring a unique perspective to the -- into subprime lending.

I have a unique background in that I grew up in the subprime industry. My father was a hard money lender. So I actually learned what Fannie Mae was when I was six years old. I don't want to tell you how old I am, but Freddie Mac wasn't around yet.

VICE CHAIRMAN THOMAS: Just a minute, let me do the math.

MS. LINDSAY: So basically I grew up with -- you know, my father would show me how to evaluate a loan, what characteristics to look at, and when I was 16 years old, 1979, okay, you can do the math again, I learned how to service the loans and learned how to look at loans, looked at properties.

And the biggest thing was with hard money lending, these were borrowers who didn't have good credit histories. So to offset that poor credit history, they would have a lot of equity in the properties.

We had three Cs that we looked at: We had the credit, collateral, and the capacity. The borrowers clearly didn't have the credit, which later on, in subprime, they didn't have the credit, but then they didn't have the collateral either. And then we found out they didn't have the capacity.

They would -- they switched to stated income loans, and they would just state whatever would qualify them for the loan, usually led by the brokers, because the brokers were the professionals in the industry who would know what they needed in order to qualify for the loan.

Those loans were submitted to lenders, like New Century Mortgage, who then sold them to investors on Wall Street where they were packaged and resold into securities.

I joined New Century as a wholesale underwriter in 1997. I was kept on as part of a skeleton crew after we declared bankruptcy in April of 2007. I was kept there to help wind down part of the bankruptcy.

I found the lending standards at New Century significantly different than what I had grown up in the subprime lending industry. Also I had worked at Beneficial Mortgage from December of 1996 until I was hired on at New Century in December of 1997.

Beneficial was one of the original subprime lenders. They, too, would work with borrowers who had poor credit history, and they would offset it with the protective equity. So in other words, if the borrowers were going to default, they would protect their portfolio by having the equity. So the borrower could either get out by selling the property or they could refinance or possibly do something else in order to -- to get out of their loan.

As Mr. Bitner mentioned, the -- the growth and subprime industry grew because of the securitizations on Wall Street. Before the banks, like Beneficial, like some of the other local banks, they kept their loans on portfolio or they would sell them off to Fannie Mae or Freddie Mac if they qualified for those loans.

With the advent of the securitizations, loans were just sold in droves to Wall Street. There was a huge demand for the product because of the returns. The problem with the returns, though, is they were based on a product that would, if anything hiccupped, like the property values, they were going to potentially default.

New Century was not able to originate loans without the use of warehouse lines of credit. We didn't have our own funds to loan. We were not a banking institution. We didn't take deposits.

So we got our money from warehouse lenders. These warehouse lenders provided us the ability to make these loans, and they were usually provided by the same people who would purchase our loans on Wall Street. There was such a huge demand for our product that our loans were forward-sold two and three months ahead of time.

We had approximately -- we were making, at our peak, approximately 20,000-plus loans per month, about 5 billion dollars in product every month that was being sold, and those loans were forward-sold.

One of the other things that changed was the originate-to-distribute model. A definition of a good loan used to be a loan that paid. It changed to a definition of a loan that could be sold.

We did track the performance of the loans that we could, because we would always say that our loans performed better than the others. The problem with that was we couldn't track all of the loans because, like I said, most of the loans were sold and we didn't know what happened to them unless we were asked to repurchase.

One of the other problems was the loose

guidelines. We have layered risk. We had people who didn't have credit. They didn't show the capacity and they didn't have the collateral because they were at 100 percent financing.

And then we added the interest-only loans, and then there were the teaser rates that would readjust after two years of being fixed.

And to finalize my opening statement, just basically at the end of the day, we had a system that went into a downward spiral because of layering risk rather than mitigating the risk, and we just need to go back to the core values of the three Cs. Thank you.

CHAIRMAN ANGELIDES: Thank you. Thank you very much. Ms. Mills?

MS. MILLS: Chairman Angelides, Vice Chairman Thomas, and members of the Commission, thank you for inviting me to appear today. My name is Susan Mills and I'm the head of the mortgage finance group at Citigroup Global Markets, Inc.

My group is a part of the team responsible for the securitization and underwriting of residential mortgage-backed securities within Citi's investment bank.

The Commission has asked me to address the securitization activities of my group, including our business model and our due diligence activities, with an emphasis on the securitization of subprime and Alt-A residential mortgages.

I have done so at greater length in a written statement for the record. Let me address a few key points for you now.

First, our mortgage trading and securitization activities were part of an intermediation business; that is, we purchased mortgage loans from originators and sold RMBS securities to any sophisticated institutional investors.

Simply stated, our objective in purchasing mortgages was to securitize them and distribute the resulting mortgage bonds to meet the demand from our fixed-income investors.

Secondly, Citi's RMBS business was smaller than the RMBS business at many other Wall Street firms. Publically available league tables showed that we ranked seventh in underwriting us mortgage-backed securities in 2004; 10th in 2005; 11th in 2006; and 10th in 2007.

A significant reason for this was that unlike many other firms, in the period leading up to the market dislocation in 2007, we did not operate what is known as a mortgage conduit, which is an entity used to acquire mortgages on an ongoing basis through established relationships with originators. In addition, Citi's investment bank did not have a direct relationship with an affiliated mortgage originator from which we had the ability to directly source mortgages for our securitizations. This meant that instead of originating and servicing mortgages in-house for securitization business, as many of our peers did, we exclusively purchased loans from originators in the marketplace in arm's-length transactions.

As a result, we underwrote our RMBS according to the guidelines of the loan originators and not our own set of guidelines.

Our due diligence had two principal components. First, before ever purchasing loans from a particular seller, we would evaluate the seller and their operations, typically through an on-site review. If we were not comfortable with a particular seller, we would not do business with them.

Secondly, with respect to pools of loans that we were purchasing, we would perform a due diligence review focused on ensuring that the loans met the originator's underwriting guidelines. To conduct this review we engaged third-party diligence providers that we actively supervised.

Once we had aggregated a pool of loans of sufficient size, we would then securitize those loans. As a part of this process, we submitted loan level information to credit rating agencies to determine the dollar amount of bonds in each rating category for the RMBS.

We would market the RMBS bonds to investors, solicit feedback from those investors regarding the transaction, and finalize the structure and pricing.

Our offering documents described the underwriting standards of the originator or originators of the loans in the pool and also provided extensive narrative and stratifications concerning the loans themselves.

I understand that the Commission is particularly interested in our efforts to monitor the mortgage market and detect fraud. Our due diligence reviews served as the primary and, I believe, highly effective means by which we evaluated the loans we had purchased and securitized.

If we identified issues with the loans in a pool of mortgages that we had agreed to purchase, including concerns about potential fraud, we would perform additional diligence until we were satisfied that our level of diligence was appropriate.

We would not purchase loans that failed to meet the applicable underwriting guidelines of the originator or that violated any compliance regulations or that appeared fraudulent.

We also monitored the performance of the loans that we purchased, and we typically negotiated the right to require the seller of loans that experienced early payment defaults, an indication of potential fraud, to repurchase those loans.

To assist us with these efforts, starting in 2006, we established a unit within mortgage finance to monitor the performance of the loans that we securitized and to manage our repurchase requests.

Unfortunately, our diligence practices did not detect what we now know to be the most significant downturn in the us housing market for generations. As a result of the unprecedented housing collapse, which led to the decline of the value of all mortgage loans, many of our RMBSs have not performed as well as expected.

However, we continue to believe, despite the financial crisis and the collapse of residential home prices, that the securitization of non-agency mortgages plays a vital role in making capital available to institutions to enable individuals to purchase homes.

And we are encouraged that we are slowly starting to see the mortgage securitization market return.

For our part, we at Citi are committed to applying thorough diligent practices as we adapt our businesses to the changing marketplace.

I appreciate the opportunity to discuss some of those practices with the Commission today, and I look forward to answering your questions.

CHAIRMAN ANGELIDES: Thank you very much, Ms. Mills. Mr. Bowen?

MR. BOWEN: Thank you, Mr. Chairman. I am very grateful to the Commission.

VICE CHAIRMAN THOMAS: The mic, is it on?

MR. BOWEN: Is the light on?

CHAIRMAN ANGELIDES: Pull it towards you. Thank you so much.

MR. BOWEN: I'm very grateful to the Commission to be able to give me testimony today. If it wasn't for this commission, if it wasn't for you, then my story could not have been told.

My name is Richard Bowen. I was promoted to business chief underwriter for Citi in early 2006. I had responsibility for underwriting for over 90 billion dollars annually of mortgage loans.

These mortgage loans were not made by Citi. They were made by other mortgage companies and Citi purchased them. And it was my responsibility to make sure that these mortgages met Citi's credit policy standards.

During 2006 and 2007, I witnessed business risk practices which made a mockery of Citi credit policy. I believe that these practices exposed Citi to substantial risk of loss. And I warned my business unit management, repeatedly, during 2006 and 2007 about the risk -- risk issues I identified.

I then felt like I had to warn Citi executive management. I had to warn the board of directors about these risks that I knew existed.

On November the 3rd, 2007, I sent an e-mail to Mr. Robert Rubin, Mr. Dave Bushnell, the chief financial officer and the chief auditor of Citigroup. I outlined the business practices that I had witnessed and had attempted to address.

I specifically warned Mr. Rubin about the extreme risks and unrecognized financial losses that existed within my business unit.

I also requested an investigation. And I asked that this investigation be conducted by officers of the company outside of my business unit. My warnings to Mr. Rubin involved two different areas within my responsibility.

The first one was called delegated flow. The delegated flow channel purchased 50 billion dollars annually of prime mortgages. These mortgages were purchased one mortgage at a time. These mortgages were not underwritten by Citi before they were purchased, but the underwriters reviewed a sample of the files after they were purchased. This was to make sure that Citi's credit standards were maintained.

Most of the mortgages were sold to Fannie Mae, Freddie Mac, or other investors. Even though Citi did not underwrite these mortgages, Citi did provide reps and warrants to the investors who purchased them. These reps and warrants guaranteed to the investors that the mortgages were underwritten to Citi credit guidelines.

In June of 2006, I discovered that over 60 percent of the mortgages in delegated flow were defective. And by defective, I mean the mortgages were not underwritten to Citi policy guidelines.

Citi had given reps and warrants to the investors that these mortgages were not defective. And the investors could force Citi to repurchase many billions of dollars of these defective mortgages. This represented a large risk of loss to the shareholders of Citi.

I attempted to get management to address this critical risk issue. I started issuing warnings in June of 2006. These warnings were in the form of e-mail, weekly reports, committee presentations and discussions. I even requested a special investigation from the management that was in charge of internal controls. And that investigation confirmed that we had very serious problems. And I continued my warnings through 2007. But Citi continued to purchase and sell even more mortgages in 2007. And defective mortgages during 2007 increased to over 80 percent.

I told you that my warnings to Mr. Rubin involved two areas of the responsibility. Delegated flow was the first area. The second area involved was Wall Street subprime. Wall Street subprime purchased pools of subprime mortgages.

CHAIRMAN ANGELIDES: Mr. Bowen, can you try to also just wrap up just as quickly as you can just because of time?

MR. BOWEN: Wall Street subprime purchased pools of subprime mortgages from other mortgage companies. And the underwriters were responsible to make sure that the mortgages in those pools met Citi credit policy standards.

Beginning in 2006, I witnessed many changes in the way the credit risk in these pools was evaluated. As an example, the credit decision on purchasing a pool of subprime mortgages was based upon the numbers of approved decisions given by the underwriters.

In some subprime pools, large numbers of underwriter decisions were changed. The decisions were changed from turndown to approved and the pools were purchased. There were many other variances to Citi policy.

Beginning in 2006, I issued many warnings to management. And many identified pools were purchased anyway over my specific objections.

Thank you Mr. Chairman.

CHAIRMAN ANGELIDES: Thank you very much. And there will be lots of time for questions. And I really appreciate the brevity of all the witnesses.

Let's do this now. I'm actually going to start with Mr. Thomas to see if you have questions you would like to lead with. I would -- I'll defer my questions until the balance of the Commission members.

VICE CHAIRMAN THOMAS: Thank you, Mr. Chairman.

EXAMINATION BY VICE CHAIRMAN THOMAS

VICE CHAIRMAN THOMAS: First of all, thank you all for coming, and for anyone who grew up in California through the `50s, the `60s, the `70s, the `80s, the `90s, et cetera, a lot of this stuff is pretty familiar to us now, especially following the last several years.

And I'll address my initial questions to Mr. Bitner and Ms. Lindsay.

Just what was the last straw? What made you walk away? Was it kind of like the cannibals, where they start with the cold water in the pot, and then it started getting a little hotter, and then eventually you realized circumstances you were in?

MR. BITNER: I think, for me, it was a combination of a couple --

VICE CHAIRMAN THOMAS: Is your mic on?

MR. BITNER: I believe so.

VICE CHAIRMAN THOMAS: Okay, close, then.

MR. BITNER: For me it was a combination of a couple of things, starting as early as 2003. Let's forget about the fact that we have a subprime business model. We had a model which makes widgets and, you know, and every month you're making more of them and you're making less. And yet what you're also noticing is that the quality of the widget that you're producing is of a decreased quality. And you're watching this trend, and of course --

VICE CHAIRMAN THOMAS: Hey, can you sell them?

MR. BITNER: What's that?

VICE CHAIRMAN THOMAS: Can you sell them?

MR. BITNER: Well, yeah, we can sell them.

VICE CHAIRMAN THOMAS: So you feel guilty about the decreased quality of the widgets?

MR. BITNER: You know, there's --

VICE CHAIRMAN THOMAS: If people stopped buying them, that would be a signal to you, wouldn't it?

MR. BITNER: No. There's a combination of a couple of things going on here. One is the fact that -- well, all right, let me get out of the widget example. Let's go back to the mortgage example.

We're producing mortgages that clearly are assuming greater levels of risk, because we're being told by someone that we're selling them to that this is now an acceptable form of risk, whereas maybe a year or two ago, that wasn't the case. In October of 2005, several things actually happened to me, one of which was --

VICE CHAIRMAN THOMAS: If I interrupt you, I apologize, but I do want to nail down some points as we go forward.

They were an acceptable level of risk because you were running out of the other mortgages that were more familiar to you and better quality? Or could you still do those but not at the volume that you could do these?

MR. BITNER: No. What I refer to as an acceptable level of risk could simply be by referred to by looking at a matrix that was put out by an investor, whether it was the Citi Financial or whichever group, saying, you know, in order to get a 95 percent loan-to-value loan or hundred percent loan-to-value loan, the loan must now meet this criteria.

So it wasn't a case of whether I had more or less of those that were available to me; it's just that the decision making capabilities were being pushed --

VICE CHAIRMAN THOMAS: Your targets changed?

MR. BITNER: Your targets changed, absolutely.

So what ultimately happened, by the time I hit October of 2005, is a couple things occurred. One, we had a record-setting month in terms of volume, in terms of the number of loans that we had closed.

Number two, we also found ourselves in the situation where, as we were looking at it from a risk -- risk perspective and analyzing the volume of loans that we did, we noticed that we had also hit record level numbers of stated income loans, record level number of hundred percent finance loans, which was very different from when we started.

When we started in 2000, much as Chairman Greenspan alluded to, I think we had a business model that was more of a minor part of the business sector of mortgage lending, where the average down payment was 10 to 15 percent, you know, stated income loans only made 15 --

VICE CHAIRMAN THOMAS: Okay, Mr. Bitner, I have a time limit as well as you.

What I want to focus on is that those of us, again, who grew up in Southern California were well aware that the first thing you tried to do is to get enough money up, borrow from your parents, do whatever you can, to get into a home, because the home would appreciate. And that was one of your principal forms of saving. And that over time, you could then get equity out of that house and buy another one.

These events were occurring because that was just the climate we were in. Do you feel you got to a point -- and I noticed you're from Texas, and it was savings and loans problems in Southern California and savings and loans problems in Texas, and there was a way to apparently make the machine work faster. Did you see a level of what I guess we could call fraud at some point get the appreciation higher by virtue of the relationship between the appraiser and the real estate agent in terms of buying and selling homes or flipping them, is a term?

MR. BITNER: It was one of the greatest problems that we had, but I don't know if necessarily -- and I talk about this at somewhat in great depth in the book -- that there's really an issue of the relationship between the appraiser and the agent.

What we're really talking about here is the fact that the appraisal is ordered directly from the broker, the mortgage broker in this particular case, not the real estate agent.

And one of the things that I concluded and my belief is that -- and hear me through for a second, let me finish this -- is that the broker did not need to apply any direct pressure to an appraiser.

The way the industry worked was pretty simple. You placed an order in front of the appraiser and you said, I need $235,000. So that appraiser -- if that appraiser was not able to hit that level, then ultimately they went to somebody else.

VICE CHAIRMAN THOMAS: I understand. And so you didn't sell your product and that's how you make money. So people conformed to a certain business practice to make sure they could sell their product? Was there a degree of uniformity on how you began to produce these mortgages?

MR. BITNER: Could you be a little bit more specific?

VICE CHAIRMAN THOMAS: There's a slow way, there's an old-fashioned way, there's a 3C way, or there's the quickest way to get it done under the new rules.

Was there a general understanding that your job was to produce these so you could make money, and therefore you do it in the fast, most -- fastest, most convenient way possible?

MR. BITNER: Well, see, the easiest way to answer that question --

VICE CHAIRMAN THOMAS: Why did you get out of the business?

MR. BITNER: Why did I get out of the business?

VICE CHAIRMAN THOMAS: Mm-hmm.

MR. BITNER: Because my house caught on fire. Now, you're going to go, what does one have to do with the other.

And I can tell you when you have moments and changes in your life, when things like that happen and you look and you start watching the house -- in this case, interestingly, the house that the profits from the subprime built begin to burn, you start questioning the validity of the work that you've been doing over time and whether or not it's providing the value that it provided five years ago when you started the business, and the answer, to me, was pretty clear that it wasn't.

VICE CHAIRMAN THOMAS: Do you think much of that self-examination and, frankly, what we used to call guilt was evident on Wall Street in terms of the continued desire to purchase whatever it was you're producing? Because when you stepped aside, there were others who filled your shoes fairly quickly.

MR. BITNER: That's correct. And I can't speak for all of Wall Street but what I know is when I left, it certainly meant sleep -- it certainly meant that it was a little easier to sleep at night.

VICE CHAIRMAN THOMAS: Okay. Let me reserve my time and I'll come back on a second round so that everybody gets a chance to get into the questions, Mr. Chairman.

CHAIRMAN ANGELIDES: Terrific. Ms. Murren?

COMMISSIONER MURREN: Thank you.

EXAMINATION BY COMMISSIONER MURREN

COMMISSIONER MURREN: My first question is for Mr. Bitner and for Ms. Lindsay.

You had referenced the fact that some of the requests from your customers for the types of products that they had wanted had evolved over time.

And I was curious as to whether you could comment on whether their due diligence practices also evolved over time?

MS. LINDSAY: For New Century Mortgage I was primarily in charge of the fraud detection and prevention. And I will say I did try to keep up with -- with that piece of it, one of the problems that I had specific to fraud prevention was the advent of stated income loans.

So in other words, if you couldn't prove the fraud, it became a business decision. The only time we had any teeth, risk management on the back end, was when we could prove the fraud, when we had something in writing, when we could hand-production something and show them.

Otherwise, they would say, well, prove it -- it -- show me it's a bad loan. And then you couldn't, and therefore it was a business decision and we would move on. So, I don't know, did that answer your question at least somewhat?

COMMISSIONER MURREN: It did. It does.

MR. BITNER: I very much agree with what Ms. Lindsay said. There are several things I would add to that point.

We -- and let me use the example of the stated income loan, because I don't think that our processes and procedures changed any; it just became very much sort of that same challenge.

You know, you get a -- you get a particular documentation or a file that comes in with a person who claims to be -- to make an income that appears to be relatively reasonable for that particular occupation in that particular -- in that particular market.

And the way I say "appears to be reasonable" is that there were ways that we could check that. We could go to salary.com and other ways that you could at least try to make sure that you didn't have, as we've all come to know, the strawberry picker who is making, you know, $450,000 a year.

COMMISSIONER MURREN: Did the person that was purchasing the loans from you though, their due diligence when they came in to look at the products that you generated, did they change their due diligence practices over time, the Citibanks of the world, who would --

MR. BITNER: No, I don't think so. I think it was fairly -- I mean, for what it's worth, I mean, I thought we had fairly strong due diligent practices. They didn't change relative to those types of loans in terms of what we were looking for, because again, we still felt, and one of the reasons why, for those of us who have been lifelong in this mortgage industry, and I came from the side of having worked for the investor before, was that at the end of the day, the one thing that always drove our opinion was our belief: Can this person make this loan, can this person make this payment, at the very basic level.

And if the answer is no then we probably don't have a reason to be doing this loan.

COMMISSIONER MURREN: One short question, when you look back on this do you think that there should have been some sort of regulatory supervision of your business activities and that of your industry, specifically that segment that was not necessarily monitored by the Federal Reserve, as a -- as a bank would be?

MS. LINDSAY: I think the person who's investing the money should know what they're investing in. As a hard money lender myself, I actually loaned my personal funds, and I grew up in the industry. I need to know the risk that I'm taking and -- and know what it involves.

I don't think the people who ultimately invested their money in this knew any -- had any idea what the risks were involved.

So I think that there should be some regulation to the effect of showing the investors who are at the end of the day the ones who are purchasing the loans, the bonfires or the retirees who are investing; I think everybody needs to understand what the risk is so they can make an informed decision, so in that respect, yes, definitely.

COMMISSIONER MURREN: There is a little bit of a conflict in that, in that you both just stated that you felt that due -- that the due diligence practices that were exercised by people that ultimately were either passing through these loans or they were end-use investors were adequate.

But yet, clearly, as we've seen, they didn't fully understand the risks that they were taking. And I guess that's -- is that correct?

MS. LINDSAY: That is correct. They had -- they had a set of underwriting guidelines, so they were kind of following the guidelines, but they didn't understand what the underlying risk was.

I think they kept -- we would run out of product; we would run out of customers with a certain product; they could no longer qualify because the property values had gone up so much. So here comes the interest-only loans. It just kept layering the risks.

And the people who -- it wasn't the Wall Street investors who were purchasing these who were taking the losses. They were passing them along, who were passing them along, passing them down the line, five or six levels, and that's where the money was coming from.

So I just think the person who is ultimately investing in these needs to be aware of what the risk is, I think there are too many levels that it went through.

COMMISSIONER MURREN: Thank you.

MS. LINDSAY: You're welcome.

COMMISSIONER MURREN: To follow up really, on that topic, which is risk and the assessment of risk, both, I guess, from Ms. Mills and Mr. Bowen, if perhaps, Ms. Mills, you could talk a little bit about, first, within your unit, what contribution or what importance did risk have in the way you ran your business?

MS. MILLS: Risk meaning the department risk or just the evaluation of risk?

COMMISSIONER MURREN: The evaluation of risk and then, in particular, where I'm headed with this is to try to determine to what extent your ability to understand the underlying risk of your business was related to your performance in your duties within your unit. So was your performance review based in part on your ability to determine risk?

MS. MILLS: When we bid on pools of loans from originators, so people who were aggregating loans, we purchased or we agreed to bid on pools of closed loans.

There was a, on average, a 30-day time period from when we were awarded the transaction to when we actually had to pay for the loans. And in that 30-day period is when we conducted our due diligence.

And our due diligence was -- had two components when it came to loan file diligence or three components. We looked at valuations, so we looked to the property; we looked at credit, so we made sure that the loan was originated to the originator's guidelines; and then we looked at compliance to make sure the loan didn't violate any state or local lending laws.

And we -- sometimes we do a hundred percent diligence. More often than not, we would use a sampling methodology where we would select both random and -- randomly selected and adversely selected loans.

The randomly selected loans were to just get a snapshot of is the pool as described on the loan level data file that you got from the seller.

The adverse selection was to try to identify the riskier loans in the pool and to spend a little bit more time focusing on the riskier loans to make sure that, in fact, that they were as described.

COMMISSIONER MURREN: But then when you get to the end of the year, when we determine, or when compensation is determined --

MS. MILLS: My own personal compensation?

COMMISSIONER MURREN: Yes.

MS. MILLS: I don't know exactly what factors go into my own personal compensation. I know that the people who worked for me, their compensation was based on the way that they did their job, whether or not they were performing adequately and up to the standards that I maintained; it was based on the profitability of the business, and it was based on the profitability of the firm.

COMMISSIONER MURREN: Was there a revenue component to it?

MS. MILLS: That's, yes, that's what profitability is.

COMMISSIONER MURREN: Well, arguably, profitability is after you take losses or any kind of expenses related to the revenue stream.

MS. MILLS: Yes, well, the way that the

firm keeps the books and records, it's a calendar year. So there was a cutoff, and we knew how much money the business made at the end of the year, and there's a bonus pool allocation amongst the various businesses.

And, you know, my management decides the final word on who got paid what, I didn't have the final word, I just made recommendations.

COMMISSIONER MURREN: But your -- was risk discussed with you during the time of your performance evaluation, risk to the firm, risk to your unit?

MS. MILLS: I can't remember specifically. It's -- it's -- because our business model is one of, you know, intermediation, in that we buy loans and we distribute bonds, and we think that we disclose the risk to our investors in the offering documents, which we believe are compliant with all required securities laws, and we sold bonds that had ratings, there was risk that was monitored and maintained on the trading desk itself.

I'm not a trader though, so that was -- it was not my responsibility to manage the risk of the firm.

COMMISSIONER MURREN: When you interact -- you've had some interactions, I believe, with the SEC and with FINRA related to your business unit, as part of the fact that the regulatory body that governs the investment bank would be the SEC, primarily, not so much the Federal Reserve; is that right?

MS. MILLS: I've only had interaction with FINRA.

COMMISSIONER MURREN: Okay. And could you talk a little bit about your interactions with the regulators just in terms of the kinds of interest that they might have had when they were evaluating your business and its importance to the parent company?

MS. MILLS: My interaction with FINRA was related to some inquiries that they made, transaction-specific. So they had some questions on some securities that we had issued off of our shelf.

And I had some meetings with our counsel and then I had one in-face meeting with FINRA, where they asked me questions about the deals that they had questions about, that they were specifically related to issues with the reporting of delinquencies and was I aware of situations where delinquencies may have been misreported on remittance reports.

COMMISSIONER MURREN: When you think about the regulatory regime that governs the investment bank, is there any discussion within the firm about how that relates to the overall safety and soundness of the parent company? Was that discussed?

MS. MILLS: Those are not discussions I would be involved in.

COMMISSIONER MURREN: Thank you. And Mr. Bowen, if I may, you had stated in your testimony that there were a number of practices that you had raised with regard to the quality of the loans that were being generated in your unit. If you could talk a little bit, you know, similar line, which is, to what extent was there any kind of regulatory oversight of this particular issue, to your knowledge, and to what extent, again, did you feed back to management or did management relate to you the importance of that to the parent company in total?

MR. BOWEN: I did not interface with any regulators. Underwriting was considered to be a part of risk. And I escalated all of my concerns up through the risk structure, as my manager did.

As it relates to the quality of the loans, again, as I indicated when I took over this responsibility in early 2006, I was charged with ensuring that the mortgage loans that came through my area were underwritten according to Citi policy guidelines.

And I attempted to follow through on that and identified those that came through my area that did not meet that criteria.

COMMISSIONER MURREN: And do both of you report up to the same risk management unit?

MR. BOWEN: I reported up through -- I'm sure, ultimately, they met at the chief risk officer at the Citigroup level. I was in a completely different part of the organization.

COMMISSIONER MURREN: So the concerns might not have been shared within your two divisions, then, if there were any concerns about the quality of the underlying assets; is that correct?

MR. BOWEN: I do not know.

MS. MILLS: I don't know, either, where risk intersected from the two businesses.

COMMISSIONER MURREN: Okay. Thank you. I'm done.

CHAIRMAN ANGELIDES: Thank you, Ms. Murren. Mr. Wallison?

COMMISSIONER WALLISON: Thanks, Mr. Chairman.

EXAMINATION BY COMMISSIONER WALLISON

COMMISSIONER WALLISON: I have so many -- I have a lot of questions for all of you, and I would like you to be as concise as you can be. I will try to make these questions that don't require a lot of expansion.

Let me start with you, Mr. Bitner, and then I'll try to go along the line.

What you described in your testimony was an industry engaged in what might be called mortgage fraud, defrauding lenders and possibly investors with a quality of the things that you -- that the industry was selling, not you personally -- did you ever come across predatory lending?

MR. BITNER: Well, I would say, I mean, yes. I think we experienced it in terms of watching loans that I knew that we denied, which I thought was a blatant effort on the top -- on the part of a broker to act in a predatory manner that were then subsequently taken to somewhere else and eventually hearing that it was closed with another lender, yes.

COMMISSIONER WALLISON: So, but in terms of the percentage of what I would call making -- taking an advantage of the naiveté, perhaps, or the greed of the lender or the investor, as compared to predatory lending, that is, taking advantage of the borrower, what do -- what relative percentage would you see there?

MR. BITNER: I don't know that given the microcosm of the world that I lived in that I would be accurate. I can give you -- I may be giving you my best guess, 10 to 20 percent.

COMMISSIONER WALLISON: Okay.

MR. BITNER: My Very best guess.

COMMISSIONER WALLISON: When you sold a loan did you make reps and warranties?

MR. BITNER: Absolutely. That was contract with every -- every contract that I had with my --

COMMISSIONER WALLISON: And did loans ever get returned to you?

MR. BITNER: Yes, and I was required for repurchase.

COMMISSIONER WALLISON: What kind of percentage of loans were actually returned to you, and can you generalize for me between the kind of institution that did return them?

MR. BITNER: Yeah, absolutely. The repurchase requests were fairly small. They were pretty consistent, meaning in terms of guidelines, either usually first payment default, borrower did not make their first payment. In the case of Countrywide, they were a little bit different, had guidelines that said if a borrower went as late as 90 days in their first one year the loan was on the books.

But in most cases it was because of some sort of a case of fraud. Typically if a borrower came behind on their loan that loan would go through a very strict quality control process by the part of the investor we sold it to, and it was usually the next level of investor, so specifically, for me, that was GMAC, HSBC, formerly Household Finance, Citi Financial, and Countrywide.

COMMISSIONER WALLISON: And they would return those loans to you? And what percentage were returned?

MR. BITNER: Small, maybe 2 to 4 percent.

COMMISSIONER WALLISON: So despite the fact that they were very poorly underwritten, as far as you could tell --

MR. BITNER: Oh, no, no, no, no, now you're talking about my underwriting qualities.

COMMISSIONER WALLISON: Ah, your underwriting was better?

MR. BITNER: Right. Because when you said that they were poorly underwritten, remember I was the one --

COMMISSIONER WALLISON: Okay. I accept -- I accept your correction.

MR. BITNER: Yeah.
COMMISSIONER WALLISON: But these were risky loans?
MR. BITNER: They were subprime loans, of course.
COMMISSIONER WALLISON: And nevertheless, the returns were relatively small?
MR. BITNER: The repurchase requests --
COMMISSIONER WALLISON: Yes.
MR. BITNER: -- were relatively small.
COMMISSIONER WALLISON: So they probably weren't as risky from the point of view of the underwritten qualities of the loans?
MR. BITNER: I don't know that they were necessarily any more or less risky. I mean, I believe we had a very strict diligence process. Like anything else, I had separate people who were, much like in your department, checking facts for fraud, trying to make sure that they were vetted out for that.
COMMISSIONER WALLISON: You talked a lot about loans to Wall Street. A lot of the loans, I think you said, went to Wall Street. Were you aware that Fannie and Freddie were buying loans? Did you ever -- were you aware of where your loans ultimately went when you sold them?

MR. BITNER: Yeah. Actually, I don't know that I would say my loans directly went to Wall Street. The four institutions that I mentioned, well, I mean, I guess, you can call Citi, yes, I mean, a conduit, you could call that technically a Wall Street -- a Wall Street firm.

So, I apologize, what was the second part of that question.

COMMISSIONER WALLISON: Were you aware that -- if any of your loans went to Fannie Mae and Freddie Mac?

MR. BITNER: No, I was not aware, once they got sold to the end investor.

COMMISSIONER WALLISON: Were you aware that Fannie Mae and Freddie Mac plus FHA actually held more or guaranteed more subprime and Alt-A loans, in 2008; that is to say, on their books in 2008 than Wall Street?

MR. BITNER: I was very familiar with that, yes.

COMMISSIONER WALLISON: How did you become familiar with that?

MR. BITNER: Well, I run what I think is a somewhat respected media outlet, and we report on that information. By then I was already --

COMMISSIONER WALLISON: Oh, but you were -- were you aware of it at the time that you were making these loans?

MR. BITNER: This is -- you're talking about 2007?

COMMISSIONER WALLISON: Yes.

MR. BITNER: 2008?

COMMISSIONER WALLISON: Yes.

MR. BITNER: Yes, I had already exited the industry at that point.

COMMISSIONER WALLISON: Right. When you were in the industry, were you aware that Fannie and Freddie were buying these loans?

MR. BITNER: About -- about 2006 it really came to my attention, when I left my organization, joined a different firm, and really started noticing things like the Community Home Buyer program, which, incidentally, if you looked at it from Fannie Mae's underwriting guidelines, very much resembled the hundred percent financing program we underwrote to our major investors.

COMMISSIONER WALLISON: Okay, good. Thanks very much for your time on this.

Ms. Lindsay, may I ask you a few questions?

Were you aware of what companies were

buying New Century loans?
MS. LINDSAY: Yes.
COMMISSIONER WALLISON: And do you know whether the loans ultimately went to Wall Street or went to the GSEs?
MS. LINDSAY: We did have some that went to the GSEs. I actually met with some of the representatives from Fannie Mae to show them what we were doing in order to prevent fraud, showed them all of our detection and prevention measures.
But, yeah, we had pretty much every Wall Street investor who was securitizing buying our loans.
COMMISSIONER WALLISON: Did -- did -- did you actually sell loans directly to Fannie and Freddie, or was it to a conduit that eventually went to Fannie and Freddie?
MS. LINDSAY: I believe they bought them directly. I believe they put them in a security specific to our loans. That was my understanding.
COMMISSIONER WALLISON: That is to say, your -- your loans were --
MS. LINDSAY: New Century, yes, subprime.
COMMISSIONER WALLISON: -- in a pool?
MS. LINDSAY: New Century, yes.
COMMISSIONER WALLISON: New Century put

them in a pool and they eventually got to Fannie and Freddie?

MS. LINDSAY: Yes.

COMMISSIONER WALLISON: Through some intermediary or directly?

MS. LINDSAY: I believe it was directly. I read in one of our SEC filings that we completed a securitization to Freddie Mac. I believe that was in 2002 or 2003.

And then I met with Fannie Mae probably around 2003. And I'm not sure when, but I know that they were buying our loans, and I don't believe it was through a conduit.

COMMISSIONER WALLISON: Now you spoke during your earlier testimony about the fact that as prices increased, it became much more difficult to make loans to people who are at least subprime borrowers and maybe even prime borrowers.

Are you -- you are, I suppose, aware of the expression "affordability gap"?

MS. LINDSAY: Yes.

COMMISSIONER WALLISON: And is that what you think you were encountering at that point?

MS. LINDSAY: Yes.

COMMISSIONER WALLISON: In other words,

would you explain the affordability gap, then, to --
to us?

MS. LINDSAY: Basically the housing prices soared so much that they exceeded the normal income. I'm not sure what it's called, the income allocations for specific areas. They have -- and I can't remember what it's called but --

COMMISSIONER WALLISON: You're talking about Fannie and Freddie, though, here; right? They had a certain loan limit?

MS. LINDSAY: Oh, I'm sorry, no. Okay.

COMMISSIONER WALLISON: I'm talking about something different.

MS. LINDSAY: Okay.

COMMISSIONER WALLISON: I'm talking about the affordability gap; that is to say, prices got so high for loans that many people could no longer qualify for a 30-year loan that amortized over the 30-year period. They wanted an interest-only loan or --

MS. LINDSAY: Yes, exactly, and so, yes, then -- then that was the advent of the interest-only and just kept expanding the limits.

We also started doing a 40-year loan to stretch it out a little bit more. So, yes, we kind of accommodated -- you know, the snowball started going down the hill and it got bigger and bigger.

COMMISSIONER WALLISON: Let me ask you the same kind of question I asked Mr. Bitner, and that is, most of what you are describing in your testimony and in your prepared testimony and so forth is, something close to misleading investors or -- or possibly the buyers of these loans or the lenders that were buying the loans. Did you encounter any predatory lending?

MS. LINDSAY: It was my understanding that the people who were buying the loans were the ones who approved the guidelines. And they're the ones who said, we'll take that risk, we'll buy that hundred percent interest-only loan, for whatever reason.

I have no idea why somebody would want to do that but apparently they did.

COMMISSIONER WALLISON: But did you encounter any loans in which the -- there was advantage taken of the borrower rather than the lender or the investor?

MS. LINDSAY: We ran across that occasionally.

COMMISSIONER WALLISON: How often would that be?

MS. LINDSAY: It was pretty rare, as

Mr. Bitner mentioned. If we ever saw it, we would decline it. Every once in a while we would have somebody from one of the local law enforcement agencies contact us regarding predatory lending, or we would contact them if we knew of it.

COMMISSIONER WALLISON: Were those high-interest?

MS. LINDSAY: But it was a very small amount.

COMMISSIONER WALLISON: Were these loans high-interest loans or were they normal-interest loans?

MS. LINDSAY: They were all subprime so they were higher than a traditional bank loan, yes.

COMMISSIONER WALLISON: How much higher, would you -- do you recall how much higher they were?

MS. LINDSAY: It depended on the product. At least 2 or 3 percent, depending on the product.

There was actually one time in our history that the subprime interest rates were lower than the prime interests rates for about two months.

So we had a lot of people coming to us for loans because we can get them done quicker than the traditional bank could and the interest rate was --

COMMISSIONER WALLISON: And there was a lot of competition for those loans, wasn't there?

MS. LINDSAY: And there was absolutely a lot of competition.

COMMISSIONER WALLISON: Tremendous amount of competition, that's right.

MS. LINDSAY: Yes.

COMMISSIONER WALLISON: Okay. I'm sorry that I can't take more time with you, Ms. Lindsay. Maybe there will be additionals to the question period, later, but I would like to talk to Ms. Mills for a while.

You and Mr. Bowen were at the same institution?

MS. MILLS: Correct.

COMMISSIONER WALLISON: But your descriptions of the risk management in that institution are wildly different. Can you explain that in any way?

MS. MILLS: I can only explain it in the context that we worked in businesses that had different business models. And being a part of the investment bank and being -- and working for a broker-dealer and working in the fixed-income division, our job was to meet demand from our fixed-income investors.

And there was tremendous demand from our investors to buy mortgage-backed securities, prime or Alt-A or subprime.

So in -- in the context of us being a market maker and an underwriter of securities, which is our primary business, we either underwrote securities or we bought whole loans and issued and underwrote securities.

COMMISSIONER WALLISON: Okay. Your investors were?

MS. MILLS: Our investors were institutional investors, sophisticated institutional investors, typically pension funds, money managers, insurance companies.

COMMISSIONER WALLISON: They bought directly from you?

MS. MILLS: They bought, yes.

COMMISSIONER WALLISON: Fannie Mae and Freddie Mac?

MS. MILLS: Yes.

COMMISSIONER WALLISON: What percentage to Fannie Mae and Freddie Mac?

MS. MILLS: I don't know.

COMMISSIONER WALLISON: Can you give us kind of a ballpark, 50 percent, 30 percent, 60 percent?

MS. MILLS: I would have to follow up on that.

COMMISSIONER WALLISON: Can you provide that later?

MS. MILLS: Yes.

COMMISSIONER WALLISON: I'd appreciate that very much.

You said in your testimony that you underwrite -- you underwrote to originator standards, not Citi's standards?

MS. MILLS: Right.

COMMISSIONER WALLISON: Now, this is quite interesting, because Mr. Bowen's group underwrote to Citi's standards.

Why was there this different business model? Why would a customer want loans underwritten to the originator's standard instead of Citi's standards?

MS. MILLS: We mostly bought from large, well-capitalized originators, who were known in market. And so there was an acceptance of New Century's guidelines, for example, or Ameriquest's guidelines, or Wells Fargo's guidelines.

And so in the offering document for the

prospectus, we would be technically the issuer but we would describe the originator's guidelines.

COMMISSIONER WALLISON: You mentioned three companies that were largely subprime lenders, is that -- is that what you're talking --

MS. MILLS: They were large counterparties of ours. We bought --

COMMISSIONER WALLISON: You bought from them?

MS. MILLS: Yes.

COMMISSIONER WALLISON: They were the originators?

MS. MILLS: Yes.

COMMISSIONER WALLISON: But they were largely subprime originators, at least they were during that period.

MS. MILLS: The pools that we bought were subprime pools.

COMMISSIONER WALLISON: They were subprime?

MS. MILLS: Wells Fargo originates many different types of loans, so I -- we don't want to say that they're just a subprime originator.

COMMISSIONER WALLISON: So your buyers were actually perfectly happy with the originator's standards of underwriting?

MS. MILLS: I don't know that I would use the word happy. I think that they were --

COMMISSIONER WALLISON: Well, that's what they went to you for.

MS. MILLS: They were accepting of it and -- and -- but what they bought were rated securities. So they bought, you know, Triple-A down to Triple-B and then there was --

COMMISSIONER WALLISON: You had gotten the ratings.

MS. MILLS: Yes.

COMMISSIONER WALLISON: But the underlying loans they understood to be subprime loans.

MS. MILLS: Yes.

COMMISSIONER WALLISON: Bought from these well-known subprime originators.

MS. MILLS: Yes, as did the rating agencies.

COMMISSIONER WALLISON: Okay. Thank you very much.

May I go on now to Mr. Bowen. I have a few questions for you.

What percentage, Mr. Bowen, of the mortgages that were improperly underwritten were prime mortgages, and what percentage were subprime, or could you make a distinction between them?

MR. BOWEN: The -- there were different channels that originated each. The largest volumes were on the prime side.

COMMISSIONER WALLISON: And so it -- did -- let me ask this -- when the mis-underwriting, like mis-underestimating, when the mis-underwriting occurred, did it occur more frequently with the subprime or with the prime, or did it not matter; it just happened generally?

MR. BOWEN: By virtue of the larger volume in the prime side the absolute numbers were certainly greater.

COMMISSIONER WALLISON: Okay. So the percentages would have been about the same. The -- but the numbers were greater because there were more prime loans?

MR. BOWEN: I -- I cannot make the comparison.

COMMISSIONER WALLISON: Okay, understood. That's perfectly good.

Do you know of any difference between the reactions of the GSEs, Fannie and Freddie, and the reactions of the Wall Street firms to improperly underwritten the loans?

MR. BOWEN: I did not interface with any of that area.

COMMISSIONER WALLISON: So you wouldn't know if investors forced Citi to repurchase or whether the GSEs forced Citi to repurchase some of these loans?

You were aware of the risks that Citi was taking because of the possibility of repurchase, but you don't know whether it actually happened.

MR. BOWEN: No. That was a different area of the organization.

COMMISSIONER WALLISON: Okay. And do you know of the actual delinquency rates on these loans that were improperly underwritten?

MR. BOWEN: On the prime side, there was reporting that was developed at the end of 2007 that did indicate -- and this was the first reporting, to my knowledge, that had been developed -- that did indicate a significantly higher delinquency rate among those.

COMMISSIONER WALLISON: That was the first time in 2007 when that seemed to be occurring?

MR. BOWEN: This was as of 2007, but it looked at all of the loans that were underwritten from 2006 to 2007.

COMMISSIONER WALLISON: Okay. And then I have one more --

MR. BOWEN: That was -- that was solely on the prime side, Commissioner.

COMMISSIONER WALLISON: Thank you. Thank you. That's interesting.

Mr. Chairman, I only have one questions, and that is, your memo to Robert Rubin.

CHAIRMAN ANGELIDES: Let me yield additional --

COMMISSIONER WALLISON: I just need a minute.

CHAIRMAN ANGELIDES: Well, I'll give you two.

COMMISSIONER WALLISON: Thanks. Your memo to Robert Rubin, extraordinary document that we have been privileged to see and that in fact was -- it was quite candid. Did you ever receive a response from anyone?

MR. BOWEN: At what point, Commissioner?

COMMISSIONER WALLISON: Well, that's a good question. From that time until the time you left the institution?

MR. BOWEN: From the point -- I'm attempting to clarify -- from the point at which I sent the e-mail to Mr. Rubin?

COMMISSIONER WALLISON: Right, that e-mail.

MR. BOWEN: I was -- I sent the e-mail on November the 3rd, I received a very brief phone call on Tuesday, November the 6th, I guess, from a general counsel within the company.

He said that they had received my e-mail, they took it seriously, they were doing some background investigation, and they really didn't need to talk to me at that point in time.

I sent two follow-up e-mails to the general counsel: One in November and one in December of 2007. I explained that there were details that he needed to know in this background investigation that posed extreme risk to Citi shareholders and to please contact me.

I was not contacted until January the 7th of 2008.

COMMISSIONER WALLISON: And when you were contacted in 2008, what were you told?

MR. BOWEN: We initiated a series of conference calls. I spent over five hours in conference calls with the general counsel, and he involved another general counsel over internal investigations, going into the details underlying my e-mail to Mr. Rubin.

COMMISSIONER WALLISON: And as far as you could tell, was any action taken? Other than contacting you, was any action taken with respect to people who were involved in the underwriting process.

MR. BOWEN: I do not know.

COMMISSIONER WALLISON: When did you leave the bank?

MR. BOWEN: Physically or from their employ?

COMMISSIONER WALLISON: Wow. Are you a lawyer? I would say their employ.

MR. BOWEN: I left the organization officially January the 23rd of 2009.

COMMISSIONER WALLISON: So you were there about a year after the point where you had had that conversation with the general counsel's office.

MR. BOWEN: I was not there physically.

COMMISSIONER WALLISON: Oh, please, would you enlarge upon this a little bit so we can understand what you mean by this? Were you sent somewhere else? Were you in prison?

CHAIRMAN ANGELIDES: Well, can I make an observation? I do not believe that -- that a subject that we should be discussing are specific employment matters, Mr. Wallison.

COMMISSIONER WALLISON: All right. I won't ask any further questions.

Thank you all for your indulgence in answering my questions so quickly and with such concision.

CHAIRMAN ANGELIDES: Mr. Georgiou?

COMMISSIONER GEORGIOU: Thank you.

EXAMINATION BY COMMISSIONER GEORGIOU

COMMISSIONER GEORGIOU: I guess to initially to Mr. Bitner and Ms. Lindsay, what incentives were there on the part of the originating brokers and others involved in the originations to do -- to deliver higher interest rate loans, if any?

MR. BITNER: There was standard operating procedure that broker could be compensated in one of two ways: They could either charge the borrower an origination fee and/or they could sell it above market interest rate.

And by doing that they would be paid a yield spread premium typically up to a maximum of 2 percent of the loan amount. In most cases there's a maximum upside for them, so significant financial gain.

COMMISSIONER GEORGIOU: Right. Now, when

you say yield spread premium, that's above the amount that they would otherwise receive as a brokerage fee for originating the loan?

MR. BITNER: That's correct. And a very quick example, today's rate may be 7 percent; if the sell 7.5 percent on a subprime loan, they may be paying an additional 1 percent. At 8 percent, they may get paid 2 percent on top of that.

COMMISSIONER GEORGIOU: And who pays that additional amount?

MR. BITNER: That comes directly from the lender, in this case, companies like myself and New Century who were doing business directly with the broker.

COMMISSIONER GEORGIOU: And would you then pass that additional cost on to the ultimate purchaser of the loan?

MR. BITNER: Well, that would have been factored in, yes, to the ultimate fee that I would have been able to or any lender would have been able to obtain by selling the loans then in bulk to the larger investors in the food chain.

COMMISSIONER GEORGIOU: Okay. Now if -- let's assume for the sake that the broker gets a higher fee for originating a higher interest rate loan, say at the high end, where they're getting 2 percent. Would there be any -- ever be any circumstances under which the broker -- anybody would go back to the broker in the event that that person who signed onto that loan weren't able to perform under it?

MR. BITNER: Well, boy, I wish we really could have, and that's really where the rubber meets the road here, because the average broker typically may have had a net worth in the organization of somewhere between 5- to 25,000 dollars. And good luck getting blood out of a turnip.

So the answer is we would have loved to but the practicality of it was it couldn't be done.

COMMISSIONER GEORGIOU: And -- and now if -- and did you charge a differential fee? Going up the chain, basically, from your company to whomever it is that you were selling them to, did you charge a differential fee for having originated a loan that charged higher interest?

MR. BITNER: I'm not sure if I understand what you mean by a differential fee.

COMMISSIONER GEORGIOU: Well, I mean, did you -- you paid -- you bought the loan; you sold the loan. Did you get an additional amount for having originated a higher interest rate loan?

MR. BITNER: Well certainly at the end of the day, if I put pools of loans together that had higher interest rates on them, they would be of greater value to myself or any lender that -- that was trying to sell them in the open market, yes.

COMMISSIONER GEORGIOU: Okay. And did -- and, now, there's been discussion that some of the acquirers had recourse back to you in the event that there was an early payment default.

MR. BITNER: Or fraud.

COMMISSIONER GEORGIOU: Or fraud. And was it your testimony that 2 -- 2 percent of the loans were repurchased or in that range?

MR. BITNER: I would say roughly in that range, yes. Less than 5 percent.

COMMISSIONER GEORGIOU: Okay. Turning to you, Ms. Lindsay, did you -- did you incentivize mortgage brokers to provide loans at a higher interest rate?

MS. LINDSAY: Yes. We had a rate sheet. So we -- the brokers could basically pick their rates that they were doing. They're supposed to discuss it with their clients, the borrowers, and they would have what's called par, meaning the broker doesn't pay --

or the borrower doesn't pay, and the lender doesn't pay the broker.

And then in the same token the borrower can also buy down their rate at a discount. So it can go either way: If it's a lower rate, the borrower would pay for that; if it was a high rate, the lender would pay the broker for that.

COMMISSIONER GEORGIOU: The lender, in your case, being New Century --

MS. LINDSAY: Correct, yes.

COMMISSIONER GEORGIOU: -- would pay that?

MS. LINDSAY: Yes.

COMMISSIONER GEORGIOU: And then would you, in turn, of course, obtain a higher price from whomever you sold it to?

MS. LINDSAY: Yes. We -- how we sold our loans were in bulk sale. So we would sell a hundred million dollars at 1 or 2 percent, depending on what the market would -- would bear.

COMMISSIONER GEORGIOU: I'm sorry, at 1 or 2 percent?

MS. LINDSAY: Of -- of the whole package, so we would package them in one big bulk.

COMMISSIONER GEORGIOU: Right.

MS. LINDSAY: So a hundred million dollars, and some investors would pay us 1 or 2 percent, in the early days we would get as much as six or 7 percent, but later on it was one to 2 percent.

COMMISSIONER GEORGIOU: And you'd get that as a -- as an upfront fee when you sold the loan?

MS. LINDSAY: Yes. So -- so if we have a hundred million dollars, the investor would wire us a check for 2 percent over the hundred million dollars, and we would send them all the loans.

COMMISSIONER GEORGIOU: And you would be able to sell the higher interest rate loans?

MS. LINDSAY: Yes. And -- and the pricing --

COMMISSIONER GEORGIOU: At a higher price?

MS. LINDSAY: Yes. And the investors would look at that, and they would evaluate what price they were willing to pay us. And that was probably the difference between the 1 and 2 percent that they were going to pay on the whole package.

COMMISSIONER GEORGIOU: Right. Now, Commissioner Wallison asked you about whether there were predatory lending practices, which would be practices that were intended to take advantage effectively of the borrower, as opposed to mortgage fraud, which was by the borrower against the lender or the investor at the end of the day.

MS. LINDSAY: Right.

COMMISSIONER GEORGIOU: Were there practices that could be characterized as predatory in that they attempted to steer borrowers to higher interest rate loans who might otherwise qualify for lower ones?

MS. LINDSAY: Not that I'm aware of. I'm sure it probably happened. We had about 7500 employees in our organization at one time. So I'm sure that some people did. It was discouraged though.

We had our policies and procedures, we had our fair lending group, we had a compliance group, and we would talk about predatory lending. And for example, we would -- we would look at somebody's income potential. So if somebody was of retirement age, for example, we would not put them in an interest-only loan or in some sort of an adjustable-rate mortgage.

COMMISSIONER GEORGIOU: Right.

MS. LINDSAY: So we did do things to discourage anything that would appear to be predatory.

COMMISSIONER GEORGIOU: Okay. Mr. Bitner, can you respond to that particular point?

MR. BITNER: That's actually a very good

question. I can give you an example of that. I think perhaps the best example might come where we would have seen a loan file come in that to use something specific might have had a 620 or 640 credit score, and it was a loan that we clearly were able to do with our guidelines.

And we would question to ourselves, why did the broker not take this loan and perhaps run it through Fannie Mae's or Freddie Mac's automated underwriting system, because it appeared that it's very possible they could have gotten a slightly better rate and a better deal for the borrower in doing that. What we saw, I think, was such a large influx of new originators who came in, who were so heavily called upon by firms like mine and others, that I think the path of least resistance for people who were not seasoned in the industry was simply to say, I'm going to send a loan to Kallmer, to New Century, to Citi, or whoever I am, and they're going to take it, turn quickly for it -- turn the loan quickly around, we're going to close it, going to make our money and go down the road.

So I think we started seeing a lot of that type of a thing, where a borrower may very well have gotten an interest rate that could have been three-quarters of a point or a point, or maybe even a little better, with a little bit greater diligence on the part of the broker.

COMMISSIONER GEORGIOU: And how is it that you capitalized your company to be buying all this huge volume of loans? Did you have any warehouse lines from anyone?

MR. BITNER: I did have warehouse lines. When I entered the industry, the -- the -- and I spent a fair amount of time talking about this in the book, the dollar amounts that were needed to fund a company like mine were substantially less than they were maybe by the time I exited the industry in 2005.

So it was -- it was loans from parents and a variety of other things to capitalize the company with several hundred thousand dollars that got me into the business.

COMMISSIONER GEORGIOU: Right. But then you had -- you had a line of credit available to you from somebody to actually provide the loans?

MR. BITNER: Correct. Actually through Citi's warehouse division and through GMACs, correct.

COMMISSIONER GEORGIOU: Okay. And what did they charge you for that privilege?

MR. BITNER: I'd have to go back and remind myself but I think it was -- one was Libor baseline Libor plus a couple of points and, you know, typically 50 -- 25- to 50-dollar transaction fee per -- per -- per loan, so, you know --

COMMISSIONER GEORGIOU: And would they -- would they then buy -- would the party that provided the warehouse line of credit customarily buy all the loans that you originated pursuant to it?

MR. BITNER: Well, it depended. I mean, they were -- in this case, for example, GMAC, which was our largest investor, they were also our largest warehouse line. So there were two separate divisions with GMAC that, yes, did one and the same and actually offered us better terms if we were able to use both their warehouse line and send -- sell the loan to them.

COMMISSIONER GEORGIOU: Okay. I guess, turning to Ms. Mills, if I could. How often did you require parties from whom you bought the loans to purchase the loan back because of early payment default or any other provision that you had in the agreement?

MS. MILLS: Initially, when we first started to purchase large blocks of loans in 2005, we saw about 2 percent of the loans be early -- early pay defaults. And the last number that I remember in 2007 is about 5 or 6 percent early pay defaults.

COMMISSIONER GEORGIOU: Uh-huh. And so now, and then you would go back to an institution like Bitner's and --

MS. MILLS: No. We dealt with larger institutions. So we wouldn't have bought loans directly from a firm like Mr. Bitner's. And we did not buy loans from Mr. Bitner's firm.

So for the -- in the example of Wells Fargo, just because they're still around --

COMMISSIONER GEORGIOU: Right.

MS. MILLS: -- if we bought loans from them, and we had early pay defaults, we had a system that tracked them. And then we had a unit inside of my department that worked with all of the firms that we bought loans from, and we pursued these repurchase requests.

And it was a -- it was somewhat of an iterative process. You know, we would send them a notice that said, you sold us these loans and they didn't make their payment and you need to buy them back.

COMMISSIONER GEORGIOU: And they weren't happy. They weren't happy with that.

MS. MILLS: It was a fair amount of back-and-forth.

COMMISSIONER GEORGIOU: Well, I -- I know this is going to be difficult to answer, and maybe you can't, but how often were you able to actually enforce these buy-back provisions?

MS. MILLS: Fairly often.

COMMISSIONER GEORGIOU: And I take it you could only enforce it from people who were liquid and adequately capitalized down the chain from whom you had bought these loans?

MS. MILLS: It was very purposeful in our business model that we only dealt with well-capitalized institutions for a lot of the reasons that we're talking about today.

We placed a lot of value on the reps and warrants that we got from the sellers when we bought the loans, but we also felt it was important that they had capital to back up those reps and warrants.

And so we were fairly successful in getting firms to repurchase early pay defaults until those firms went out of business.

COMMISSIONER GEORGIOU: Right. And then you were stuck. Somebody was stuck anyway.

MS. MILLS: We were stuck.

COMMISSIONER WALLISON: Tell me, were you involved in the securitization, thereafter? I mean after collecting all these loans, were you involved in the process of structuring them and selling them as RMBS?

MS. MILLS: My group was involved in preparing the offering documents. So not only did we perform the diligence on the whole loans when we purchased the pools, then once we actually owned the loans, we worked with our trading desk in deciding what loans would be securitized.

COMMISSIONER GEORGIOU: Right.

MS. MILLS: And it was my group that worked with the rating agencies and the lawyers and the accountants to put together the prospectuses that were used to sell the securities to our investors.

COMMISSIONER GEORGIOU: So you're the perfect witness to answer the question I'm about to ask.

At the last hearing when we had some of the heads of these organizations before us, and recently I've been sort of reflecting that perhaps the system might have worked better if a variety of people along the way had additional skin in the game, if you will, or had to eat their own cooking was the term that I used, where maybe rather than take all their fees in cash at every step of the process, including the mortgage brokers, the intermediate purchasers, the purchasers, yourselves, you know, the lawyers who wrote the prospectuses, the investment bankers who did the -- got paid on the underwriting, the credit rating agencies, that maybe they ought to take them in the actual securities, themselves, some portion of their fee, so that they are actually long in the security and that maybe, under those circumstances, they would have a greater incentive to do appropriate diligence and to be certain, more certain that they would perform in accordance with the representations that they made to the investors.

Have you given any thought to that question or anything similar? Do you think that Citi could operate your securitization of these mortgages if you got paid, at least in significant part, in the security itself?

MS. MILLS: In the context of when we purchased loans as principal and then securitized those loans, there is always a risk that we would wind up not being able to sell all of the bonds and we would have some of the bonds left in our position.

COMMISSIONER GEORGIOU: Right.

MS. MILLS: Also, when we did subprime securitizations, there's a component of the securitization where it’s an equity piece that there was no market for that we wound up owning in almost all of the transactions where we bought whole loans.

COMMISSIONER GEORGIOU: Well, would that be CDOs or is that --

MS. MILLS: No.

COMMISSIONER GEORGIOU: -- the first round of securitizations? You still couldn't sell a portion of those?

MS. MILLS: There's a piece, it's called the equity off of the NIM.

COMMISSIONER GEORGIOU: Right.

MS. MILLS: NIM is net interest margin security.

COMMISSIONER GEORGIOU: But that's pretty marginal, isn't that like 2 percent of the offering or thereabouts?

MS. MILLS: It is. It varies depending on the loans that are in the particular securitization.

COMMISSIONER GEORGIOU: Right. But you would charge maybe a 7 percent underwriting fee off the -- just say you issued a billion-dollar RMBS, I mean, you -- you'd customarily get a 70-million-dollar fee.

MS. MILLS: I'm not sure where those numbers are coming from. In the context of us buying whole loans and selling bonds, the only way that the business makes money is if you sell the bonds for more than you paid for the loans.

COMMISSIONER GEORGIOU: Okay. All right. So you're saying that your pricing so that ultimately -- but I thought that the impression that I got was that you had pretty ready and willing buyers for these bonds; is that not fair?

MS. MILLS: We did, but depending on market circumstances or, you know, investor appetite, it is possible that we would have bonds left in our position. But we're a market maker and we have bonds in our position all the time.

COMMISSIONER GEORGIOU: Right, of course.

MS. MILLS: And bonds that we buy in the secondary market.

COMMISSIONER GEORGIOU: Right. And you wouldn't be acquiring them without the intention ultimately of selling them.

MS. MILLS: No, it was always our intention to distribute.

COMMISSIONER GEORGIOU: Okay. And I

guess --

CHAIRMAN ANGELIDES: Would you like some additional time?

COMMISSIONER GEORGIOU: Just a minute or two, if I could.

CHAIRMAN ANGELIDES: I'll yield you two minutes.

COMMISSIONER GEORGIOU: Thank you.

CHAIRMAN ANGELIDES: Three minutes, take your time.

COMMISSIONER GEORGIOU: And I take it your compensation or your group's compensation -- I guess somebody touched upon this already, probably Heather -- but depended, to some extent, on the amount of revenue that you generated through the securitization process for your group; is that right?

MS. MILLS: I believe that is a component, yes.

COMMISSIONER GEORGIOU: Right. Now, did you ever -- did any of these securities ultimately fail in the hands of the investors, if you know?

MS. MILLS: Fail is a difficult word to use because it's not a pass-fail scenario.

COMMISSIONER GEORGIOU: How about lose value?

MS. MILLS: I can tell you that they lost value and they performed worse than we expected.

COMMISSIONER GEORGIOU: Okay. Now, at any time, did they come back to Citi?

MS. MILLS: As a market maker, you always have the possibility that someone that you sold bonds to comes back to you and says, I don't like this bond; I want you to buy it back from me.

COMMISSIONER GEORGIOU: Right, but how often did that happen?

MS. MILLS: I'm not on the trading desk. I couldn't really answer that appropriately.

COMMISSIONER GEORGIOU: Okay. Let me ask you this: If you're on the incentive-based, compensation of your group was -- was dependent on the origination fees of creating those securities, were you -- do you ever have an occasion when they didn't perform as well as expected of any clawback of compensation that went to the group?

MS. MILLS: That's not a Citi policy as far as I know.

COMMISSIONER GEORGIOU: Okay. Okay. I guess, Mr. Bowen, I guess I'm not entirely certain I understand -- thank you very much, Ms. Mills -- I'm not certain I understand the -- the different area that you had.

You had an area that was reviewing the acquisition of loans, and for what purpose at Citi?

MR. BOWEN: I was business chief underwriter of the correspondent area. We actually purchased loans. The -- that part of the organization did not originate mortgages. Other mortgage companies originated those loans and they were purchased by Citi.

COMMISSIONER GEORGIOU: Right. For what purpose?

MR. BOWEN: Again, the -- it was my understanding on the prime side most of them were sold off to investors.

COMMISSIONER GEORGIOU: And were they securitized? I guess they were.

MR. BOWEN: I was -- I was not on that side of the business.

COMMISSIONER GEORGIOU: Okay. All right. Well, then -- then, I think, thank you very much, all of you. I think I've exhausted my questions here.

CHAIRMAN ANGELIDES: Thank you very much. Mr. Thompson?

COMMISSIONER THOMPSON: Thank you, Mr. Chairman.

EXAMINATION BY COMMISSIONER THOMPSON

COMMISSIONER THOMPSON: And good afternoon ladies and gentlemen.

Mr. Bitner, it's not often that someone would have an epiphany quite like yours that would cause you to change your career. And so I -- I applaud you, not so much for the disaster that you had, but the fact that you chose to take some action as a result of that.

I'm struck, however, by the fact that there would appear to be no state regulations over this part of the business. But you yourself and many others who participate in this could see where there were obvious flaws, that actions should have been taken.

So, in your opinion, were there obvious steps that state or federal regulators should have taken that would have reigned in this crisis long before it got out of hand?

MR. BITNER: I always felt, you know, it's very interesting when you look at people in the financial world who are responsible for managing money for individuals, a series of people have to get Series 7 licences, things of that nature, I think most financial professionals, CFBs, go through some pretty strenuous testing.

It always amazed me that to become a lender or a broker, which arguably is the greatest investment as most of us as humans will ever make in the course of our lives, oftentimes requires nothing more than a fingerprint check and a multiple-choice test.

I always use the state of Texas as an example, which has probably the most stringent standards, and is truly just a pass-fail, 70 percent, multiple-choice test, not exactly what I would consider to be rocket science for the purposes of entry.

So, yes, I would have liked to have seen -- frankly, I would have liked to have seen stricter standards just to get into the business as a baseline, both for lenders and brokers.

COMMISSIONER THOMPSON: So you obviously saw up the food chain as well, and that is, the people who were buying the bundles of loans from you. What would you say about regulations in that sector?

MR. BITNER: Well, I'm a very big believer, and I realize this panel is not focusing on the rating agencies. I have a very strong belief --

VICE CHAIRMAN THOMAS: Au contraire, we will.

MR. BITNER: No, I'm sorry, for purposes

of --

CHAIRMAN ANGELIDES: Oh, today.

MR. BITNER: The purposes of this discussion, excuse me, I know you will but --

VICE CHAIRMAN THOMAS: You're in line ahead of them; that's the only difference.

MR. BITNER: I'm sorry?

VICE CHAIRMAN THOMAS: You're in line ahead of them; that's the only difference.

MR. BITNER: And I feel fortunate for that, thank you.

The reality is this, we talked about the originate-to-distribute model, we talked about a situation where one institution used to hold all of the responsibility.

Securitization broke that up where, again, no one truly had skin in the game. The only impartial group, really, that was supposed to act in here were the rating agencies.

And it just -- it still continues, to this day, to boggle my mind that three years later there has been literally nothing that has been done, and this is not a sign of this commission, because I realize that's not what this commission is tasked with, to do anything to either get back to the days where we could create an arm's-length distance between the investment banks and the rating agencies or find some other ways for which they are compensated that has nothing to do with the volume of work that they do.

COMMISSIONER GEORGIOU: We are going to try to do a little bit about that at some point down the road here.

COMMISSIONER THOMPSON: Well, that's certainly an area, as Mr. Georgiou says, has come to our attention, and we'll look into it a little bit later.

Ms. Lindsay, can I move to you in just a moment, please?

MS. LINDSAY: Yes.

COMMISSIONER THOMPSON: Don't take this question the wrong way, but given the collapse of New Century, I mean, it literally imploded.

MS. LINDSAY: Yes.

COMMISSIONER THOMPSON: Would it be fair to say that the risk management function, as it existed within the organization, was more window dressing by senior management to get this fraud perpetrated on as many people as they possibly could?

MS. LINDSAY: With respect to my

department, I strictly was in charge of fraud detection and prevention. So I'd like to think that we did a pretty good job.

As far as the rest of the business unit goes, as far as producing loans that borrowers couldn't afford, the guidelines that were created, yeah, I think -- I think it was a mess.

One of the problems was, since values kept going up, one of the questions -- for example, I dealt with repurchase requests as part of my job, and when I started seeing some of the repurchase requests come in, specifically the 80/20s, the hundred percent financing, I would bring that to the attention of senior management, and they would say, well, that's just one loan or two loans. We made 20,000 loans last month, you know.

So there were no significant numbers because the values kept going up. And the -- all of the fraud was masked. And production always wanted to see the numbers. Show me the numbers; show me where we're taking a loss. That was the big thing. We couldn't show anybody that we were taking a loss because we were in such an upswing.

And then by the time we figured out that there was a problem, it was too late and New Century exploded or imploded, both.

COMMISSIONER THOMPSON: So it would -- would it be fair to say that you were pressured by senior management to ignore those things that your normal barometer would have said are problematic?

MS. LINDSAY: We were basically told to stick to the fraud. If we had concerns about a loan, we had risk managers that were put throughout the country to review loans.

And some of their requests were ignored, some of the production teams would override their decisions, and other groups were really good and would sit down with them and figure out why they were making the recommendations they were.

Part of the problem was the lack of -- lack of depth or knowledge in the industry. And so the sales people -- since it was such a new industry, we had so many new employees throughout the country in subprime that had never been in mortgage lending before. So I think part of it was just their inability to understand what the problems were to make informed decisions.

And so they did ignore the more seasoned professionals who may have had a better insight into it.

COMMISSIONER THOMPSON: So how much did the competitive pressure, particularly between New Century and Countrywide, contribute to the level of risk that the organization was willing to take?

MS. LINDSAY: Oh, it was huge. That was -- I mean, the account executives would come in and say, well, if we don't do this loan, if we don't give this pricing or make this particular loan, Argent, Countrywide, and they would name off ten of our other competitors, who will do it right now, can we do it faster, better, quicker, you know, at a better price. So, yes, it was huge.

COMMISSIONER THOMPSON: Okay.

Ms. Mills, the vernacular of league tables is all about a proxy for market share in your business.

And in my experience with Wall Street, that's everything. Every investment bank, every corporate loan officer, everybody who looks at themselves wants to compare themselves favorably against industry league tables.

Yet you were proud of the fact that you were sliding, that seems counterintuitive to me to the culture of Wall Street. What am I missing?

MS. MILLS: I won't tell you that league

tables were not something that people talked about, but I can tell you that there was never pressure to do business just to gain league table position in -- in my business.

So my management was focused on being profitable and being a presence in the market. But there was never any pressure to be one, two, or -- or three. It is, you know, do business that makes sense, buy loans where you think you can make money and distribute the bonds, and I -- I -- I'm not aware of any pressure to just do business to be higher in the league tables.

COMMISSIONER THOMPSON: So you were an island in the sea of Wall Street or an island in the sea of Citi, because other parts of Citi certainly had pressure on league tables.

MS. MILLS: I can only speak about my business and my interactions with my management.

COMMISSIONER THOMPSON: Okay. Thank you very much. I yield, Mr. Chairman.

CHAIRMAN ANGELIDES: Thank you very much. Ms. Born?

COMMISSIONER BORN: Thank you very much.

EXAMINATION BY COMMISSIONER BORN

COMMISSIONER BORN: Mr. Bitner, you've just spoken about the inadequacy of state regulation or oversight of mortgage lenders and brokers. You also say in your written testimony that there were two statutes in the early 1980s that you think laid -- laid the groundwork for subprime lending.

And I wondered if you would comment on those. They're the depository institutions Deregulation and Money Control Act of 1980 and the Alternative Mortgage Transaction Parity Act of 1982.

What role did they play in laying the groundwork for subprime lending.

MR. BITNER: Well, I would be remiss if I said or inadequate if I said that I was truly expert on these. When I was researching my book and -- and attempting to find where sort of a foundational point for the industry began, several different scholars had pointed me to these particular acts as sort of starting points where we begin to say we actually saw foundations for that.

The depository, the monitory -- the money -- Money Control Act, excuse me, was by and large allowed businesses to, and lenders, to charge higher rates and fees to borrowers that had not been in place at times. So there was some structure that was put in and around that.

The Alternative Mortgage Transaction Parity Act in `82 also really gave rise to the use of variable interest rates or what we really now refer to now as ARMs or adjustable rate mortgages.

Those two, in and of themselves, were certainly a starting point. I think what really started to kick the industry into gear, although those were fairly minor, the third really sort of occurred in the early `90s, when we came out of a refinance wave in `93.

And subsequently, like with most originators, when you find yourself -- this time I was actually not originating in the industry -- when interest rates go higher and there's no other ways to do loans because people stop refinancing, you look for alternative forms of opportunities.

And that's really when subprime lending began to enter the market. It really wasn't until a few years later that we began to see the securitization of these products. Initially that was just more portfolio lending at that time.

COMMISSIONER BORN: So basically the role that those two statutes played was to give the flexibility to design new kinds of mortgage products?

MR. BITNER: Correct. And, again, at that time we really just saw people dipping their toes in the water; it was not any sort of a major entry point.

COMMISSIONER BORN: Thank you.

MR. BITNER: Yeah.

COMMISSIONER BORN: Ms. Lindsay, may I ask you about New Century?

MS. LINDSAY: Yes.

COMMISSIONER BORN: It was, we have heard, the third largest subprime lender in the country from 2005 to 2007, and I wondered what, in your view, caused it to go bankrupt?

MS. LINDSAY: That's a good question. We just -- we just grew too fast. It got really competitive. And then that, coupled with the repurchase requests starting to come in as the market kind of flattened out as the values stopped going up, to mask any fraud or any problems, it -- we started seeing repurchase requests.

We had reps and warrants with all of our investors as well, and the primary reason to repurchase loans were fraud or first payment defaults.

We also had compliance issues and missing documentation. But the first payment default started growing exponentially. It was pretty -- pretty busy. The middle of `06 we created a specific repurchase desk to handle all of the repurchases. And I just think we couldn't keep up with them.

COMMISSIONER BORN: So in other words, you just -- because a larger number of your -- the loans that you were selling were slow in payment or not paying, you had a lot of liability with respect to them?

MS. LINDSAY: That's correct, yes.

COMMISSIONER BORN: And was it also because the mortgage market itself was slowing down, the originations were slowing down?

MS. LINDSAY: Originations were slowing down. I think we had pretty much exhausted all of the products. We got out as far as we could, and there were no new borrowers out there. I think that was part of it as well.

COMMISSIONER BORN: Thank you.

Ms. Mills, you describe in your testimony how diligently your operation has been doing due diligence on the underlying loans for your mortgage-backed securities and also how you cut back on purchases when you saw problems in the housing market.

Did your operation incur any losses relating to the implosion of the housing markets and, if so, what were they caused by and how great were they?

MS. MILLS: I can't give you the specific loss numbers. I will tell you that whole loan prices started to drop because of the dislocation that was occurring in the market.

We had loans in our position that we owned that suddenly were worth less just by virtue of the fact as to what was happening in the market. We had loans on our books that were supposed to be repurchased by companies that had gone out of business, and there was nobody to go to to repurchase those loans.

We also had a large book of whole loans that we bought at distressed values. And those loans also lost value.

So the business lost a lot of money. We can follow up on the exact dollar amount but as the securitization market went away, there was no venue for us to sell the loans and securitize them.

And because our business is not running a portfolio, you know, we spent a lot of time in the last couple years managing the whole loans that we owned.

COMMISSIONER BORN: So has that been a

primary focus of your group in the last couple years?

MS. MILLS: Yes.

COMMISSIONER BORN: I would appreciate it if you could provide the information on the losses --

MS. MILLS: Okay.

COMMISSIONER BORN: -- to the Commission.

MS. MILLS: Okay.

COMMISSIONER BORN: Mr. Bowen, you described the significant problems with Citi's implementation of its -- and its -- of its underwriting standards for mortgages.

And you said that you saw a significant number of defective products being purchased in 2006 and 2007 and that you tried to alert people and that the purchases, nonetheless, went forward.

What do you think the motivation of the impetus for going forward with these noncomplying loan purchases were?

MR. BOWEN: Again, that -- that would call on speculation from my part and I -- I don't know.

COMMISSIONER BORN: Thank you. I'll yield the rest of my time.

CHAIRMAN ANGELIDES: All right. Thank you very much. Mr. Thomas.

VICE CHAIRMAN THOMAS: Thank you.

Commissioners, need any additional time for any follow-ups?

COMMISSIONER WALLISON: I want --

VICE CHAIRMAN THOMAS: How long? Go ahead, Mr. Wallison.

CHAIRMAN ANGELIDES: How much time do you need, Mr. Wallison?

VICE CHAIRMAN THOMAS: I'll give you four and a half.

COMMISSIONER WALLISON: Oh, okay.

VICE CHAIRMAN THOMAS: We'll negotiate to five. Go ahead.

CHAIRMAN ANGELIDES: Microphone, Mr. Wallison.

EXAMINATION BY COMMISSIONER WALLISON

COMMISSIONER WALLISON: That's right. I have some questions for Ms. Lindsay.

You refer to buyers of securitized subprime mortgages as unsophisticated. And that's quite interesting, to me. These are buyers after all. They're people who are in this business all the time.

Why do you regard them as unsophisticated?

MS. LINDSAY: They were sophisticated in putting financial deals together. The reason I used the word unsophisticated is because they didn't know the risk of the underlying product. These were all very high-risk loans.

COMMISSIONER WALLISON: And they didn't know that. You thought of them as putting together the pools very well and negotiating, I suppose, about how these pools would be eventually marketed?

MS. LINDSAY: Right.

COMMISSIONER WALLISON: But you didn't think they understood the underlying loans? Why -- why would that be true? I mean, why do you think that is what I mean.

MS. LINDSAY: Well, my personal opinion is, because of what I had learned growing up and working in finance and working for hard money lenders and other subprime lenders who actually had a stake in the game, who had an interest in whether the loan performed or not, these were extremely risky loan.

And so if they would look back at a Beneficial mortgage, for example, the highest loan-to-value Beneficial mortgage would have loaned somebody with a poor credit score, and if they had spots on their credit or on their employment history, they wouldn't loan them any more than 65 percent loan-to-value. So they would have to come up with that other 35 percent.

So the default -- so, basically, if anybody defaulted on these loans, the lender was going to take a loss immediately. There was no -- there was no protective equity.

COMMISSIONER WALLISON: Right.

MS. LINDSAY: No cushion.

COMMISSIONER WALLISON: You sold loans to Fannie Mae and Freddie Mac?

MS. LINDSAY: Yes.

COMMISSIONER WALLISON: Were they unsophisticated, in your view?

MS. LINDSAY: I don't know what --

COMMISSIONER WALLISON: Well, was there any difference --

MS. LINDSAY: -- what they were thinking.

COMMISSIONER WALLISON: Was there any difference -- of course not, but you don't know about the others, either.

I mean, the point is, did you think from looking at what they were buying that they might also be unsophisticated?

MS. LINDSAY: Yeah, I didn't see the actual products that they were buying other than they were buying the higher -- the subprime loans that had the higher credit risk or the lower credit scores.

I'm not sure what loan-to-values they were using. So I'm not sure which packages. They may have been buying a particular pool of loans that had a lower loan-to-value. I don't know the answer to that question.

COMMISSIONER WALLISON: Okay. Ms. Mills, in February of 2007 you started reducing your subprime exposure. Why? What signaled you to do that? And that February of 2007 was early.

MS. MILLS: We had started to see a deterioration in the quality of the loans that were being originated and a deterioration -- deterioration in the whole loan prices that -- where loans could be sold.

And so because we lent money to a lot of the people that we also bought from, we had access to their financial statements. Part of what they were required to do was to send us quarterly financial statements.

And there were all sorts of financial covenants related to their profitability. So on a very sort of micro level we started to see that the types of loans that were originating, these companies were not making money.

And that, in combination with the fact that whole loan prices continued to drop, we had already started to step away a little bit from the business in the middle of 2006. We slowed down our purchase activity; we stipulated our bids; we tried to buy the -- if there is such a term -- sort of like the core, subprime products, nothing that was really like an outlier as far as risks because the credit -- the rating agencies were increasing their credit enhancement levels, which was reducing the amount of proceeds that you could raise by selling bonds.

So we had to pay less for loans. And because everything we bought was competitive bid, we also weren’t winning pools.

COMMISSIONER WALLISON: Who were you bidding against?

MS. MILLS: Primarily other Wall Street firms.

COMMISSIONER WALLISON: And did they do the same thing that you were doing, or you were selling on to others, it seemed to me, from what you were saying, they were selling directly to investors?

MS. MILLS: In very general terms, most of the firms that were in our space I believe bought loans and securitized them, but I'm not -- I can't speak, you know, definitively, that that's all they did.

COMMISSIONER WALLISON: Okay. But the bidding was still strong?

MS. MILLS: There was still a lot of activity, yes.

COMMISSIONER WALLISON: One more question. You described the process of working with investors and a credit rating agency. You said that you would get a dollar amount and a rating for the RMBS; then you would market to investors and solicit feedback. This sounds like a very iterative process, and I think all of us would like to understand a little bit more how this really -- how this really worked.

MS. MILLS: Okay.

COMMISSIONER WALLISON: Please.

MS. MILLS: Once we owned a pool of loans, we would send a data file to the rating agencies. We primarily dealt with Moody's, S&P and Fitch. Each rating agency had their own data requirements, so what data they wanted to see and what format they wanted to see it in. We would send them the information. The rating agencies have models that they sort of run the cash flows of the underlying mortgage loans through this model.

And they would come back to us and tell us how many bonds we could issue that were rated Triple-A, Double-A, Single-A, Triple-B, and then what the over collateralization amounts underneath the Triple-B needed -- needed to be.

And then, based on -- that was sort of how we sized the bonds in the offering process. And then we went out to investors and you went out with pricing. So you might try to sell the Triple-A at Libor plus a spread.

And you either had investor interest or you didn't. If you had investor interest you might be able to tighten the spread; if you didn't have investor interest, you would have to widen the spread.

COMMISSIONER WALLISON: Tighten the spread, widen the spread, did the rating agency have any role in the interest --

CHAIRMAN ANGELIDES: I'm going to yield additional, by the way, an additional, we're over, so I'll just an additional --

COMMISSIONER WALLISON: Sure, this is important, Mr. Chairman, I appreciate the additional time.

CHAIRMAN ANGELIDES: Three minutes, total.

COMMISSIONER WALLISON: Did the rating agency have any role after you got the initial structure from the rating agency?

MS. MILLS: You don't technically get the structure from the rating agency. You just get bond sizes and other features of the deal that are related to credit enhancement.

They're involved up until the actual day that the deal closes. It is an iterative process, and the pool could change during the marketing time. The loans could drop out; loans could go delinquent. So there's always this sort of final true-up that goes on, and on the day that the deal closes you get a letter from the rating agency that says I -- I, rating agency, you know, in relation to this security, will let you issue this many Triple-A's and so on.

COMMISSIONER WALLISON: Did you ever go back to the rating agency during the time you were in the middle of talking to the investors and say, we need a change here in this structure or that part of the rating or the number of bonds involved and that kind of thing so that they changed their assessment and responded to your request?

MS. MILLS: I don't have any specific recollection of that happening in the subprime space. I do remember, and I know that we're not focused on prime, but in the prime securitization market, I do remember instances where investors wanted more credit enhancement levels than the rating agencies were requiring.

CHAIRMAN ANGELIDES: All right, Mr. Wallison, we'll move on, thank you. Ms. Murren, you have a couple minutes, if you like, and then Mr. Georgiou, two minutes each.

COMMISSIONER MURREN: Thank you.

EXAMINATION BY COMMISSIONER MURREN

COMMISSIONER MURREN: I have a question, actually, for all of you, but it may be a simple yes or no answer.

In listening to your commentary, it appears that we've talked about declining underwriting standards and the fact that this is a business where there were fairly low barriers to entry and that the price of loans declined over the course of the boom.

So when you think about, in your own minds, weighing the factors that drove the boom, was it demand-driven or was it supply-driven when you think about the relative importance of these two things?

And then, in consideration of that, do you think that had we had better oversight and reasonable barriers to entry, that things might have been different?

MR. BITNER: I guess I'll take that first.

I think it's a combination of both. I don't think one happens without the other. And, yes, I very much believe that had there been some barriers to or some -- I'm sorry, not barriers to -- greater levels of oversight that we could have prevented this mess from happening or at least minimized it to a certain degree.

MS. LINDSAY: Yeah, I agree. As far as the loan originators go there needs to be more oversight with that, definitely, there, as Mr. Bitner pointed out there were several states that didn't even require licensing. And they were allowed to originate loans. And that was part of the problem.

MS. MILLS: From my perspective, I think it was both supply- and demand-driven. I don't really -- I can't really speak that well about the impact of regulation just because the people that we bought from we believed were regulated or well run or well capitalized.

So I didn't have the same sort of negative experience in dealing with smaller unregulated counterparties.

MR. BOWEN: I was not involved in the actual origination of the loans. These had already been originated by the time that I reviewed them, so I really can't opine on that.

CHAIRMAN ANGELIDES: All right.

COMMISSIONER MURREN: Thank you.

CHAIRMAN ANGELIDES: Mr. Georgiou?

COMMISSIONER GEORGIOU: Thank you, Mr. Chairman.

EXAMINATION BY COMMISSIONER GEORGIOU

COMMISSIONER GEORGIOU: Ms. Mills, could you tell us, in the typical structure that you had when you did these bonds, how were the credit rating agencies paid?

MS. MILLS: They were paid a fee that was driven by the transaction size.

COMMISSIONER GEORGIOU: So it was --

MS. MILLS: Typically they got a certain number of basis points up to a maximum cap dollar amount, and then they were sort of capped out at the dollar amount.

COMMISSIONER GEORGIOU: Right. But they got basis points based on the size of the issue.

MS. MILLS: The dollar amount of the transaction, yes.

COMMISSIONER GEORGIOU: All right. Okay. And that didn't matter how they rated it.

MS. MILLS: No.

COMMISSIONER GEORGIOU: They got paid.

How many times did you take to market or attempt to take to market a pool of loans that didn't receive ratings that you thought were necessary to sell them?

MS. MILLS: I'm not sure I understand the question.

COMMISSIONER GEORGIOU: Did you ever -- did the rating agencies ever provide a rating that was too low for you to be able to market effectively the -- the pool of loans that you securitized.

MS. MILLS: What the rating agencies gave us was the dollar amount of bonds in each rating category. So you've always had bonds in each rating category. And there was typically appetite for bonds with various ratings.

COMMISSIONER GEORGIOU: All right. Differential -- differential returns?

MS. MILLS: Different risk appetites and yield requirements.

COMMISSIONER GEORGIOU: Okay. You provided warehouse lines to Argent to the tune of about three and a half billion dollars; is that right?

MS. MILLS: It was the Argent, slash,

Ameriquest platform. I think most of our warehouse lines were technically with Ameriquest.

COMMISSIONER GEORGIOU: Right.

MS. MILLS: I think we might have had one smaller warehouse line with Argent.

COMMISSIONER GEORGIOU: But then you -- you bought -- later in the process, you folks ended up buying Argent; is that right?

MS. MILLS: Yes.

COMMISSIONER GEORGIOU: How did that work out for you?

MS. MILLS: Could have been better.

COMMISSIONER GEORGIOU: That's good enough, I think. Thank you.

CHAIRMAN ANGELIDES: Mr. Thomas?

EXAMINATION BY VICE CHAIRMAN THOMAS

VICE CHAIRMAN THOMAS: Couple of quick follow-ups along that line and then moving in another direction.

In terms of the rating agencies and you're sending your materials to them and getting them back, was there ever something that could be described as negotiations; that is, you got something back from them, you argued back, they reexamined or looked at it, was there anything that could be fairly characterized as negotiating with the rating agencies in coming up with the final package and agreement?

MS. MILLS: What you could do is you could change the composition of the pool. So in other words, if you got back credit enhancement levels where there weren't a sufficient enough number of Triple-A bonds, you could remove some of the riskier loans from the pool and resubmit it to the rating agencies.

VICE CHAIRMAN THOMAS: When it was submitted to you in that regard, was there any guidance or a clear understanding of what you could do to make it work?

MS. MILLS: What do you mean?

VICE CHAIRMAN THOMAS: Were there any negotiations with the rating agencies? If you send me a package and I send it back to you --

MS. MILLS: Right.

VICE CHAIRMAN THOMAS: -- I can give it to you cold and you've got to figure out what to do or I can give you a couple of hints in terms of moving it in a particular direction, but of course it would be up to you to make that decision?

MS. MILLS: I don't believe so. I think that we knew if you pulled out riskier loans you could have less credit enhancement.

VICE CHAIRMAN THOMAS: I could even probably handle that level of understanding. So you mixed it up and sent it back.

Were there situations where you had to send it back two or three times to get what you were looking for?

MS. MILLS: I'm not sure that I know how to answer that.

VICE CHAIRMAN THOMAS: Do you recall?

MS. MILLS: I don't know that I can answer that.

VICE CHAIRMAN THOMAS: Well, the answer is yes or no or I don't know. So you don't know?

MS. MILLS: I don't know.

VICE CHAIRMAN THOMAS: Okay. And I want to say this, I appreciate your willingness, because unlike others, you are in a current position, and we're asking you questions about your employer. And so I'm very sensitive to that, and having said that, I'm going to ask both of you a series of questions.

COMMISSIONER THOMPSON: Can I make a follow-up to the last question?

VICE CHAIRMAN THOMAS: Go.

COMMISSIONER THOMPSON: Were there ever instances where you might have given the same bundle of loans to two different rating agencies to essentially shop for the best rating?

MS. MILLS: There was a requirement from investors, primarily on the Triple-A side, that bonds have two ratings. And there was typically Moody's and S&P. Most of our deals had Moody's, S&P, and Fitch. But the demand for rating agencies was driven by the investors so that we could sell bonds.

COMMISSIONER THOMPSON: So the answer is yes?

MS. MILLS: Typically, well, I don't like the word shop, because that wasn't really the process.

The process was that in order to sell bonds, you needed to have more than one rating agency.

COMMISSIONER THOMPSON: Thank you.

VICE CHAIRMAN THOMAS: Did you ever choose the worst one? No.

We currently have what's called a new party or an emerging party; it's called the Tea Party.

In the history there was a political party called the Know-Nothing Party. And that was the response that people would give when questions were answered.

What I heard from both of you, one formerly employed, one currently employed, is I think one of the reasons I was interested in looking at Citibank was in terms of its structure.

And basically the answer that we have gotten back from you whenever we wanted to inquire about what I think most of us would think would be an aspect of the work you were in or a partnership in some way, the answer was, I don't know because they were somewhere else.

I know it's an enormous operation, and I know that the history was more of a kind of a conglomerate than a synthesizing integrating structure. Was this done just because of the way the company was built or did you feel that there might have been a design to the separation in terms of the information?

And, Ms. Mills, if you want to, you can take a pass on that question. Mr. Bowen?

MR. BOWEN: Mr. Vice Chairman, I cannot render an opinion as to why the organization structure was why it was. I -- it was very heavily segmented.

VICE CHAIRMAN THOMAS: Yeah.

MR. BOWEN: And I was responsible for my piece, and other people were responsible for theirs.

VICE CHAIRMAN THOMAS: And let's revisit your e-mail, once again, very briefly. Was that the first e-mail you ever sent?

MR. BOWEN: To Mr. Rubin?

VICE CHAIRMAN THOMAS: Yes.

MR. BOWEN: Yes.

VICE CHAIRMAN THOMAS: Did you send them to others?

MR. BOWEN: At corporate management.

VICE CHAIRMAN THOMAS: I'm just asking you, were you an e-mailer in terms of communicating with folk higher up the chain about what you saw as problems?

MR. BOWEN: There are in excess of hundreds of pages of documents that I submitted.

VICE CHAIRMAN THOMAS: I'm looking at something that could be characterized as sending an e-mail to higher-ups in this segmented operation to try to explain something that concerned you.

MR. BOWEN: I know that the warnings went to the highest levels within my business unit, which was called the consumer lending group.

VICE CHAIRMAN THOMAS: I mean, your analysis of what was going on was akin to the fellow in the field who calls an air strike on his location because his position is being overrun, and that was about the only way that you could resolve the problem that you were in. So I was just wondering if you had found yourself in those predicaments more than once?

MR. BOWEN: You're talking about prior to Citi or are you -- I -- I don't understand the question.

VICE CHAIRMAN THOMAS: No. Let me ask you, it was segmented and you wanted to send an e-mail, and you have, I assume, a book with people who are in your company, and you have a choice of selecting who it is you want to send it to. My question would be, why did you pick Rubin and not Prince.

MR. BOWEN: There was speculation in the press leading up to that weekend that Mr. Prince would no longer be with the company. There was announced that there was going to be a special board meeting.

VICE CHAIRMAN THOMAS: There's no water cooler where folks in the company had this info? You had to go find out about it in the press rather than the scuttlebutt in the company?

MR. BOWEN: I don't understand your question, Mr. Vice Chairman, I'm sorry.

VICE CHAIRMAN THOMAS: Then we'll just leave it at that. But you decided, based upon what you read in the press, there may be a structural change in your company, and that prompted you to send the e-mail to Rubin. Was that because he wasn't speculated as being removed?

MR. BOWEN: I was -- I knew that there were issues that were being considered by executive management and the board of directors. And I felt like I needed to get these in front of them because, to my knowledge, they had no -- they had no knowledge of my issue.

VICE CHAIRMAN THOMAS: And if you were getting it to the board of directors, it made sense that it could have been Rubin, given his structure within the board of directions. Was that a motive to get it to Rubin?

MR. BOWEN: It was, again, speculated in the press going up to that weekend that Mr. Rubin was taking over for Mr. Prince.

VICE CHAIRMAN THOMAS: Thanks. I'm interested, because I don't know anything about it, how you operated in terms of rela- -- I would say relatively small amounts of money. Mr. Bitner, you talked about how you got your company up and going.

And would it be correct to say that there was no chance of growing that company, save for the warehouse concept where you could use these other folks' money to do what you would otherwise do, because you couldn't bootstrap yourself; is that accurate?

MR. BITNER: Well, I think, if I understand your question, we did grow the company. The reality is warehouse lenders are based on an amount of leverage, you know, typically a 10 or 15 to one leverage off of a net worth.

So you're correct. The amount of loans that I could fund was, I think, initially limited to maybe 10 or 15 million dollars on a monthly basis.

But, you know, the route my company chose and other companies that I knew also, we took most of our money, put it back into the company, grew our net worth to continue to make ourselves more competitive, to grow the size of our warehouse lines, to try to be able to fund more business.

VICE CHAIRMAN THOMAS: And, Ms. Lindsay, at least in terms of New Century, you were involved in that as well?

MS. LINDSAY: Yes.

VICE CHAIRMAN THOMAS: I guess I'm trying to figure out how you find out about this stuff. We discussed earlier state regulation and, perhaps, problems that weren't there?

You have professional organizations, don't you? Where there are newsletters that were going out? Did you -- you talked a lot -- were you as silo'd as Citigroup in terms of talking --

MS. LINDSAY: With respect --

VICE CHAIRMAN THOMAS: -- to others who were in the business and you were looking at what you were doing and how were you doing it?

MS. LINDSAY: No, we all talked.

VICE CHAIRMAN THOMAS: Were you members of the Know-Nothing Party as well?

MS. LINDSAY: No, we all knew everything. No, we all talked. I mean, my niche was fraud, so we would talk about fraud. I spoke at several different seminars. I worked with the MBA. You know, my specific area was fraud detection and prevention.

How can we, with our changing guidelines, how do we prevent fraud. And, you know, we did talk about that. Nobody ever talked about -- well, some groups did talk about the increasing risk with the interest-only loans and when they readjust. And that was more of our compliance department and fair lending group who would talk about stuff like that.

VICE CHAIRMAN THOMAS: And was there a discussion, as you got into the whole business of warehouse lines and the rest, about the risk associated with that?

MS. LINDSAY: The risk with borrowing the money to make the loans? If we didn't sell the loans. Then that would probably pose the biggest risk to us.

VICE CHAIRMAN THOMAS: But there was plenty of opportunity?

MS. LINDSAY: There was plenty of opportunity for a long time, yes.

VICE CHAIRMAN THOMAS: Long time is what in your business?

MS. LINDSAY: Well, we were founded in -- we made our first loan in January of 1996, and then we declared bankruptcy in April of 2007.

VICE CHAIRMAN THOMAS: That was a long run?

MS. LINDSAY: For subprime, sadly, yes.

VICE CHAIRMAN THOMAS: You were in at the beginning and collapsed when everyone else did?

MS. LINDSAY: Yeah.

VICE CHAIRMAN THOMAS: Thank you, Mr. Chairman.

EXAMINATION BY CHAIRMAN ANGELIDES

CHAIRMAN ANGELIDES: Thank you, Mr. Thomas. Terrific. Let me -- I have questions, first, for Mr. Bowen and Ms. Mills, and then for Mr. Bitner and Ms. Lindsay. And Mr. Bowen, I'm going to start with you.

One of the things I want to try to get a good understanding of is that when I do look at the data on Citigroup, it appears that in the various lines of the business where Citi was buying, selling, securitizing or holding mortgages, it looks as though the write-downs may have been across all business lines in the order of about 20 billion dollars. And this would exclude what happened in the collateralized debt obligation business.

So I'm trying to get to the identification of risk, an identification of how those losses occurred, how they might have been avoided. In your opening statement today, you talked about how your review, I guess, of the underwriting standards and the business lines you were in, which was the buying of mortgages to hold in portfolio and the buying of mortgages for sale; correct?

MR. BOWEN: I was not involved on the selling side. I was involved --

CHAIRMAN ANGELIDES: Just on the purchase side?

MR. BOWEN: -- on the purchase side, yes, sir.

CHAIRMAN ANGELIDES: All right. You made

the comment that what was happening made a mockery of Citi's business practices. So I do want to just go to your e-mail, again, on November 3rd.

And I guess, apropos of the Vice Chair's comments, I believe Mr. Prince stepped down, what, on the 5th? So he stepped down a couple days later. But looking at your memo and having looked at the transcripts of the interview of our staff with you, it appeared that with respect to the purchasing from mortgage companies and the sale to third parties, you indicate that that's about a 50-billion-dollar-a-year business, and that you underwrite a small sample of those to see to what extent -- I want to get clear to what extent they met your policy criteria.

Now, as I understand it there were two issues here: You were concerned that the sample size was too small, that the policy called for a 5 percent sample, is that correct, and that you believe there was under sampling?

MR. BOWEN: Yes, that is correct.

CHAIRMAN ANGELIDES: Okay. And then, secondly, I understand -- I want to understand if 46 percent of the files are either outside of the policy criteria or have documentation missing from the files and then it rose to 80 percent, tell me really specifically what that means?

They -- these were standards that Citi was setting for what it would buy, or was it verification that the loans were what the sellers represented they were? In other words, is it a standard you set or are you sampling these things to see if they actually meet the standards that the sellers say they meet?

MR. BOWEN: The sellers represented that they sold to Citi according to our standards. And it was our standards I measured those loans against.

So, again, I'm trying to understand your question, Mr. Chairman.

CHAIRMAN ANGELIDES: Well, I guess what I'm understanding is you had standards then. They had to meet X standard. And you're saying they were deficient in meeting X standard. But the purchasers were happy, notwithstanding that; correct?

MR. BOWEN: The purchasing of the mortgages was against our standards.

CHAIRMAN ANGELIDES: Yeah.

MR. BOWEN: But the recommend -- we did not underwrite all of the -- in fact, we did not underwrite any of the mortgages there prior to their being purchased.

CHAIRMAN ANGELIDES: Correct. So what are you judging? What I'm saying is, when you say these were deficient, just tell me how they were deficient.

MR. BOWEN: They were deficient in one of two ways: One, they were not underwritten against the express guidelines by Citi, or they were underwritten and then they purported to be against the underwriting guidelines by Citi.

But they did not have documents that were required by Citi policy to support the assumptions that were put into or made in the underwriting decision by the originating lender.

CHAIRMAN ANGELIDES: Okay. And what were the risks that flowed from that, that you would be getting loans obviously that were suboptimal, that weren't underwritten properly, that had risks and risk layering that would be inappropriate, you believe, for mortgages you would hold and potentially resell; correct?

MR. BOWEN: The risks, from my standpoint, as I outlined in my memo to Mr. Rubin, was that we, in turn, being Citi, represented to the investors that these mortgages were made according to our guidelines.

CHAIRMAN ANGELIDES: And they were not?

MR. BOWEN: And they were not.

CHAIRMAN ANGELIDES: All right. And is

that also -- does that also apply to the corresponding fundings to Wall Street bulk purchases, same essential problem?

MR. BOWEN: We did do underwriting in the Wall Street subprime channel.

CHAIRMAN ANGELIDES: But you were overwritten; is that a fair statement?

MR. BOWEN: In many instances, that is correct, sir.

CHAIRMAN ANGELIDES: You said, I'm underwriting this, I don't believe it's something we ought to hold, you believe the risks are too great, and you're being overridden?

MR. BOWEN: There were many instances where my underwriters' decisions were reversed.

CHAIRMAN ANGELIDES: And was this -- did this accelerate? I mean, how long have you been in risk management business? I mean, having run a business; there's always someone I can think of, you know, Mr. Thompson the same, you know, you're running a business, there's always people who recommend for and against certain transactions, but did you see a market change?

MR. BOWEN: I'm sorry, Mr. Chairman, I'm having a hard time following what --

CHAIRMAN ANGELIDES: I guess what I'm saying is did you see more overrides?

MR. BOWEN: Absolutely.

CHAIRMAN ANGELIDES: In other words -- okay, that's fine. So you saw accelerating overrides? All right.

Let me talk to you about another matter. The Argent purchase to which Mr. Georgiou referenced, and Ms. Mills, the one you said could have turned out better, this was the acquisition of Ameriquest, which was one of the biggest, most aggressive subprime lenders located in the State of California.

And as I understand it, from looking at documents that our staff's put together, there was -- and interviews -- there was a desire to captive -- to buy -- to acquire a captive subprime originator to give you a flow of loans.

You reviewed that transaction, didn't you, Mr. Bowen? Were you involved with Mr. Davis, your supervisor?

MR. BOWEN: I was involved, as Mr. Davis was, in the due diligence of that acquisition.

CHAIRMAN ANGELIDES: And you recommended against it?

MR. BOWEN: Yes.

CHAIRMAN ANGELIDES: And on the basis of?

MR. BOWEN: We sampled the loans that were originated by Argent, and we found large numbers that did not -- that were not underwritten according to the representations that were there.

CHAIRMAN ANGELIDES: Okay. Large numbers, what kind of percentage? That's a question from the Vice Chair and me.

MR. BOWEN: I do not recall, Mr. Chairman.

CHAIRMAN ANGELIDES: Could you check, perhaps, for us?

MR. BOWEN: I have no access to that document.

CHAIRMAN ANGELIDES: Okay. You don't have access to that document?

VICE CHAIRMAN THOMAS: It was enough to cause you some concerns, because obviously you state that as the reason for your decision.

MR. BOWEN: Yes.

VICE CHAIRMAN THOMAS: Among other items.

MR. BOWEN: Yes.

VICE CHAIRMAN THOMAS: So it was a lot.

MR. BOWEN: Yes, sir.

VICE CHAIRMAN THOMAS: Whatever that means.

CHAIRMAN ANGELIDES: Terrific, let me move on, now, to Ms. Mills.

You mentioned that there were certain underwriters that you just wouldn't feel comfortable doing business with, but as a predicate, were you involved in the warehouse lending business?

MS. MILLS: Yes.

CHAIRMAN ANGELIDES: All right. So just by way of reference for the public and the Commission, my understanding is that Citi extended about 11 billion dollars of warehouse lines, credit facilities to subprime originators.

So in a sense, and I'm sure there were many other institutions who provided these, so that you were providing fairly significant credit support to subprime originators. And I guess, by my count, there are about 26 of them across the country.

Let me start by actually picking up and saying, when you said, there was some people we wouldn't feel comfortable with, give me an example or two of entities you didn't feel comfortable with supporting, either purchasing their loans or providing a warehouse line.

MS. MILLS: Sometimes when we would go to visit a company that perhaps was not a startup but hadn't been in business for that long, we would go out and conduct an on-site review and meet with senior management.

And having done this for many, many years and having people on my team that had done it for many, many years to a certain extent there is an instinctual reaction as to whether or not the company knows what they're doing, and whether that's the management team that they've put together, the state of their office, the state of their files, whether or not they're making money, what the business plan is. So there are concrete examples that you can look at, such as profitability.

But there is also the sense that, you know, maybe they're just not ready to do business with us, and maybe they need to have a little bit more time under their belt before we would be comfortable that they had worked out the kinks; for instance, if it was a new platform.

CHAIRMAN ANGELIDES: Would you normally, in the course of extending your warehouse line, also get a commitment of having them funnel product to you? Were they linked agreements?

MS. MILLS: No.

CHAIRMAN ANGELIDES: But, of course, there was a relationship.

MS. MILLS: Part of the reason that we lent was to establish relationships with these originators. But there was no direct linkage.

CHAIRMAN ANGELIDES: There were 26 different companies to which you extended warehouse lines, I believe, Jim and you, which I believe is -- excuse me, sir?

VICE CHAIRMAN THOMAS: Would you yield for just briefly?

CHAIRMAN ANGELIDES: Yeah, and then I want to --

VICE CHAIRMAN THOMAS: My concern is how many you instinctually rejected.

MS. MILLS: I mean, I can't remember. Like I said, I've been doing this for a long time. I know that there were companies we went to see that we did not lend money to. I know that there are companies that we had warehouse lines with that we did not renew, because we were uncomfortable with the operation.

VICE CHAIRMAN THOMAS: Did you have a batting average? Was it lots?

MS. MILLS: Our minimum capital requirements were fairly high. So in the subprime space, it's not like there were hundreds of companies to choose from. You know, I really would not want -- I wouldn't want to speculate.

VICE CHAIRMAN THOMAS: You round up with 26 so it was like a 1200 batting average?

MS. MILLS: Well, I think the list that you have right now of 26 is every warehouse line that we've ever done.

And some of the warehouse lines that are on that sheet are -- have nothing to do with subprime. They are current lines where we are financing Fannie, Freddie, and FHA loans.

VICE CHAIRMAN THOMAS: Thank you, Mr. Chairman.

CHAIRMAN ANGELIDES: Yeah, there's some agency and there's non-agency on this list; correct?

MS. MILLS: Right.

CHAIRMAN ANGELIDES: And then it's one of the documents which I'm sure the staff can classify. All right, let me proceed on this.

One thing that Mr. Prince -- and we'll have a chance to talk to him tomorrow morning. One of the things he said -- he actually said two things. I want to see if you share his views on these matters.

He said, I believe, in hindsight, the lack of adequate regulation of the origination or mortgages created a situation where the demand side, the pull side of that equation, found a place where more raw material could be created and could be created safely.

So there was more and more and more of these subprime mortgages created as raw material -- raw material for the securitization process. Not surprisingly, in hindsight, more and more of it was lower and lower in quality.

And at the end of that process the raw material going into it was actually bad quality, it was toxic quality, and that is what ended up coming out of the other end of the pipeline. Wall Street obviously participated in that flow of activity.

The second thing he said is, I found out at the end of my tenure -- this is about the warehouse lines -- so he said he found out that they had been extended is how I interpret this. I did not know it before, so it's 11 billion dollars of warehouse loans. I think that getting that close to the origination function, being that involved in the origination of some of these products, is something that I wasn't comfortable with.

On reflection, do you share his view about the toxicity of products flowing into the system and do you share his view that it was a business mistake to be that close to originators, to mix the business lines between what you did, as a kind of a third-party buyer, and the sellers of those loans, the originators and sellers?

MS. MILLS: I'm not sure what Mr. Prince was referring to when he talked about the types of loans that he referenced.

I don't think it was a mistake for us to lend money to originators. I think it was a way to facilitate the business that we were in, and that is to create mortgage-backed securities to be sold to sophisticated institutional investors.

We specifically were not that close to the origination side of the business, because we bought loans that closed in other entities' names; we never sent money directly to an originator; we set up our warehouse lines so that there were mechanisms where we could never be deemed to be the originator.

So we really were in a different -- different position than an originator of loans, themselves. And we had complete control over what we bought and what we were willing to finance.

Our warehouse lines had restrictions as to the types of loans that we would finance. We would not finance every type of loan that originated, would originate.

We had limits as far as types of loans, geographics, LTVs, seasoning of the loans, how long the loan could stay on the line. It wasn't -- it wasn't a blank check to an originator that we would just finance anything that they originated.

CHAIRMAN ANGELIDES: All right. Let me --

VICE CHAIRMAN THOMAS: John would like one more?

CHAIRMAN ANGELIDES: Okay. John, do you want to ask one more.

COMMISSIONER THOMPSON: I'll let you finish.

CHAIRMAN ANGELIDES: Yeah, okay, it will be hopefully surgical here, but this is an important point. And after Mr. Thompson asks his question, I may return to ask all of you this question.

I want to go to the responsibility of a market maker. You know, everyone here at some level has their business model. They're originating; they're securitizing. And you've said today, and others have said, you're not alone in this; look, we're market makers; whatever people wanted to sell us, whatever people want to buy, we'll be market makers.

What's the responsibility of a market maker to ensure that the product that they are moving into the marketplace is a good and sound product? In other words, to undertake the reasonable level of due diligence that you would feel absolutely comfortable warranting that this is the kind of product you want to move, akin to a manufacturer who makes a technology product or a, you know, a toy manufacturer understanding whether or not that toy manufacturer, perhaps in another country, had lead in it, what's the responsibility of market makers in the financial system essentially to warrant the products they're moving?

MS. MILLS: To -- what was the last part of what you said?

CHAIRMAN ANGELIDES: To warrant, to stand behind the quality of the products they're moving through the system and just -- you know, it's a large question, to the extent that everyone's saying, I'm just passing this along, where is the responsibility along the chain for ensuring the quality of the products that are moved into the system? Because I understand that, can I ask you a question, just so I'm clear? You did not have your own underwriting standards?

MS. MILLS: Correct.

CHAIRMAN ANGELIDES: You relied on the underwriting of others; correct?

MS. MILLS: Correct. We believed that we conducted the appropriate diligence so that when we created offering documents, prospectuses, which is the document that you deliver to investors, that we had high confidence that what we were telling investors about the loans was accurate.

There were pages and pages of stratifications with information about the loans. There were pages of risk factors where we told investors every possible scenario that could describe something that would go wrong with these securities. There were pages that described the origination guidelines of whoever the originator was for that particular pool. There were ratings from rating agencies on these bonds.

And our job, as an underwriter, is to, you know, comply with securities laws and, you know, this business is regulated by the SEC. We used extensive amounts of outside counsel to make sure that Citi, as a firm and as an underwriter, was -- was protected, and that we were also telling investors what they needed to know. And it's the investor's decision to buy the bond.

CHAIRMAN ANGELIDES: All right. Well, you did have different standards for the loans you were buying to hold; correct? Ostensibly different standards. In other words, in the business of securitization, you just accepted whatever was given to you subject to your verification that it met those other folks' standards; correct?

MS. MILLS: I believe so, yes.

CHAIRMAN ANGELIDES: Okay. And then on the other side of the business where Citi was originating to hold, they had a higher standard, is my understanding.

MS. MILLS: I'm not that familiar with what their standards were.

CHAIRMAN ANGELIDES: Are you familiar with the differential standards, Mr. Bowen?

MR. BOWEN: I was not involved in the origination channels, Mr. Chairman.

CHAIRMAN ANGELIDES: Do you agree with Ms. Mills' characterization of the responsibility of the market makers?

MR. BOWEN: I -- I can't express an opinion on that, sir.

VICE CHAIRMAN THOMAS: Last question?

CHAIRMAN ANGELIDES: All right, last question here. Yes, Mr. Thomas, do you have a --

EXAMINATION BY VICE CHAIRMAN THOMAS

VICE CHAIRMAN THOMAS: The phrase market maker, I guess, in your analogy, which I would like to follow through on, that you have people who make products. And you were talking about what motive they had to make sure that the product wasn't toxic, or if you sell a baby blanket, you're supposed to make sure that it doesn't burn easily.

The problem is you have a whole tort system to back you up on that, and you do it, and there are actionable -- plus you got other folks looking at it. Ms. Lindsay, you started off your testimony indicating that it was really the responsibility of the people who were buying the product to understand.

I mean, the good old-fashioned caveat emptor, you know, we're putting it out there, but it doesn't have anything to do with us. If it goes the direction that apparently almost everything was going, Ms. Mills, I was hearing a little bit of that out of you as well.

Commissioner Georgiou said maybe if you had some skin in the game. Do you think if you were actually on the line -- well, obviously you wound up with a lot of losses -- in terms of each and every product you put out there, it would have been sobering in terms of decision making, or there was just so much to make that, you know, 20,000 out of 2 million isn't that big of a number so keep shoving product, which was one of the things we heard?

MS. LINDSAY: Yeah, I think that if you have skin in the game, obviously you're going to protect it more.

I think it got so overwhelming, at the end, to try to get product to the -- to sale that the product did go downhill. But, yeah, the having the skin in the game is very important.

VICE CHAIRMAN THOMAS: Yeah, and everyone uses skin in the game as a euphemism.

MS. LINDSAY: Right.

VICE CHAIRMAN THOMAS: I'm beginning to think more and more if it wasn't a euphemism, it would be even better.

EXAMINATION BY CHAIRMAN ANGELIDES

CHAIRMAN ANGELIDES: Just to very quickly, then wrap up.

Mr. Bowen, I did have one question for you. You, when you referred to the Wall Street bulk purchases, was that Ms. Mills' shop?

MR. BOWEN: No.

CHAIRMAN ANGELIDES: It was not? Okay.

So when you're talking about the exceptions and the overrides, that doesn't refer to Ms. Mills' shop?

MR. BOWEN: No, sir.

CHAIRMAN ANGELIDES: Okay, thank you. My final question, Ms. Mills, is for you, and that is, from what we've learned, you began to slow down. You're privileged, you're lucky that you're getting the questions.

No, you, it looked like, from what we see, is you began to slow down because of the risks you saw in the market.

I actually have two questions: One is I'm looking at a March 28th, 2007, non-agency strategy memo. I don't know if this was yours and I don't -- it was not yours? Okay.

Because -- would you know whose it was, just because it speaks about even as late as March 28, 2007, it talks about gaining additional access to mortgage origination, both flow and bulk, to enable Citi to grow its whole loan purchase business. Do you know from whence this would have emanated and where it ended up?

MS. MILLS: I believe that that presentation was put together by the business management unit of global securitized markets.

CHAIRMAN ANGELIDES: Which would have been above you or --

MS. MILLS: Business management is sort of --

CHAIRMAN ANGELIDES: All right.

MS. MILLS: They manage the business.

CHAIRMAN ANGELIDES: But it was not your document?

MS. MILLS: No.

CHAIRMAN ANGELIDES: Okay. So I'll put that aside, and we'll find out whose document it is, and we'll ask them about that document.

But I do understand that you slowed down your purchases, but at the same time, and they'll be here later today, the collateralized debt obligation desk in the investment bank was ramping up. It was raising its limits from about 30 billion dollars to 35 billion dollars, and this was a unit that ultimately had, I think, about 30 billion dollars in write-downs.

Was there any communication between you, directly, as someone who's buying, seeing things in the markets and securitizing, and the folks on the other desk, who are ramping up, buying their residence, you know, their mortgage-backed collateralized debt obligations, in the sense they need to ramp up their profile, their risk profile, at the same time you're pulling down?

MS. MILLS: No.

CHAIRMAN ANGELIDES: All right, thank you. Mr. Thompson?

EXAMINATION BY COMMISSIONER THOMPSON

COMMISSIONER THOMPSON: So, Ms. Mills, pardon me for my preoccupation with league tables.

So if they didn't matter, why buy Argent? And were you involved in that transaction at all?

MS. MILLS: I was involved in the diligence that went on for the Argent platform because they were a client of ours that I had done business with over the years. At that time in the market, a lot of other Wall Street firms were buying originators, and their -- we didn't -- we didn't think that the end was there. We didn't think that it was over. We didn't think that it was the end of subprime.

COMMISSIONER THOMPSON: So league tables did matter?

MS. MILLS: This -- this is not about league tables. This is about having access --

COMMISSIONER THOMPSON: Market share did matter?

MS. MILLS: This is -- I didn't say that. This is about having access to originations so that we could supply bonds to our fixed-income investors.

And so with all of the other originators, independent originators in the market being bought by other Wall Street firms, for our business and our business of creating mortgage-backed securities, we were concerned about having access to supply of mortgages, and so Argent was a platform that was available, and it was someone that we knew, and it was a very long, you know, months and months of diligence process.

And in that time, call it the summer of 2007, the subprime market and securitization essentially dried up, was our view. I think we thought of it as akin to a fall of `98 sort of situation, where the capital markets sort of froze for a couple of months, but then they became unfrozen.

And Argent had essentially stopped originating loans, because our purchase was pending, and our thought was, until subprime came back, we would use the platform, which was just an origination platform that didn't have any loans in it, and we would originate agency-eligible loans and FHA-type loans until subprime came back.

And because it was our platform, we could control the types of loans that were originated. And we all know how that worked out.

COMMISSIONER THOMPSON: Okay, thank you.

MS. MILLS: Sure.

VICE CHAIRMAN THOMAS: On that -- on that question, at some point somebody decided it would be better to have them in-house than the business model you were following.

MS. MILLS: To buy the platform?

VICE CHAIRMAN THOMAS: Yeah.

MS. MILLS: In the context that there weren't that many independent originators left.

VICE CHAIRMAN THOMAS: And it was easier not to do that because you didn't have that, another silo, to attach to Citibank? Do you know where that decision came from? Where were the groups that discussed moving in that direction?

MS. MILLS: Moving in the direction of?

VICE CHAIRMAN THOMAS: Of purchasing Argent?

MS. MILLS: I know that I discussed it with -- with my management. And I know that there were -- I was involved in some discussions with the two gentlemen or the one -- one of the two gentlemen who ran fixed income. After that, I was not involved in any direct discussions.

VICE CHAIRMAN THOMAS: Would you say that you were, rightfully so, kind of one of the originators of the idea?

MS. MILLS: No.

VICE CHAIRMAN THOMAS: No? Do you know where it was originated?

MS. MILLS: No.

VICE CHAIRMAN THOMAS: Okay. Consistent. Thanks.

CHAIRMAN ANGELIDES: All right. Members, we are close to on time, considering our lights-out problem earlier in the day.

I want to thank all of you for the time you've given us and for your answers to our questions; appreciate it very, very much.

We are going to take a ten-minute break, ladies and gentlemen, and we'll be back here in ten minutes. Thank you very, very much.

(Session ended at 2:56 p.m.)

CHAIRMAN ANGELIDES: The meeting of the Financial Crisis Inquiry Commission will come back into order.

We are now in our final session of the day. We will be hearing from our panelists in our third session, which is called Citigroup CDOs, collateralized debt obligations, and Risk Management.

Let me ask each of you or all of you if you would please stand to be sworn in and, again, let me say, as I say to everyone, this is a customary swearing in, that we have done for all witnesses and will in the future.

Do you solemnly swear or affirm, under the 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?

MR. BARNES: Yes, I do.

MR. BUSHNELL: I do.

MR. DOMINGUEZ: I do.

MR. MAHERAS: Yes, I do.

CHAIRMAN ANGELIDES: Thank you very much.

VICE CHAIRMAN THOMAS: Mr. Chairman, prior to your moving forward, can I ask all of you, would you be more than willing to respond in writing to questions sent to you, in writing, as we move forward in this investigation?

Each one of you need to say yes to the microphone.

MR. BUSHNELL: Yes.

MR. MAHERAS: Yes.

MR. DOMINGUEZ: Yes.

MR. BARNES: Yes.

VICE CHAIRMAN THOMAS: Thank you very much. Thank you, Mr. Chairman.

CHAIRMAN ANGELIDES: Thank you. So, gentlemen, thank you very much. You've all submitted written testimony, and we're going to ask each of you to provide up to five minutes, you can be briefer if you choose, but no more than five minutes of oral testimony to commence this session.

We're going to start with you, Mr. Dominguez and move across the table, from my vantage point left to right. And I would appreciate when you first introduce yourselves, while we know who you are, for the folks watching, if you could just also briefly describe your position in the institution, it would be very helpful.

So, Mr. Dominguez, if you would start off? And, by the way, at one minute, you'll see the little timer in front of you, the light. The light will go from green to yellow and then to red when the five minutes is up, all right? Thank you very much, Mr. Dominguez.

MR. DOMINGUEZ: Chairman Angelides, Vice Chairman Thomas, and members of the Commission, thank you very much for inviting me to appear before you.

My name is Nestor Dominguez. I hope that my experience with Citigroup can shed light, with the benefit of hindsight, on the important issues before the Commission.

I understand that the Commission is interested in Citi's business activities with respect to collateralized debt obligations or CDOs.

I was involved in Citi's CDO activities from 1999 until I left Citi on November 1st of 2007. From 2006 to 2007, I served as co-head of Citi's global CDO business that focused on cash CDOs.

I was responsible for overseeing the structuring, distribution, and trading units of that business. I believe then and still believe now that Citi's CDO business was performing an important function in the capital markets in creating securitized products to meet investor demand for exposures to specific asset classes and to specific cash flow profiles.

Citi completed many successful and

productive transactions in numerous asset classes during a time of dramatic global expansion of the CDO industry as a whole.

Citi expanded its involvement in the structuring of ABS CDOs from 2001 to 2007. Over a number of years, up to the fall of 2007, Citi rose to become one of the leading global originators and traders of all types of CDOs, including those backed by RMBS securities, corporate credits, and several other categories of collateral.

The cash CDO business that I co-headed generated approximately 400 million in total annual revenues in 2005 and in 2006. This revenue came from one-time structuring fees of between one half a percent to 2 percent of the assets in each CDO deal we structured and from secondary trading and warehousing activities.

Our CDO business model called for distributing all the securities that resulted from our CDO structuring activities except the most senior tranches of specific transactions that were structured to be held on Citi's balance sheet.

These retained positions were referred to in the market as super senior because they -- because they were structurally senior in the cash flow waterfall to tranches that themselves had virtually zero expected loss based on analytical modeling.

This tranche, this other tranche was subordinate to the super senior tranche, was rated Triple-A by the rating agencies.

The view that super senior tranches carried virtually no risk was widely held at Citi, based on, among other things, the level of structural subordination beneath these retained securities and our modeling and stress analysis.

We, at Citi, believed that the retained super senior tranches were an efficient use of capital and Citi's balance sheet with an extremely remote risk of impairment of interest or principal repayment.

Citi retained certain super senior tranches in two forms. First, in a product referred to as liquidity puts. For certain cash CDO transactions, between 2003 and 2006, the senior-most level of the capital structure was funded by the issuance of short-term asset-backed commercial paper, which at that time was a large and deep market with a long history of stability during previous times of stress.

To facilitate the issuance of this commercial paper, Citi issued a renewable 364-day liquidity facility to the CDO as a backstop source of funding in case of either a significant widening in credit spread or a temporary inability to issue commercial paper.

Second, Citi also retained portions from both cash and synthetic form of super senior notes of certain CDOs issued in 2006 and 2007 by both the CDO desk based in New York and as a result of synthetic CDO structuring activities in London.

In both super senior programs, the risk of loss on the retained super senior exposure and the liquidity puts was examined extensively, and based on those stress tests and models, the likelihood of losses was considered extremely remote.

Ultimately, Citi recognized significant mark-to-market losses on its CDO exposures. These losses occurred as a result of cataclysmic and unprecedented market events: Housing price declined and mortgage defaults not seen since the Great Depression, and anticipated by virtually no one, including those of us who dedicated ourselves to building a business we believed was good for our clients and for the shareholders of our company.

I hope I can be of some help to the Commission in putting into perspective the nature of Citi's CDO business. I look forward to answering your questions.

CHAIRMAN ANGELIDES: Impeccable timing. Thank you. Mr. Barnes?

MR. BARNES: Chairman Angelides, Vice Chairman Thomas, and members of the Commission, thank you for the opportunity to appear today.

My name is Murray Barnes and I served as a managing director in the independent market risk management group of Citi's investment bank with the responsibility for overseeing Citi's global credit markets trading businesses from 2005 until early this year.

The Commission has asked me to address risk management issues related to CDOs backed primarily by subprime RMBS, including the setting of risk limits for these products and valuation and pricing issues.

Generally speaking, the role of independent market risk is to work with the business to limit and manage market risks that trading businesses are exposed to in a manner that is consistent with the company's risk appetite.

In my role, I reported directly to the head of market risk management for the investment bank who, in turn, reported directly and exclusively to Citi's chief risk officer.

This reporting line was fully independent of the business. This meant that, among other things, compensation for independent risk managers was not determined by the business, nor was it tied to the performance of the businesses that we covered.

One of the primary risk management tools that we employed with respect to CDO activities and all other trading functions involved the setting of risk limits.

Market risks set risk limits on overall trading activity. In the case of the CDO business, there were several applicable limits, including limits that applied to assets the desk warehoused for future securitizations and limits that applied to any positions the desk retained from past securitizations, including the super seniors.

Market risk independently monitored compliance of risk limits and reviewed risk limits in light of market developments.

During my tenure, market risk assessed potential exposures in a variety of ways, including through the use of stress tests, which employed assumptions using historical data to stress for potential loss.

Stress tests were performed at the division level, desk level, and for individual market factors in an effort to dimension risk in as many ways as possible. As part of this process, we routinely engaged in a dialogue with the business concerning the proper stress levels to employ, although the levels ultimately applied were the responsibility of market risk management.

In accordance -- in accordance with Citigroup's pricing policies, responsibility for marketing trading positions resided with each business, including the CDO desk.

Prior to the market events in late 2007, Citigroup relied on using comparable analysis to value its CDO super senior exposures. It did this by comparing the spreads on similarly Triple-A-rated first-pay tranches that it recently priced. This resulted in such exposures generally being carried at par through June 30th, 2007.

These marks reflected the widely held belief, both within the company and throughout the market, that the super senior positions bore almost no risk of loss.

As the unprecedented market events unfolded in 2007 and new issuances of CDOs froze, the business developed a model to price its super senior positions based in part on an intrinsic cash flow methodology of the CDOs underlying RMBS collateral.

I understand, with the benefit of hindsight, why one might conclude that Citi's independent market risk management function failed to set appropriate limits on the CDO business.

The issues, however, are significantly more complex. Indeed, given the widely held view that super senior positions posed only an extremely remote risk of loss prior to the events of 2007, it is still difficult to imagine how the severity of the decline in house prices and its effect on the CDO market could have been predicted, let alone modeled.

Throughout the challenging market conditions of late 2007 and beyond I believe that Citi's independent risk management function was fully engaged for the business and had access to and utilized the risk management tools that were then available.

Our downside risk assessments included what we then understood to be extreme loss scenarios, and market risk set limits for the business on the basis of that analysis.

With the benefit of hindsight, we realize that certain stressful assumptions were not adequate.

Ultimately, I believe that the rapid growth of complex structured credit products presented unique challenges that in some respects outpaced the market's ability to develop the necessary tools to fully evaluate the risks of those products.

The impact of this increasing complexity was exacerbated by the commonly held belief that house prices could not fall by anything like the 30 percent-plus decline that we have seen.

I appreciate the difficulty of the task facing this Commission and look forward to answering your questions.

CHAIRMAN ANGELIDES: Another piece of impeccable timing. Thank you very much. Mr. Maheras?

MR. MAHERAS: Tough act to follow. Chairman Angelides, Vice Chairman Thomas, and members of the Commission, I also thank you for the opportunity to appear here today.

My name is Tom Maheras and I served as Citi's co-head of the investment bank from January 2007 until I left the bank in the early part of October 2007.

Let me begin by placing Citi's CDO business in context. When I was co-head of the investment bank, we provided a very broad range of products and services in more than 80 countries around the globe, and we employed more than 40,000 people.

The CDO business was at all times a very small part of the investment bank's overall business. To give you some perspective, in the fiscal year 2006, the investment bank had a balance sheet of about or a little over 1.3 trillion dollars and revenue -- and revenues in excess of over 27 billion dollars.

The entire CDO business in that year, its best year ever, comprised 1 and change to under 2 percent of those revenues.

I believe that the business was appropriately supervised by experienced and highly competent managers and by an independent risk group and that I was properly apprised of the general nature of our work in this area and its attendant risks.

I also strongly believe that our board of directors and our most senior management were provided with the appropriate information and guidance about Citi's investment banking business activities.

When issues arose in early 2007 regarding the more junior CDO tranches we held and when issues regarding our safest super senior CDO holdings arose later that year, senior management and the board took reasonable steps to evaluate and address the unprecedent- -- unprecedented events that rapidly unfolded.

How then did our investment bank end up incurring such large losses on its CDO positions? What went wrong?

The losses that Citi incurred that related to the CDO business principally arose from the extremely high-rated CDO tranches, the so-called super seniors that everyone at the bank and most in the industry believed were among the safest instruments in the capital markets.

These super seniors were rated above Triple-A. They were senior to those securities in the same structures that were rated Triple-A, which meant that their chances of default were deemed to be extremely low.

It is difficult now to put ourselves back to the time before the financial crisis. But it is important to understand the following critical point: Citi's losses from its CDO business did not result from its fixed-income group placing high risk bets in its proprietary trading business on esoteric cutting-edge trades in a reach for outsized profits. To the contrary, our primary CDO losses stemmed from client-driven activities resulting in the holding by

Citi of very low-interest yielding, very low-interest yielding, and what were understood to have been super safe securities that later unexpectedly depreciated in value.

My focus on the CDO business increased when we began to see deterioration in the subprime market and related financial fallout in early 2007. This is when the lower-rated, the lower-rated CDO securities started to decline in value, when we took significant steps to reduce our exposure to these riskier CDO positions.

But even in the summer and fall of 2007, I continued to believe, based on what I understood and had gathered from the experts in the business, that the bank's super senior CDO holdings were safe. It was only later in the fall of `07 that the banks started to see mark-to-market losses on these positions.

And it was only after I left the bank and, thereafter, when the rating agencies downgraded these securities in a sweeping and unprecedented series of moves that these positions were significantly marked down.

What could have been done to prevent these losses? I have asked myself this question so many times. Given the extraordinary losses that were eventually imposed on the company shareholders, I understand that it would be somehow more reassuring to concluded that we made an ill-conceived trading bet or that we invested in a business that was overly risky or even that we lacked proper controls, but I do not believe any of these to be the case, any of those to be the case.

Knowing what we knew at the time and looking back on this part of our business, I cannot fault the fact that the business and most everyone in the industry, including our own regulators, regarded these super senior CDO securities to be extremely safe.

What I can tell you with the benefit of hindsight is that we, like many other experienced members of the industry, failed to recognize that there was a real possibility of the kind of catastrophic residential real estate crash that our country has experienced over the past several years.

We were certainly not alone in failing to predict that real estate prices would plunge 30 to 40 percent, with homeowners walking away from their homes en masse for the first time ever.

I regret that I and my colleagues did not see that coming, but we did not.

Going forward, we must recognize the ever-present vulnerability of our financial system to serious and unanticipated widespread shocks and continue to evolve risk measurement and risk management practices accordingly.

I thank you and would be pleased to answer the questions you might have.

CHAIRMAN ANGELIDES: Thank you very much. Mr. Bushnell?

MR. BUSHNELL: Chairman Angelides, Vice Chair --

CHAIRMAN ANGELIDES: Microphone, please.

MR. BUSHNELL: Sorry. Chairman Angelides, Vice Chairman Thomas, and members of the Commission, I am pleased to participate in today's hearing and to assist in your important and challenging inquiry.

My name is David Bushnell and I was the chief risk officer of Citigroup from 2003 to 2007 and the chief administrative officer of Citigroup in the latter part of 2007.

I've submitted a longer statement for the record, and I would like to begin my testimony today by addressing what is, in my view, the single-most contributing factor to Citi's significant write-downs and losses.

As you know, beginning in 2007, an unprecedented collapse in the United States' residential real estate market was the primary instigator of a global crisis in the world's financial system. As with many other market participants, Citi was severely impacted by this sudden downturn.

In particular, Citi suffered massive unanticipated losses in connection with its approximately 43-billion-dollar position in a specific asset class exposed to the subprime residential real estate.

These were the so-called super senior tranches of collateralized debt obligations. In the fourth quarter of 2007 alone, Citi took a 14.3-billion-dollar write-down on this single asset class.

These super senior CDO tranches have come under tremendous scrutiny, and rightfully so. To understand their contribution to Citi losses however, it is important to understand how these investments were perceived at the time.

First, in 2007 this 43-billion-dollar position represented less than 2 percent of Citi's 2.3-trillion-dollar balance sheet.

Second, prior to late 2007, these securities were rated above Triple-A, an extremely high credit rating.

Citi and the rest of the market shared the view that super seniors were safe and presented an extremely low risk of default or depreciation in value.

Thirdly, the views of the credit rating agencies were reinforced, in part, by risk models employed by Citi. These risk models, like those of most other financial institutions, tested for what were believed to be extreme-loss scenarios for residential real estate.

We now know that even the most pessimistic assumptions in these models did not foresee the severity of the downturn.

As the chief risk officer during this relevant period, I've given a great deal of thought to the lessons to be learned from these events.

First, the write-downs associated with CD -- with our CDO positions far exceeded anything predicted in our stress tests and were materially greater than was anticipated using a statistical approach.

Second, the complexity and sophistication of these structured products obscured the importance of understanding the risk characteristics of the ultimate underlying collateral, that is, residential mortgages.

Third, at the most sophisticated level, none of us fully appreciated the consequences of such a collapse would have for even the senior most tranches of these structured products.

In short, we did not anticipate these extraordinary developments or comprehend their interactions. We made a rational but, in retrospect, mistaken business judgment to retain the super senior tranches of CDOs.

As chief risk officer, I was responsible for communicating risk and compliance issues to the executive management, to the board of directors, and to external regulators. I communicated almost daily on an ad hoc basis with the CEO, Chuck Prince, and had a regular, weekly one-on-one meeting with him.

I was also a member of Citi's business group heads. This group met weekly and included all of Citi's senior-most executives from the firm's business and administrative and control functions. I provided regular risk reports to the full board of directors and participated in its audit and risk management committee and subcommittee meetings.

Citi's independent risk organization was organized across business lines with a geographic overlay. All of these reported up through me through a chain of increasingly senior risk managers in order to assure their independence. In all, I oversaw a risk organization of approximately 2,700 highly-qualified risk professionals.

Citi's risk discipline framework included risk policies, limits, the value at risk and stress testing for what we then considered extreme-loss scenarios.

All of these procedures were well known to our regulators and were conducted in accordance with the then-global capital regulatory standards.

All extensions of credit required the approval of risk management. If there was a disagreement between our risk group and the business as to an appropriate limit, independent risk had the final say.

I would like to conclude by noting that Citi's risk managers were dedicated well-trained professionals with the independence, authority, tools, and technology to deliver best in class risk oversight. That does not change the fact that in this case, our method of analysis was not good enough.

I hope that my participation in this hearing will help contribute in some small way to the important work of the Commission to better protect the financial system in the future. And I will be happy to answer questions that you have.

CHAIRMAN ANGELIDES: Thank you very much, Mr. Bushnell. We will now go to -- I will do what I did in the last session, members, which is reserve my questionings till the end. We'll start with the Vice Chairman.

VICE CHAIRMAN THOMAS: Thank you, Mr. Chairman. I'll ask some questions and in the end, reserve time, as we did previously.

EXAMINATION BY VICE CHAIRMAN THOMAS

VICE CHAIRMAN THOMAS: Mr. Bushnell, I didn't come back out of retirement to sit back on a thing I've done for 28 years to try to protect the financial system.

A consequence of what we try to do in our job of trying to explain to Americans what happened, I can assure you, probably won't contain one word of what you folks just told us.

Did any of you, and I'll just ask a show of hands, and I assume you'll be honest in your response, lose one night of sleep over what happened? No? No hands. You didn't lose one -- oh, no, I didn't prompt you. I said, did you lose one night of sleep?

MR. MAHERAS: I lost a lot of sleep.

VICE CHAIRMAN THOMAS: The answer is supposed to be yes. You're supposed to raise your hand. Once you got it, you raised your hand.

You lost a lot of sleep?

MR. MAHERAS: Yes.

VICE CHAIRMAN THOMAS: Well, for someone who earned as much money as the most highly-paid player on the New York Yankees -- at least he can show a World Series win for what he got.

And if they do various things that are against the rules, they got to pay fines and do other stuff.

I'm not going to dwell on the money. I can't comprehend it. Obviously, you weren't supervised by competent people or what happened wouldn't have happened. And the argument is what happened to everybody else, then no one is competent.

The argument that none of you ever heard the phrase, "what goes up must come down," you thought somehow housing was unique? Or are you familiar with other areas that never go down? Or why in the world would you pay anybody for risk management in the area of dealing with these securities when housing never goes down?

I mean, you would think that's not an area where you would invest money. You would stick more into the products that don't go down.

I just have to tell you that I'm frankly more concerned about you than some of the guys at the top, because I'm always familiar about guys at the top, and they make a lot of money, and I don't -- this has nothing to do with you, Mr. Thompson, because I now know you as a person.

You guys were at a level, paid handsomely. And what I heard was we took somebody's word who rates them and we pay them to get the rating but we took their word for it. We had models, and nobody could model what happened.

It did. So you didn't know what you were doing or, yes, you did, you knew what you were doing until you didn't. Mr. Dominguez at what point did you know that you didn't know?

MR. DOMINGUEZ: We became concerned late -- mid to late summer of 2007 as the markets froze, the CDO markets froze.

VICE CHAIRMAN THOMAS: That was across the board in terms of your company, or were some other folks not getting it? Were they still conducting themselves in a way that they thought this was going to continue, that their models were right, the rating agencies were correct, or did you all pretty much realize it about the same time throughout the silos of your company?

MR. DOMINGUEZ: Well, in August of 2007, we began -- we began extensive discussions about the implications of the decline, the dramatic decline of the underlying subprime markets, and how that would feed into the super senior positions.

We had already seen it feed through into the lower-rated tranches, you know, earlier that summer and late that spring. So that's when the dialogue began -- began in earnest.

VICE CHAIRMAN THOMAS: When no one wanted to purchase is that, in a general sense, the low-interest yielding super senior tranches, they were low interest, why? Because they was as good as gold, like treasury notes? How come no one wanted to purchase something as secure as that?

MR. DOMINGUEZ: Well, the -- the -- there was several types of super seniors, by and large --

VICE CHAIRMAN THOMAS: I'm trying to stay above the details you want to go down. To make a point I'm more than willing to descend with you.

MR. DOMINGUEZ: By and large we distributed the most senior tranches on almost all our CDOs except for a program liquidity puts which was specifically intended to be held on balance sheets.

So, there was a market. It was -- it was all institutional. It traded between banks with commercial paper conduits, with protections from the mono-line. So there was a market and by and large --

VICE CHAIRMAN THOMAS: On the whole, did you keep them because you thought they were really good and you wanted to keep them, or that you couldn't really move them or figure out a way to package them to move them? I mean, is there a --

MR. DOMINGUEZ: The -- the -- the only program specifically designed to be kept on the balance sheet was the liquidity put program.

VICE CHAIRMAN THOMAS: Mm-hmm.

MR. DOMINGUEZ: The rest of the super seniors that we got caught with in the fall, late summer, fall of 2007, was really as a result of the freezing up of the markets.

And the market had been through -- I've been involved in the market since `99, as I mentioned.

The market had been through a number of very stressful situations: September -- September 11th, the Iraqi war, and spreads widen and narrow, participant's capital comes in and -- and goes out of the markets.

So we've been through stressful times before, and of course those -- those senior most tranches are specifically designed to take a lot of stress, and so people viewed them as very robust. And so we expected the market to come back. But, of course, what happened in -- in October and November is the market -- the underlying market for RMBS, as represented by the ABS Index, for example, declined even more dramatically.

VICE CHAIRMAN THOMAS: Things go down, but not according to somebody's model, not according to somebody's rating agency, so it's someone else.

Mr. Maheras, you made a lot of money. Do you believe now, looking back on that situation, that you earned all of it?

MR. MAHERAS: I appreciate the topic of Wall Street compensation. It -- it is very --

VICE CHAIRMAN THOMAS: It's not the topic of Wall Street compensation. I've got a group of people in front of me. I'm looking at these numbers. I'm no longer in Congress. I don't have a constituency, but I moved back to my home.

And they've asked me questions, and I'm basically conveying to you the questions they're asking me.

Do you think you earned that money?

MR. MAHERAS: I was paid very handsomely. I was paid in a manner consistent with the market at the time.

VICE CHAIRMAN THOMAS: Kind of like the rating agencies and the models, it wasn't associated with what you did before or after; it was some model that you put yourselves up against.

My question was a bit more personal than that. Do you personally believe you earned that money in terms of what happened?

MR. MAHERAS: Well, in -- in the year of 2007, when things came to pass that ended up costing the firm, I didn't get paid any money.

VICE CHAIRMAN THOMAS: No money, whatsoever, you worked for nothing?

MR. MAHERAS: I'm sorry, I'm sorry, I did not get paid a bonus. I got paid a zero bonus. In the prior years --

VICE CHAIRMAN THOMAS: Well you got paid

something.

MR. MAHERAS: I was paid a salary that year. In the prior years, when I was very handsomely paid, it was at a time when Citigroup was paid, at a time when Citigroup did very well, performed very well economically, and my pay was part cash and nearly half the shares of the company, which aligned our interest.

VICE CHAIRMAN THOMAS: `07, you only got your base salary?

MR. MAHERAS: Yes.

VICE CHAIRMAN THOMAS: You didn't get a bonus. In `08 -- when did you leave the company?

MR. MAHERAS: I left in early October of `07.

VICE CHAIRMAN THOMAS: Of `07? Did you get anything in `08?

MR. MAHERAS: No.

VICE CHAIRMAN THOMAS: So you left when you, in fact, only had your salary?

MR. MAHERAS: I left at a time when I had only earned a salary to that point, and I was not given a bonus for that year.

VICE CHAIRMAN THOMAS: And you had remuneration that would continue to go on, it wasn't just cash, that you got?

MR. MAHERAS: I had shares in the company, granted in prior years, which had three or four years of vesting requirement. And it had -- it was a number of shares. So at the time when I received the stock, it was at much, much lower levels.

VICE CHAIRMAN THOMAS: So you lost at least one night's sleep.

At any time during that night or however many nights it was, did you ever consider perhaps voluntarily not taking the total package that you knew you were walking away from based upon what was left of the company that paid you handsomely? Did you owe them anything? Did you owe somebody anything about the decisions that you were responsible for?

MR. MAHERAS: Per the standards of the compensation system, I would have happily played by those rules if that was the way the packages worked, sir, but, no, I didn't.

VICE CHAIRMAN THOMAS: Well, I'm talking about an internal rule that would make you feel better based upon what happened, not some company model, because I know full well in terms of clawback, which changed in `08, I'm aware of the changes that were made. I'm just trying to talk to you as a person. I don't know you.

MR. MAHERAS: Well, as I said before, I did lose a lot of sleep. It wasn't -- it was about the fact that a company I cared a lot about and had worked at for 23-plus years and many, many people I cared a lot were going -- about a lot were going through a very difficult period after I left the firm.

The losses that have been well detailed occurred well after I left the firm. And I felt terrible that I was not there to be part of the solution.

Had I -- had I known what was going to come, I would never -- I would not have left the firm, Mister --

VICE CHAIRMAN THOMAS: But you were there as part of the problem.

MR. MAHERAS: I was. I was there when those securities were put on the balance sheet and I was there --

VICE CHAIRMAN THOMAS: And you didn't know it then, of course, because you were relying on ratings services and all the other things that let you sleep at night.

MR. MAHERAS: I barely --

VICE CHAIRMAN THOMAS: And so when you walked away, when you walked away, it hadn't fallen.

So if someone builds a building and it
didn't fall down when they walked away but it did
after they left, with more than two decades of
dedication to that structure? I don't -- I mean,
obviously, I'll -- I'll better appreciate it as we go
along, and I've got a lot of specific questions,
Mr. Chairman, but at this point I'll reserve my time.

CHAIRMAN ANGELIDES: All right. Thank you,
Mr. Vice Chairman. Ms. Murren?

COMMISSIONER MURREN: Thank you.

EXAMINATION BY COMMISSIONER MURREN

COMMISSIONER MURREN: I have maybe two
observations and then some questions.

Number one is Citigroup has a very large
and a number of extremely talented fundamental
analysts, both in the equity research department and
in fixed income. So the notion that the four of you
were unable to determine the value of underlying
securities because you relied completely on a
financial model is somewhat disingenuous.

The bottom line is there is fundamental
ability to determine whether assets are risky or not.
So I think that, you know, the notion that somehow
it's all about the model is a little bit disingenuous.

And then, to follow on to that, you know, the other thing that's a little disingenuous is the notion that you didn't get paid in 2007.

I mean, let's face it, those things that were -- those decisions that were made in the earlier years are ultimately what led to what happened, so to some degree you do bear responsibility for that.

The line of questioning that I'd like to pursue, though, is one that I'm very focused on, and that is regulation, and then secondarily, compensation, but not so much the amount of compensation; to me that's almost secondary; it's really how you got paid, which relates to the amount of risk that you're willing to take and the way in which you approach it; what are your timetables. My guess is they were annual.

But, to begin with, I'm interested in each of you commenting on your interactions with the regulators. Could you please talk a little bit about, number one, your understanding of risk-focused regulation and what that meant to you personally in managing your areas? Mr. Maheras, if you could start?

MR. MAHERAS: Sure. My interaction with the regulators was most frequently with the OCC. And then, I would say, the Fed would follow that. Other regulators, the frequency was much, much lower.

And the interaction with the regulators was around business conditions, business strategies, planning, risk-management-type topics. They were appropriately focused, consistent with the independent risk management group of the firm and the management of the firm; appropriately focused on ensuring alignment of independent risk with business products; they were particularly focused on these meetings, particularly focused on new products; ensuring that new products enjoyed internally an infrastructure, systems technology, risk management, financial accounting and all that was on par with or could keep up with fast business growth, again, particular in the new areas. That's my recollection of interaction with the regulators.

COMMISSIONER MURREN: How often did you interact with them, and to what extent was part of your responsibility an awareness that the regulatory division that supervised the investment bank also had a responsibility to convey information to the Federal Reserve that related to the safety and soundness of the bank holding company?

How keenly did you think about that on a regular basis, and to what extent was it factored into your business decisions, either in terms of those things you chose to approach, or when we get to the next question, how did that factor into your compensation?

MR. MAHERAS: I -- I can -- I can answer part of that. I -- I -- I would say that I can defer, also, to members of the panel here who would have had much more interaction with the regulators.

The -- to my eyes, there was -- I'm sorry, can you repeat the first part of your question, Commissioner?

COMMISSIONER MURREN: If you look back at your interactions with the regulators, to what extent were you personally aware of the fact that your division needed to represent information to the holding company regulators that would affirm or not the safety and soundness of the overall enterprise?

MR. MAHERAS: We were keenly aware of that as a topic. The framework was built around the safety and soundness of the institution. Capital measures were built around ensuring that we met safety and soundness standards and certainly rating standards as well. So we were keenly aware of that imperative.

COMMISSIONER MURREN: And did you feel that the regulators did an adequate job of supervising your activities and evaluating the risks that you were exposed to?

MR. MAHERAS: Well, I think we in the industry and the regulators, missed this particular aspect of risk management. We were -- we were negative on subprime, as a matter. We were, from the very earliest part of `07 and the end of `06, we were, in most of our business areas, reducing our risk around subprime.

What we're trying to convey here is that we were not focused on those areas, logically not focused on those areas where we all believed the system-wide, that these -- these securities were safe enough to withstand very significant pressure.

We weren't sitting there twiddling our thumbs and assuming that housing could never go down. We had in our base case that housing was going down during `07 and would likely continue.

But what it took to lose money in these securities where we took the most pain, what it took was a very significant step function down in housing prices, which was, unfortunately, well outside our sights and our frame of reference. I'm sorry.

COMMISSIONER MURREN: Do you think that you would have been more focused on that aspect of it if the formula or at least the basis for how everyone gets compensated at your firm were less related to revenue growth, return on equity, which by definition means that you would want to be levered, and earnings per share growth, which, of course, is what will likely drive the stock price; if there were more of an orientation internally, towards evaluating risk and being able to handicap that as opposed to growth?

MR. MAHERAS: Well, I -- I can't accept the premise of the question that there was not more. There was a very, very significant internal focus on risk. I -- I -- you correctly point out that compensation constructs were generally, you know, significantly correlated to the performance, the bottom line performance, of the business.

But I don't believe that there was a lack of focus on risk. I think that to the contrary, I think Citigroup probably had the largest risk management infrastructure in the business.

COMMISSIONER MURREN: Bigger isn't better.

MR. MAHERAS: We missed -- we missed something. We missed something. And the senior-most securities, after having appropriately recognized that the housing as an asset class was coming down some, appropriately recognized and acted accordingly by reducing our risk in the junior areas, the risky areas, those areas that were perceived to be risky or that could have some risk.

We were actively engaged and successful at reducing risks all over the firm. There was one place, and it was that place that was furthest from our focus, unfortunately, with the benefit of hindsight, where we took a loss.

But risk management was at all times incredibly prioritized and consumed a lot of our time and focus.

COMMISSIONER MURREN: You each actually observed in your testimony that you thought your risk management practices were excellent. That has not been necessarily the opinion of outside observers.

Perhaps, if you could comment on that, Mr. Bushnell?

MR. BUSHNELL: I would be happy to weigh in, and I might also follow on with a question that you asked about the regulatory interface because they're sort of combined.

I'm confident that amongst the panel members, I had the most interaction with regulators around the world. My interactions with them were daily. And that was a combination of regularly scheduled briefings on a periodic basis, weekly, monthly, quarterly, to ad hoc calls.

And they were worth, if you will, the alphabet soup, everywhere from the OCC to the Fed to the FSA in London to the FSA in Japan to the Hong Kong monetary authority, all of the regulatory authorities that we dealt with, so I would be happy to follow up on that.

The linkage in the question is we had feedback from the regulators themselves. I didn't have any indication during my tenure in 2003, 2004, at these periodic meetings or in their annual reports to the board of directors about risk management that there were inadequacies and that we were second-rate in our risk management in comparison to their peers.

Indeed, we had other instances, in certain areas, that felt that we were ahead of our peers.

COMMISSIONER MURREN: Could you talk a little bit about those meetings? And their way of expressing it is risk-focus -- risk-focused regulation, which really is an evaluation of your internal controls and internal communication with regard to risk.

In your opinion, was that an effective way to measure the risk at your firm?

MR. BUSHNELL: I think that based upon the base fundamental, and I know we don't like to keep going back to these model, I think the framework of risk, everything from its independence, its structure, the usage of limits and policies, is the right way to go.

The fundamental area that we missed and I think the regulators missed etcetera, Tom said we stressed real estate losses. We stressed them to what had been not seen, you know, in history, but we still didn't stress them enough.

And that was at the baseline of all of this. So I think that that's why, in my testimony, I tried to indicate that our method of analysis was wanting.

And, indeed, the -- if I could, I'd like to get one thing across to the Commission, the usage of statistical models, without stress tests and thinking of things that have never happened before as part of those stress tests is important.

COMMISSIONER MURREN: And in that -- those conversations with the regulators, were they asking questions about the underlying asset classes, or were they simply asking questions about the methodology of your modeling?

MR. BUSHNELL: Both.

COMMISSIONER MURREN: And did they look at the CDO business?

MR. BUSHNELL: They did. They looked at the structured finance business, of which the CDO business was a part.

COMMISSIONER MURREN: And at any point were the underlying assets tested as part of that or, again, was it really just an evaluation of your risk modeling?

MR. BUSHNELL: I don't know what their internal -- we saw reports off that, but I don't know if they did any of their own stress testing, if you will, of those positions.

COMMISSIONER MURREN: But that wouldn't be stress testing. It would actually be going into the portfolio and looking at the assets as opposed to determining if there's an event that's cataclysmic that would affect the whole asset class; is that not right?

MR. BUSHNELL: Yes.

COMMISSIONER MURREN: So there was none of that type of thing?

MR. BUSHNELL: I -- I -- I don't know what, in their work papers and in their examinations, what they looked at specifically. I saw the -- a final report, if you will, of these areas, but I don't know what -- what detail they went into in coming up with the summarizing report.

COMMISSIONER MURREN: In those final reports, what was the conclusion?

COMMISSIONER HENNESSEY: My recollection was that there were no major findings in the credit structuring business. There may have been certain instances, though, of what I would call minor issues, but nothing major off of that.

COMMISSIONER MURREN: Thank you.

CHAIRMAN ANGELIDES: That's it? All right. Mr. Wallison?

COMMISSIONER WALLISON: Thank you, Mr. Chairman.

EXAMINATION BY COMMISSIONER WALLISON

COMMISSIONER WALLISON: Let me make a couple of prefatory remarks. Everyone knew that the bubble was going to deflate. Many bubbles had occurred in the past, and then they deflated, but no bubble's deflation ever caused a worldwide financial crisis.

Even assuming that the Great Depression wasn't a deflation of a bubble. So I'm not going to cast blame when something completely unprecedented happens that is not only -- not only not within the experience of the people who confronted it and were involved in it, but was not within the experience of anyone alive today.

So I want to just, with that prefatory remark, I would like to just talk about what was known at the time. I'll start with you, Mr. Dominguez, and then move across.

You referred to what happened as a cataclysmic and unprecedented event. And I don't think anyone can doubt that. Did you know how many subprime and Alt-A mortgages were outstanding at the time in 2007 when you were creating CDOs and marketing them?

MR. DOMINGUEZ: Were outstanding in the market?

COMMISSIONER WALLISON: Outstanding in the market, exactly.

MR. DOMINGUEZ: No.

COMMISSIONER WALLISON: Do you have a guess of how many were outstanding?

MR. DOMINGUEZ: I'd say 200 billion subprime and another --

COMMISSIONER WALLISON: Okay. Would it have made any difference to you, in terms of knowing what the risks were, if you knew that half of all mortgages outstanding in 2007 were subprime and Alt-A?

When I say half of all mortgages outstanding, we're talking about over 4 trillion dollars in mortgages, almost 5 trillion dollars in mortgages, would that have made a difference in terms of what you could imagine would happen?

Now, it might not have been your business to understand that, but I think what it does is suggest that a cataclysmic and unprecedented event is not so far off the radar screen in a situation like that. I'll address this question to all of you, but I just want to go back to Mr. Dominguez with a couple of other questions and details about CDOs, if you don't mind.

Why was it necessary to have a super senior tranche in a CDO?

MR. DOMINGUEZ: Well, the super senior tranche is the most senior tranche.

COMMISSIONER WALLISON: Right.

MR. DOMINGUEZ: It's called super senior simply because there's another tranche below it, and it is senior to that tranche, and that happens to be rated Triple-A.

COMMISSIONER WALLISON: Right. Let me rephrase it, then. There are a whole series of tranches.

MR. DOMINGUEZ: Yes.

COMMISSIONER WALLISON: And the ones that were generally sold to the public were Triple-A and then Double-B and so on down?

MR. DOMINGUEZ: Yes.

COMMISSIONER WALLISON: And then there was an equity piece at the very bottom, which, in fact, was the riskiest piece of all, and someone even bought that because there was a lot of profit associated with it if everything worked out.

I don't understand the economics, the financial economics yet of why it was necessary, and it seems to have been necessary, to have created a piece at the top that was super senior that were superior to the ones that were actually marketed to investors. I'm talking about the economics of the business. Why -- why was that necessary?

MR. DOMINGUEZ: It wasn't necessary. Some -- some -- some transactions had senior pieces, super senior pieces, that were marketed to conduits and other -- other investor categories. As I mentioned before, there's a specific program called the liquidity put program that was specifically designed --

COMMISSIONER WALLISON: Let me stop you there. My time, of course, is limited. So it was done because this was something from Citi's business that it wanted to do; it wanted to hold those super seniors; is that right?

MR. DOMINGUEZ: On that program, yes.

COMMISSIONER WALLISON: Okay. As you described it, the CDO consisted of more than just mortgages; am I correct about that? Other assets were included in some of these CDOs?

And what were those assets, and why were they included, and were those the sorts of things that were demanded by investors?

MR. DOMINGUEZ: Well, in my statement, what I said was that there's -- there's several kinds of CDOs, RMBS pools. Securitized RMBS pools are but one type.

COMMISSIONER WALLISON: Right.

MR. DOMINGUEZ: So there's collateralized loan obligations, there's CDOs made up of Tier 1 capital securities from middle market banks; there's middle market loans. And so there are various investor types that tend to gravitate towards specific types of CDOs. There are those investors who only buy RMBS CDOs, and there are investors who only buy

collateralized --
COMMISSIONER WALLISON: Were there mixed CDOs, that is, consisting of residential mortgage-backed securities plus other kinds of asset-backed securities? Were they mixed in any way?
MR. DOMINGUEZ: The -- the -- the percentage limitations, which defined in the transactions, which defined the eligible collateral securities, allowed for several asset classes. And the asset classes that were allowed was determined in negotiations with the investors.
COMMISSIONER WALLISON: Okay.
MR. DOMINGUEZ: Who indicated to us --
COMMISSIONER WALLISON: I understand. So this was marketing -- marketing, and the investors wanted certain kinds of assets on their balance sheets, and you accommodated them by creating those pools --
MR. DOMINGUEZ: That's right.
COMMISSIONER WALLISON: -- that they wanted. Okay.
Did your potential customers care whether a CDO they purchased was synthetic or not?
MR. DOMINGUEZ: Some investors didn't. What -- what -- what happened in the marketplace, the

synthetic ABS CDO and the cash ABS CDO developed somewhat independently, but by 2005, 2006, those markets were converging as investors -- many investors were reasonably agnostic to how they got that exposure.

What they were interested in and the investors we dealt with -- the institutional investors we dealt with wanted to take certain exposures to the asset class. And many of them, whether it was synthetic or cash form, were agnostic to that; some weren't.

COMMISSIONER WALLISON: Okay. Mr. Barnes, I have questions for you.

How many subprime and Alt-A mortgages did you think were outstanding before what you call the unprecedented -- unprecedented events in 2007? Did you know?

MR. BARNES: On a relative basis, I thought it represented around 15 percent of the total residential mortgage -- residential real estate market.

COMMISSIONER WALLISON: There was obviously a widely held view that there could not be a disastrous fall in house prices, such as occurred in 2007 and subsequently.

Would there have been such a view if people had known, at least in your view, if people had known that almost half of all mortgages in the financial system were subprime and Alt-A?

MR. BARNES: I think clearly the fact that an increasing amount of mortgages were subprime-related. And what became clear, in retrospect, was the underwriting standard associated with those was definitely substandard.

But at the same time, even given a decline in house prices, given the various levels of subordination provided by the underlying mortgages, the RMBS that was actually backed by those mortgages, and the CDOs that were backed by the RMBS, certainly the -- the consensus within the firm as well as across the industry of the market participants was that the -- the likelihood of losses hitting the super senior was extremely remote.

COMMISSIONER WALLISON: Okay. You said that after the events of 2007, it was necessary to change the methodology for valuing super senior CDOs.

And you called -- you used something you called an intrinsic cash flow method evaluating CDOs and the underlying collateral.

Please explain how this was done as

concisely as you can?

MR. BARNES: Basically the I -- the -- the -- the methodology was to look at the underlying residential mortgage-backed securities that backed the CDO and look at common loan characteristics within each of those RMBS.

And we effectively used some kind of historical regression model. But based on certain input assumptions, which were judgmental, tried to predict what the timing and level of defaults were, as well as the severity of losses.

And this is a very iterative process and one challenged by the fact that 2007 was still extremely out of sample with what we had experienced historically.

And so even developing this much more sophisticated model that looked through the CDO through to the underlying collateral, and even through the RMBS to various -- the various loan pools and allocating them into -- into buckets that had similar features, that was -- it still was not a very good predictor of future defaults, delinquencies, defaults.

COMMISSIONER WALLISON: Right, I understand that part, but what is an intrinsic cash flow system of methodology for --

MR. BARNES: What it -- what it really did was by looking through to the loans and looking at the RMBS and the priority of payments that exist within the RMBS structure, according to the performance of the underlying loans, the forecasted performance, the model then looked at how those cash flows, whether they were a hundred percent of the --

COMMISSIONER WALLISON: And then you discounted -- you knew what the cash flows were, and then you discounted them in some way?

MR. BARNES: Well, first, we had to actually wash them through the RMBS waterfall --

COMMISSIONER WALLISON: Yes.

MR. BARNES: -- in terms of the various tranches.

COMMISSIONER WALLISON: Right.

MR. BARNES: -- and then, to the extent that there was CDO, which was referencing those RMBS, we then went through that process again, and then that effectively came up with what -- what in -- what, in the firm's opinion, was a sort of an expected future value of those cash flows. And then we had to discount them using some discount.

COMMISSIONER WALLISON: And -- and did your auditors approve that?

MR. BARNES: We went through a rigorous process, including a review of the assumptions, a review of the -- a review of the model itself and that process was, frankly, a challenge because of us being so out of sample and relying on input switch couldn't really be properly validated or verified in the marketplace.

But the decision was made that in the absence of an observable market to actually assess the fair value of these securities, that was a decision that was made by senior management, by finance and risk.

COMMISSIONER WALLISON: With the auditors?

MR. BARNES: I'm sure. I wasn't involved in the discussions with the external auditors, but certainly that model or an early version of it was included in the initial substantial losses that were taken and that were included in eight phase in the fourth quarter of `07.

COMMISSIONER WALLISON: All right, thank you very much.

Mr. Maheras, the losses on the CDOs were large, as we know, but as you point out, the whole CDO business was only 2 percent of the revenue of the investment bank that you were running.

Incidentally, investment bank was a mythical idea, was it not? I mean, there wasn't an actual entity? All of Citi's operations were divided among a commercial bank, an investment bank, and a consumer bank, as I recall.

So you had a whole lot of different entities under the investment bank no matter where they were in the unit. Correct me if I'm wrong about that. But then the question I want to ask is, the investment bank, did it have a profit?

And although there was severe losses in case -- in the case of the CDOs if you include over a trillion dollars in assets that were in the investment bank, was that a profitable investment for the bank?

MR. MAHERAS: I'm sorry, you're asking if the CDOs --

COMMISSIONER WALLISON: The entire -- the entire operation under your control, 1.X trillion dollars in Citigroup assets, was that ultimately profitable despite the losses on the 2 percent of revenue that the super senior CDOs represented?

MR. MAHERAS: Let me clarify, the under 2 percent number is the number that would represent revenues from the CDO business in 2006.

COMMISSIONER WALLISON: Mm-hmm.

MR. MAHERAS: It was an under 2 percent number. In 2006, the investment bank, for which I was co-head of, had a 7 -- a little over 7 billion dollars of after-tax net income performance, so it was very profitable.

In 2007, by the end of the year, I don't know exactly what -- what the performance was. At the time I left, we were -- we were profitable on a year-to-date basis through the end of the third quarter at around 4 to 5, around 5 billion dollars after-tax net income.

COMMISSIONER WALLISON: Okay.

MR. MAHERAS: The losses that were suffered, which were substantial, were in the fourth quarter.

VICE CHAIRMAN THOMAS: Mr. Chairman?

COMMISSIONER WALLISON: Thank you very much.

VICE CHAIRMAN THOMAS: Mr. Chairman, I yield Commissioner Wallison another five minutes.

COMMISSIONER WALLISON: Oh, thank you very much. I actually don't think I'll need all of that, but I appreciate it.

CHAIRMAN ANGELIDES: We'll pick up what you leave on the table.

COMMISSIONER WALLISON: Mr. Bushnell, what would have been included in the stress tests that you said should probably have been done? Do you think it would have been reasonable to include in those stress tests a decline in housing values of 30 or 40 percent? Was that within anyone's idea of what would have been a reasonable stress test?

MR. BUSHNELL: I don't think so, I think that that, again, based on what we had seen in history and even taking the worst case that we had ever seen in history and doubling it, if we had come up with that in risk management, we could have run the models using that and come up with the number. The credence that one would have put in the results of that would have been questioned, I'm sure.

COMMISSIONER WALLISON: I'm going to ask you the same question that I've asked to your colleagues, and that is, if you had known as the risk -- the chief risk manager in the bank, if you had known that in 2007 half of all mortgages in the U.S. financial system were subprime or Alt-A, would that have caused you to think that the dangers of a deflating bubble would be greater than they have ever been?

This is, I might say, an unprecedentedly large number, that we've never had anything remotely like that.

MR. BUSHNELL: I think that we knew in our research areas and in outside services, such as Case Schiller, that we employed in risk management, that the proportion of mortgages that were both being originated and in the totality of the mortgage market was -- was favoring subprime, you know, it was increasing in that.

What -- what we still didn't appreciate, and none of those outside experts appreciated, was the risk that that provided, again, how much of a -- back to the -- back to the loss scenarios that would have said that means you should not double historical losses but triple historical losses. I don't think that pitch was made, Commissioner.

COMMISSIONER WALLISON: Thank you very much and thank all of you.

CHAIRMAN ANGELIDES: Thank you very much, Mr. Wallison. And Mr. Georgiou?

COMMISSIONER GEORGIOU: So many questions, so little time. Let me -- let me start, if I can, just about the CD -- CDOs.

Mr. Maheras, I think that maybe there was a misunderstanding with regard to this 2 percent number.

The way I saw it is you were, at one point, you said that the 43 billion dollars was only 2 percent of Citi's two-trillion-dollar balance sheet. Did you mention that or did somebody --

MR. MAHERAS: Actually, that --

MR. BUSHNELL: That was in my --

COMMISSIONER GEORGIOU: That was Mr. Bushnell?

MR. BUSHNELL: Yes.

COMMISSIONER GEORGIOU: Right. Okay. And -- but of course that would be just the balance sheet that was reported on the balance sheet; that wouldn't be taking in any of the other assets that were off?

MR. BUSHNELL: Right. It would have been a less even a smaller component of what we would have thought of as our risk balance sheet, our exposure balance sheet.

COMMISSIONER GEORGIOU: Right.

MR. BUSHNELL: Not just our gap balance sheet.

COMMISSIONER GEORGIOU: And these CDOs, you know, I -- we're all here; we're not experts in this area; we're learning. You know, I try to understand it. You've got -- basically you take, as I understand it, you take in an RMBS CDO you take a whole bunch of Triple-B-rated mezzanine tranches from RMBS bonds and then you slice up the cash flow streams to create the CDO.

And in the model that we have here, you end up with 60 percent of the resultant CDO tranches being rated Triple-A-plus super senior, 20 percent Triple-A, 6 percent Double-A, 5 percent A, 2 percent Triple-B, 2 percent Double-B, and 5 percent equity.

So, 91 percent of the result is rated at A or above and 80 percent of it is rated Triple-A or Triple-A-plus.

Now, I guess I would just ask that I know that all of you have said that the financial crisis con- -- the occurrence of the drop in all the housing prices, which ended up impacting mortgages which underlie the RMBS and then effectively also the CDOs, wasn't -- wasn't comprehensive, wasn't really contemplatable at the time or wasn't within your risk models.

But doesn't anyone question whether you can effectively do what I would liken to sort of the medieval alchemy, where you're taking base metals, lead, Triple-B-rated tranches of mezza- -- of RMBS, and slicing and dicing them and ending up with products that are essentially senior and super senior, Triple-A and Triple-A-plus, turning them into gold.

I mean, doesn't anyone wonder whether that's possible and whether that the -- there ought to be some question as to the legitimacy of the ratings that resulted in those tranches? Did that ever occur to you, Mr. Barnes, for example?

MR. BARNES: I mean, certainly looking at the -- the level of subordination, you know, the way you described it, you know, intuitively, if it's new to you, it does seem quite extreme.

Having said that, you know, our assumption was that these securities were being packaged by loans which were diversified across the country. The -- the country -- not all of the country had the degree of price appreciation and the subsequent correction that the likes of California and Las Vegas and some of the other parts of the states have, you know, has been well -- well publicized.

And we looked to the -- the -- the credit enhancement provided on the actual mortgage itself the 5 percent first loss protection, which is provided by the residual piece on the RMBS, will be the equity, as you just described it.

COMMISSIONER WALLISON: Right.

MR. BUSHNELL: And then the additional 30 to 50 percent, well, let's say 40 percent, that was effectively provided -- provided a further degree of credit enhancement from the tranches beneath the super senior. Now, in retrospect, you know if --

COMMISSIONER GEORGIOU: Well, but -- but wait a second. No, the super senior was 60 percent, the Triple-A was 20 percent. I mean, the resultant security had 93 percent that was rated either Triple-B or above; that is, the constituent securities you were working with, Triple-B tranches of mezzanine, mezzanine securities, as I understand it, and then you were -- you were change -- taking the cash flows and assigning them to other tranches that were rated differently, in the resultant CDO.

Not -- setting aside, for the moment, the synthetic CDOs. But I guess all I'm trying to say, and, again, I don't want to spend all of our time analyzing how it is that the CDOs were constructed, but it's not so implausible, is it, that a structure like this, which becomes ever more complex, which is a security-structured from a pool of other securities that have already been structured and which you're, of course, making a structuring fee, presumably 50 basis points or 200 basis points, depending on the deal, so you're taking that off the top, that the resultant product might not perform as well as characterized, that is, 60 percent of it being Triple-A-plus, so essentially risk-free.

And -- and I want to focus on the capital behind it, because one of the questions that I asked Dr. Greenspan this morning, and which I would -- which I also reiterate to you, is that -- and I'm not trying to pick just on Citi, because a lot of people did this. I mean this is not -- it just happens that you're here today talking about Citi, but this has happened throughout the industry. Part of the reason why this was done, as we understand it, is that the -- the liquidity puts per the super senior tranches you essentially had to hold no capital for.

The -- the -- there's -- we had an interview with a senior person from the -- our staff did -- from the -- the deputy director of the Division of Banking Supervision and Regulation at the Federal Reserve Board who said that the trade, if these were held in trading assets, as I understand some of them were, that you effectively had to hold almost no capital. The leverage ratio was as much as 750 to 800 to one.

And that -- and the liquidity puts, as

opposed, for example, to a stand -- an actual direct letter line of credit that would stand behind commercial paper customarily, you would have to have capital for on your balance sheet of the bank. Whereas, if you did it with the liquidity puts, there was essentially no capital required.

Can anybody speak to that, or was that a factor in your decision making in moving into the CDO market so aggressively?

MR. DOMINGUEZ: No. There was not a factor. The amount of capital that the liquidity put program or other programs used within kind of broad ranges was not a determining factor.

We weren't out to minimize number -- the amount of capital or anything of that nature.

COMMISSIONER GEORGIOU: Well, of course, the capital really wasn't the capital of the investment bank, right, because the liquidity puts were provided by the bank.

MR. DOMINGUEZ: The bank.

COMMISSIONER GEORGIOU: So, the losses that were suffered, were suffered on the bank's P&L when they had to honor the liquidity puts; isn't that correct?

MR. DOMINGUEZ: No. I don't believe that's the case. When -- when the program -- when commercial paper stopped rolling, when the A and B commercial paper markets actually disappeared --

COMMISSIONER GEORGIOU: Right.

MR. DOMINGUEZ: -- the features of that program were that you would automatically create a -- I believe it was a ten-year note of Libor plus 40, and that went into the broker-dealer.

COMMISSIONER GEORGIOU: So you had to write -- so you had to take losses in the broker-dealer?

MR. DOMINGUEZ: Yes.

COMMISSIONER GEORGIOU: On that note?

MR. DOMINGUEZ: Yes.

COMMISSIONER GEORGIOU: And I guess that goes back to a question that was raised earlier. I mean, I don't know where, within the bank, the bank and the broker-dealer, where the losses, ultimately, from all of this write-down went.

But of course your compensation was based on the production of these among other -- other securities that produced during those years.

And, of course, when they were written down, there were no clawbacks that were -- were enforced against anyone taking back any of the money that was made based on the revenues that came from these CDOs that were written down; isn't that correct?

MR. DOMINGUEZ: That's correct.

COMMISSIONER GEORGIOU: Okay. And do you think that there might have been -- I guess I'm trying -- you know, Alan Greenspan told us today that he felt that one of the major problems was that there was inadequate capital and inadequate liquidity in the system at essentially all of the bank holding companies and financial holding companies throughout the system, that all of which either -- most of which either failed or would have failed but for the infusion of extraordinary taxpayer capital, which is, after all, our charge here is supposed to be to investigate all of those institutions.

So could you -- do you think that an increased capital requirement at the investment bank would be a significant deterrent to doing any of these activities that got you into trouble? Maybe, Mr. Maheras, maybe you could address that?

MR. MAHERAS: There's certainly a connection between capital requirements and the amount of business a business entity's going to conduct. But with or without a specified amount of capital required at the actual underlying security level, the bank is still operating within constraints, overall leverage ratios, Tier 1 ratios, or a whole mix of myriad of different capital ratios.

But to be fair to your point, if you had higher capital requirements across the board, across all the activities, you would have had a lesser overall balance sheet in the industry and you would have probably seen less of the -- the ebullience that built up over a couple of years.

You know, one thing that probably hasn't come across is people weren't creating these securities and just trying to find a way to sell them. This wasn't, you know, the perception of Wall Street of old, you'd create products and you'd find a way to sell them.

The businesses evolved over the last five to ten years to one where the investor classes have grown so large, and their demand for yield and their demand for securities with specific yield characteristics drove a lot of this activity.

They -- they -- they drove Nestor's business to create products, because they had a bid for some of those underlying tranches, leaving Nestor with a piece or two to then sell on the aftermarket. But the -- the -- the --

COMMISSIONER GEORGIOU: But the --
MR. MAHERAS: The availability of liquidity and financing to purchase those things with investors coupled with the fact that regulatory capital requirements in some asset classes, with the benefit of hindsight, were a little low --
COMMISSIONER GEORGIOU: Right.
MR. MAHERAS: -- you know, conspired to -- to probably exacerbate the problem.
COMMISSIONER GEORGIOU: But weren't they -- weren't the investors buying principally the ones that had nice yield, the more -- the lower-rated tranches, really, within the CDOs?
MR. MAHERAS: Well, you had all different types of investors. Insurers were focused on, and some of these conduits Nestor talked about, and re-insurers were focused on the senior-most, the super senior and Triple-A's.
COMMISSIONER GEORGIOU: Right.
MR. MAHERAS: You had asset managers focused on the Double-A's, and Triple-A's, and Single-A's, and Triple-B's. You had hedge funds focused on Triple-B's and --
COMMISSIONER GEORGIOU: And equity.
MR. MAHERAS: -- and equity. So you had

the full array of investor types across the ratings spectrum of these various structures.

COMMISSIONER GEORGIOU: Right. But when you talk about the 25-billion-dollar liquidity put program, that was -- those were securities that were super senior that you didn't sell to anybody that you effectively moved off your balance sheet because, you know, they were off in a -- in a -- in a special investment vehicle, with special purpose vehicle off-balance-sheet, right?

And basically no risk was attributed to them because the risk, the liquidity put risk, the 25 billion dollars that was ultimately paid was paid by the bank itself.

MR. DOMINGUEZ: Well, yes, there -- there -- there was risk attributed to them, and you can see in the documents provided to the staff where the -- the notional amount of the super senior related to the liquidity put is itemized.

So we've always looked at the risk as if they were on balance sheet even though the liquidity facility, we call the continued credit facility, didn't -- didn't have to be exercised for it to show up on our balance sheet for --

COMMISSIONER GEORGIOU: So what was the

risk that you attributed to the 25 billion dollars that was ultimately paid for those, to bring those assets back on the balance sheet?

MR. DOMINGUEZ: What was the capital?

COMMISSIONER GEORGIOU: What you say -- what -- you did evaluate the risk --

MR. DOMINGUEZ: Well, those --

COMMISSIONER GEORGIOU: How did you quantify the risk.

MR. DOMINGUEZ: Well those -- we quantify them in very similar ways.

COMMISSIONER GEORGIOU: Do you know the amount, by any chance?

MR. DOMINGUEZ: I'm sorry?

COMMISSIONER GEORGIOU: Do you know the amount that you calculated.

MR. DOMINGUEZ: Those positions were generally held at par, and there was -- until -- until late 2007. There was a lot of analysis done on those positions and both with respect to looking through the underlying assets and with respect to comparables such as they existed in the market, and they were marketed, I believe, to 10 basis points running.

COMMISSIONER GEORGIOU: 10 basis points?

MR. DOMINGUEZ: Per annum, yeah.

COMMISSIONER GEORGIOU: Okay. Well, I mean, I guess the other -- the other thing, I guess there is an issue about regulatory -- capital regulatory arbitrage because, as I understand it -- I'm sorry, could I have a minute or two more?

CHAIRMAN ANGELIDES: You can have a minute. Why don't you take two minutes.

COMMISSIONER GEORGIOU: The -- the securitization rule was changed in 2001which addressed some portions of the capital arbitrage system, the rule established risk ratings -- risk weightings based on the credit ratings of each tranche of securitization.

And they allowed liquidity puts on asset-backed commercial paper tranches to get a 10 percent risk rating resulting in a capital charge of eight-tenths of a percent basically on liquidity puts.

And one of the Citi executives to whom we spoke said that Citi made the decision to support the growing CDO business with its own capital because the regulatory capital associated with holding the super senior Triple-A tranches was close to zero.

And I wonder, I guess I'm trying to get to what we can do on a go-forward basis in the future here to avoid another meltdown. You know, obviously mistakes were made. You now, all of you, are -- agree that you wouldn't have done -- you wouldn't have invested in those -- created those securities, had you known what was going to happen to them. We all recognize that. The question, I guess, is, on a go-forward basis, to avoid future catastrophes, similar catastrophe, we probably have to change something.

So what is it that we're going to change? One -- one -- again, Dr. Greenspan suggested greater -- significantly greater capital and significantly greater liquidity requirements. And a -- an end to this capital arbitrage where, by simply moving assets from one legal structure within your organization to another, from one unit to another or moving it off-balance-sheet, that you could essentially create an opportunity to create a product that doesn't require you to hold any capital against it.

So some people have suggested that there should be a principle that the total amount of capital required for a pool of assets should be the same after a securitization as before, and it reduces. It reduces from the point of view of a mortgage down into an RMBS and from an RMBS to a CDO. Do any of you have any thoughts? Mr. Bushnell is shaking his head. If you can respond to that?

CHAIRMAN ANGELIDES: By the way, I will yield two additional of my minutes. So therefore try to keep it within Mr. Georgiou's time or he'll be in the penalty box.

VICE CHAIRMAN THOMAS: I'll take a minute of that time.

CHAIRMAN ANGELIDES: There you go.

MR. BUSHNELL: I do have some thoughts on that. I overheard your questioning of Mr. Greenspan, and I think the problem is really twofold.

One, there needs to be more capital in the system, and you need to end the opportunities for regulatory arbitrage.

I would make a comment that says, as opposed to the reason there is an arbitrage that exists, is because there are multiple regulators. If there were not multiple regulators you could not arbitrage regulatory capital requirements.

COMMISSIONER GEORGIOU: Right.

MR. BUSHNELL: And that more emphasis needs to be placed on, if not having a single purveyor of regulatory capital, at least a complete agreement amongst the various agencies, both in the U.S. and worldwide because some of the --

COMMISSIONER GEORGIOU: Because you said -- you said you dealt a lot with the OCC. And we heard from one of the OCC people who said the following to our staff: The CDO business was managed outside the bank; it changed from an agency business to a principal business, We didn't know that; that's outside of our jurisdiction.

Gramm-Leach-Bliley wouldn't let us look into that, yet the bank had these liquidity puts that were not reported in any risk system that we had.

Now, that's the OCC examiner talking about this circumstance.

So obviously they regarded themselves as constrained by the law from asking you about anything other than, you know, other than what asking the banker, banking people, about your business, really, and so forth, and which is obviously a major problem.

And I suspect that really the only issue regarding compensation, which I would toss out just as something to reflect upon, is that if you all had a longer timetable for you to earn your bonuses so that you could track through the process, the creations that you had, to ensure that they didn't crater and ultimately have a clawback that resulted from that cratering, wouldn't that enhance your diligence in the timing and in the -- in the -- in the effectiveness of your -- of your issuance of these securities?

CHAIRMAN ANGELIDES: Two final minutes for Mr. Georgiou.

COMMISSIONER GEORGIOU: Yeah. Mr. Maheras, could you speak to that?

MR. MAHERAS: I -- I don't know that anything would have been different if there were a clawback. I don't think that people put these positions on, you know, arbitraging some compensation scheme.

I think -- I don't think there's any issue with, and I think it could be a healthy variant of the compensation construct to possibly use clawbacks more.

But I don't know that there would be any difference as it relates to the events of the last couple of years.

COMMISSIONER GEORGIOU: Right. I mean, one of the great frustrations to the public, I think, is that you made significant compensation. Nobody begrudges you that compensation if it ultimately produces value for your organization or for anybody else, but what ended up happening is significant losses were suffered and the taxpayers got stuck holding the bag and having to backstop all these institutions.

And nobody really, at your level, above your level, below your level, ever had to come out of pocket with any money of their own to backstop the institution for the failures that resulted.

And this is what -- if there's one thing that I hear about all the time that angers the taxpayer more than anything else is that there was no consequence to people at your level and in your position for the failures that resulted on your watch.

And I just leave you with that reflection and yield the balance of my time. Thank you, Mr. Chairman.

CHAIRMAN ANGELIDES: Thank you so much. Let's move on now to Mr. Thompson. I think I'm doing this in the right order.

COMMISSIONER THOMPSON: Thank you, Mr. Chairman.

EXAMINATION BY COMMISSIONER THOMPSON

COMMISSIONER THOMPSON: I guess, if I were to think about this industry, much has been said about the rate and pace of innovation and the inability in many respects to really characterize the risk associated with some of that innovation.

One might also argue, however, that innovation in this industry is as much about regulatory arbitrage as it is some unique new product, because it's still, when it's all said and done, a dead instrument that underpins what you're doing in the marketplace.

And so my question is, in light of Dr. Greenspan's comments this morning and the current state of the industry, should we be doing more to test new products in some controlled way in this industry, given the systemic and societal risks that are associated with them, just like we do in other industries, where there's huge societal risk with new product introduction, pharma, airlines, I mean, you pick it, so I'll start with you, Tom.

MR. MAHERAS: Me?

COMMISSIONER THOMPSON: Yes.

MR. MAHERAS: Well, to my eyes, there was a lot of testing of new products from the regulators. You know, clearly certain things went wrong. And it could -- I'm not sure what form it would take.

I would point out, though, that a lot of things have been done. If you think about the impact of FAS 166 and 167, it forces consolidation back on the balance sheets for a lot of financial intermediaries who may have taken advantage of balance sheet arbitrage or the regulatory capital arbitrage you cited.

FAS 166 and 167 recently instituted go a long way towards helping that situation.

Increased capital requirements, I can't think, as I sit here, but I would be happy if I have any other thoughts to share them with you in writing at a later point. But I think certain things are in motion that are of substance.

COMMISSIONER THOMPSON: Mr. Bushnell, would you comment?

MR. BUSHNELL: I think if -- if one wanted to have some sort of further control around a new products process, there are several ways to accomplish that. Most of the institutions, and we can argue, again, observe that they didn't seem to work.

But in their own boundaries have a new capital, a new product screening committee, that -- that -- and I think Tom mentioned it, that would address a bunch of issues in terms of everything from internal, can we settle it, can we account for it, what's the customer reaction going to be, what's -- what are the taxation concerns that our customers might have all sorts of things.

MR. MAHERAS: Suitability.

MR. BUSHNELL: Suitability for customers. You could conceptually expand that to have, you know, in essence, an agency of the government that would look with those types of disciplines as part of it.

Another methodology would simply be to put the tax of extra capital on a new product. You don't necessarily have to have an agency that just says, until this, somebody would have to make a decision that says -- until this product is tried and tested in a time of stress, we're gonna have to acquire an extra -- an excess amount, however you want to define that, of capital for all those who originate it.

So I think my comment is I think there are several different ways that if that's thought to be unnecessary adjunct to the regulatory framework, there are several ways to accomplish that.

COMMISSIONER THOMPSON: Well, you had a pretty unique view because you were not just chief risk officer, but you were the chief administrative officer. And that would suggest that your purview looked across not just risk but how the organization itself functioned, how does information flow, how does the IT systems infrastructure work, on and on and on and on. And that might suggest that given that Citi is an amalgamation of companies that were brought together over the course of the last 15 years or so, that perhaps we didn't anticipate the stability of the organization and its ability to absorb the combination of market risk and all of the turmoil and stress that might have been going on as you tried to integrate many, many, many entities that you bought over the last 15 or 20 years.

In your judgment at this point, should the company have looked for greater organizational stability before it pressed into some of these new markets where the risk was really unknown?

MR. BUSHNELL: I -- I -- I don't think so, in that, in the integration process, one of our first things that we required, sort of all new members of the Citigroup family that we acquired or merged with and came involved with, was integrations of risk systems and risk policies that said, you know, whether it was an overseas institution or a domestic institution, I don't care how you were dealing with your risk policies, here's how you will do it on a going-forward basis.

So at least from a risk perspective it was one of our primary areas of focus to get integrated as fast as we could. Clearly other areas, as chief administrative officer, areas like technology is a tough one, it -- it takes, I'm sure you're aware, in the business, a long time to get legacy systems and get a consistent methodology for that.

But I think we tried to prioritize, therefore, our integration process with special attention to compliance issues, policy issues, risk issues as being the ones that were the most important to get consolidated first, if you will.

COMMISSIONER THOMPSON: So let me turn my attention to Mr. Dominguez and Mr. Barnes, for a moment.

If you think about risk and you have very scientific models that give you a sense of whether or not a given market or a given product is, in fact, risky to a certain level, I guess the question is, at what point did you or might you have talked to people who were really on the ground, the traders, the analysts, the people who really had a sense of what was going on in the market around these products as you were making your call as to whether or not the business was sound or not?

Oftentimes traders will have a much closer insight into what's going on than perhaps someone who's sitting, you know, in your role. So were they a part of your process or not? And how was that incorporated in a model that you yourselves have said was more statistically driven as opposed to human judgment core unit?

MR. DOMINGUEZ: So in the process of warehousing and creating an ABS CDO transaction for each piece of collateral, that is, each security that ultimately went into the collateral pool, and there may be 50 to 75 different pieces of collateral or secure -- individual securities in there, we conferred with the secondary trading desk.

And because they not only were in the market to see if there was -- they were hearing anything about that underwriter or -- or even that particular transaction, but they could make a judgment on where that piece of collateral was trading relative to the market.

So clearly, if it was trading much wider than the rest of the market or much tighter, that always raised bells and whistles.

The second part, which you know we haven't talked about here yet, is for each of these CDO transactions there is a third-party collateral manger. And there's two types of CDOs, the static CDOs and the so-called arbitrage CDOs, which was -- is largely Citi's business.

And a third-party collateral manager was hired for every transaction. I should say most transactions, so we did some static transactions. And that manager typically was -- had an expertise and track record in the particular asset class of the CDO we were -- we were creating. So -- so as a multi- -- we did talk to other people, we talked to other markets, we had --

COMMISSIONER THOMPSON: How about the guys that were actually writing the mortgages? I mean, Citi's a conglomerate. It does a little bit of everything. And so you'd have a sense of the quality of what is coming into the hopper if you talk to the guys who were actually originating the paper.

MR. DOMINGUEZ: Well, that's true, but our belief was that -- that would be reflected in the market prices. And so that's why that factor was very important.

And also the diligence done by the third-party asset managers. And I really need to emphasize that these were very well known, in many cases had longstanding reputations in that particular asset class and managed other portfolios in that asset class, so -- so that was the process.

CHAIRMAN ANGELIDES: Mr. Thompson, do you would like some additional time?

COMMISSIONER THOMPSON: Yeah, I'm just --

CHAIRMAN ANGELIDES: I yield a couple minutes.

COMMISSIONER THOMPSON: I'm just struck by the fact that for a lack of a better term, we can hide behind statistical models, and leadership by and large is about intuitive sense and judgment.

And at some point somebody had to make a call, independent of what the model produced, and so it just seems odd to me that we'd say, well, our models told us this and therefore this is the way we behave.

Where was the intuitive leadership judgment that says something may not be right in this market?

MR. BARNES: If I can just comment? And I think on the risk management side, I think working closely with the business, and I think we already viewed ourselves as partners with the business, and we were on the desk interacting with them to a dialogue on a daily basis, I interacted with my counterpart who covered the global securitized markets. This is the market making in -- in -- in subprime RMBS, made sure that we were consistent in terms of our methodologies. As Mr. Dominguez mentioned, while assets were in the warehouse as they were being ramped up ahead of a planned CDO, they were being mark-to-market daily, even though if the securitization went ahead, effectively Citi would recover its cost.

But we reflected that mark-to-market volatility through P&L on a daily basis. We relied on market surveillance, everything from our own internal RMBS research or mortgage research department as CDO and CLO research group.

And then we also looked at other market indicators, the fact that CDOs were pricey. Recently priced deals were still commanding extremely tight -- extremely tight spreads, whether it was from major insurers, the bond insurer's model lines, or other banks not only in the us but also in Europe, who continued to view it as, you know, as extremely safe risk.

And then the final thing is that the -- the other thing is while we saw the market deteriorate, the business was actually very proactive at reducing some of the low order risks, some of the first order risks.

So in terms of getting rid of more junior tranches accelerating the warehousing process throughout the summer of 2007. And in retrospect, you know, the error, and I know this is starting to become a bit of a broken record, but it was -- the focus was not on the super senior position.

And even the super senior positions of the liquidity puts were really only intended to be held temporarily. And the assumption was the market would always be there for that, so that was -- that was my sort of assessment of how we were looking at risk what was admittedly a very fluid situation with the a lot of, you know, significant market volatility. But we -- we -- that was part of our job to rely on that type of market surveillance.

COMMISSIONER THOMPSON: All right. So, Mr. Maheras, can you answer that from the business perspective as opposed to the risk management perspective?

MR. MAHERAS: I think so.

CHAIRMAN ANGELIDES: Let's take -- if we can just take about a minute and a half, at most, I'm only concerned because there's a time we have to get out of here.

But, John, I want you to -- I want you to get that. No, Mr. Maheras, please respond.

MR. MAHERAS: Okay. I think it's a very good question. You started with the point about the intuitive leadership. And, you know, again, it's probably hard to imagine that existed here given the story we’re telling, but I can assure you that the managers of the structured credit business to whom Dr. Nestor Dominguez reported were actively focused on subprime risks and actively focused on risk reduction in the area and were effectively -- effectuating that, again, and the -- and where they saw the risk, and that was happening actively.

The mortgage people, who were a different business unit within fixed income, you heard from Ms. Mills earlier today, she was in that unit, their supervisors were actively managing down exposures with a negative and quite concerned view.

They were -- these units were getting intuitive leadership. We were all very focused on that I think, as a general matter, in companies like ours, it's very important to make sure that silos of expertise are communicating with each other and, to the maximum extent possible that it was encouraged; it was a best practice.

And to varying degrees it was done extremely well. And certain places, where communications should be had, and other places it was suboptimal, but it was a best practice, it was an important one, and I think you made that point.

COMMISSIONER THOMPSON: Thank you very much, gentlemen.

CHAIRMAN ANGELIDES: Thank you, Mr. Thompson. Ms. Born?

COMMISSIONER BORN: Thank you.

EXAMINATION BY COMMISSIONER BORN

COMMISSIONER BORN: I would like to understand a little bit better what synthetic collateralized debt obligations are. I think I'm beginning to understand cash CDOs, but I would appreciate it, Mr. Dominguez, if you could indicate for us what the difference between a cash CDO and a synthetic CDO is. My understanding right now is that in a synthetic CDO, rather than containing actual RMBS's, for example, it would include credit default swaps or other kinds of derivatives on asset-backed securities; is that correct?

MR. DOMINGUEZ: That's the essential difference. There were some other technical differences, but that's the key difference.

COMMISSIONER BORN: And how much of the issuance of CDOs by Citi were synthetic and how much were cash in terms of the proportion?

MR. DOMINGUEZ: It was primarily cash. The synthetic ABS CDO market, which was run out of London, our London operation, which did not report to me, was a new and growing market, and I don't have the exact numbers. There's a proportion, but it's on the order of about a third, a third to a quarter of our positions.

COMMISSIONER BORN: Perhaps we can ask Citi to provide exact statistics on that.

Why was it growing at that point of time? Was it because it was more difficult to get the assets for the cash CDOs?

MR. DOMINGUEZ: I think that's part of it. When you're warehousing collateral, you're effectively limit -- limited to what's out there in the market and trading, so that's part of it.

The other part of it is that the managers, the third-party managers, who were often hired to -- to select a collateral liked or -- in fact, investors liked the ability to reference any asset of any vintage if -- if there was a willing counterparty to play among the dealer community willing to write the other side of the contract.

So it allowed more flexibility. And, as I mentioned before, a number of investors, an increasing number of investors, were -- were agnostic to whether they got the exposure synthetically or in cash.

COMMISSIONER BORN: So essentially, by synthetic, we mean that there are aren't any actual assets, just the derivatives obligations?

MR. DOMINGUEZ: That's the pure -- pure synthetic CDO.

COMMISSIONER BORN: Although I assume there were some hybrids with actual RMBS.

MR. DOMINGUEZ: And that's what they were called.

COMMISSIONER BORN: And some synthetic assets? They were called hybrids.

MR. DOMINGUEZ: Yes.

COMMISSIONER BORN: Do you think, and let me maybe ask Mr. Barnes this. I understand that you suggested to the staff that the synthetic CDOs being built on the credit default swaps essentially allowed deals to be created faster than if you had to actually accumulate all the assets.

MR. BARNES: That was --

COMMISSIONER BORN: Is that correct?

MR. BARNES: That was my observation, yes. One of the challenges is that in actually building a portfolio of RMBS or other types of securities to go into the CDO, typically the market is more of a buy and hold market. And so you had to wait for the new issuance of the underlying securities such as the ones that Ms. Mills described earlier.

Whereas, as long -- to -- to Mr. Dominguez's point -- as long as you can actually find a willing buyer of the CDS protection on a particular RMBS you could effectively build this portfolio significantly more quickly.

COMMISSIONER BORN: So did the use of synthetic CDOs allow, in effect, more securitization to occur than if you had to wait for the RMBS to be actually issued and available?

MR. MAHERAS: Probably at the margin, but it's important to remember that it was really the investors, was the limiting factor. If there are no investors, it didn't matter how quickly you can create the deal. So, at the margin, I would say that's right.

COMMISSIONER BORN: But you suggested that investors were, in fact, interested?

MR. MAHERAS: They are. They are.

COMMISSIONER BORN: In the --

MR. MAHERAS: But so -- so it's -- it's a question of -- what I'm trying to suggest is that there wasn't an infinite capacity to do this because your ultimate limitation would be the investors, whether they wanted that risk at all.

But, as I said, at the margin it allowed for an easier and cleaner execution of the transaction.

MR. BARNES: And while the investors were there the -- from a risk standpoint, the fact that shortened the horizon period or the hold, holding period for the warehousing, that was actually viewed as a sort of a risk mitigate. And -- and -- and it was actually the underlying market that was more concerting for us in 2007.

COMMISSIONER BORN: Well, as the underlying market began to close down, did the synthetic CDOs allow you to continue securitization longer than you otherwise would have been able to?

MR. MAHERAS: No, no. They -- they -- they pretty much shut down around the same time.

COMMISSIONER BORN: So investors were scared off --

MR. MAHERAS: Exactly.

COMMISSIONER BORN: -- by the freeze in the mortgage market essentially?

MR. MAHERAS: That's right.
COMMISSIONER BORN: So you don't think that the synthetic CDOs in any way contributed to extending the period of securitization or the appear -- appearance of the housing bubble?
MR. MAHERAS: Well --
MR. BARNES: From my standpoint, I would say that to the extent it allowed more deals to print, then probably it resulted in losses being larger in aggregate than had those deals not occurred.
COMMISSIONER BORN: Well, that was my next question, whether, you know, Citi experienced greater losses because of the securitization of synthetic CDOs than it otherwise would have. I assumed there were losses on the synthetic CDOs --
MR. MAHERAS: Yes.
MR. BARNES: Yes.
COMMISSIONER BORN: -- as well as the cash CDOs?
MR. MAHERAS: Yes. But in answer to your question, I don't think it extended the housing bubble because it didn't require any origination.
COMMISSIONER BORN: All right. I yield back the rest of my time.
CHAIRMAN ANGELIDES: Terrific. Ms. Murren.

EXAMINATION BY COMMISSIONER MURREN

COMMISSIONER MURREN: Just a follow-up question on our conversation earlier about the regulators.

You had mentioned that both you, Mr. Maheras, and you, Mr. Bushnell, that you were sensitive to the fact that your regulators needed to convey information to the Fed about the safety and soundness of the parent company.

And you had talked about your interactions with the OCC and a little bit with the Fed, but you didn't mention the SEC. And I think, if I'm not mistaken, that the SEC is the functional regulator for the investment bank; is that right?

MR. BUSHNELL: For the us portion of the investment bank.

MR. MAHERAS: And I would say the investment bank, I think it may have -- Commissioner Georgiou may have mentioned this -- the investment bank conducted activities in a number of different legal entities.

It conducted activities on the bank balance sheet and it conducted activities at the holding company, conducted activities at Citigroup global markets. Global markets was the broker-dealer entity which was regulated by the SEC.

COMMISSIONER MURREN: And did you have interactions with the SEC.

MR. MAHERAS: My earlier reference to having less interaction there was a personal one. My interaction with the SEC was lower than that of my interaction with OCC and the Fed. I can't speak to the frequency of interaction in other parts of the firm with the SEC.

COMMISSIONER MURREN: And could you talk a little bit about their approach to supervising that entity, the investment bank?

MR. BUSHNELL: Would you like me to address that?

COMMISSIONER MURREN: Either one or both of you, which -- whoever.

MR. BUSHNELL: I think that I, too, saw relatively less of the SEC amongst my regulatory contacts. They were there and a lot of times the regulators did try to share information. They would send each other their exam reports of different trading desks or different divisions throughout the world.

And this included not only the OCC and the Fed, and the Fed of the OCC, but as you say, foreign regulators, certain of the large regulators would get a piece of that. The SEC in some instances would get pieces of that but I -- I -- not as frequently.

I would say, when I saw groups of regulators, the Fed was always there. The OCC was always there. I mentioned the FSA in London for all of our legal entities was always there. The SEC would occasionally be there, in part because sometimes the issues being discussed weren't relevant to the U.S. broker-dealer, but that was my experience.

COMMISSIONER MURREN: Thank you.

CHAIRMAN ANGELIDES: Mr. Thomas? A burst of energy as we come around the turn.

VICE CHAIRMAN THOMAS: Thank you, Mr. Chairman.

EXAMINATION BY VICE CHAIRMAN THOMAS

VICE CHAIRMAN THOMAS: I asked if you would be willing to respond to us in writing over a period of time about issues that we're dealing with. We didn't talk about it today, but I am, based upon my background in Ways and Means and the particular profile of your company, with such a significant presence outside of the United States, what are you, 50/50, 60/40?

MR. BUSHNELL: I think 50/50 --

VICE CHAIRMAN THOMAS: Internal versus

external --

MR. BUSHNELL: -- I think for assets or income is a reasonable estimate. It has varied over time.

VICE CHAIRMAN THOMAS: I mean, this was worldwide. You folks deal in markets around the world and we're working on our problem, focused on our needs, and repairing our problems.

But if we don't do this on a broad international basis, we're not going to accomplish a whole lot. And -- and there's going to be an even greater reaction to people who are supposed to know what they're doing, not doing it on that basis.

Now, obviously we have tried to move some things internationally, but I would very much like to pick your brains, if that's a word that I can use, on -- based on what you do with one foot in the world, especially Europe, and one foot here, what would make more sense?

I'm more than willing to talk about a structure which is fair, but I also would like to talk about a structure that gives us a modest advantage in terms of not being dumb about changes that we're going to make.

I mean, when you look at an international situation, we somehow don't want to have product and financing linked in a way that you can make a sale on a one-stop shop when most of the rest of the world operates that way in dealing with folks.

So if you're willing to do that, that would be very helpful to me.

I just want to make a couple of comments, in part, Mr. Maheras, about your statement in terms of constant contact notwithstanding the silo structure in communications. In the interview, Mr. Bushnell, on the question, were you aware that Citi global securitized markets, which I believe are under the direction of Susan Mills who was here before us earlier, they were decreasing their purchases in securitization of subprime mortgages due to concerns with the mortgage market, in a real time situation were you aware that that division or department was doing what it was doing at the time it was doing it?

MR. BUSHNELL: Commissioner, at that point in time, for that specific area, I was not. I knew that we had several different areas where, both in risk management and the business of their own volition if you will, were looking at subprime exposures and increasing loan loss reserves, tightening underwriting standards on the consumer side, et cetera, but as the specifics of Ms. Mills' business, I was not aware of that at that time.

VICE CHAIRMAN THOMAS: And again, in reference to notes from meeting between Citigroup and regulators in late November of `07, quote, effective communication across business was lacking, management acknowledged that in looking back, it should have made the mortgage deterioration known earlier throughout the firm, the global consumer groups saw signs of subprime issues and avoided losses as did mortgage-backed securities traders, but CDO structures business did so belatedly, no dialogue across businesses.

So we're looking, based upon all the data we put together, with a slightly different profile, in reacting to what you said.

Mr. Bushnell, when Mr. Thompson asked you a question about structures, and I was going to go through a whole series of questions about capital requirements, because throughout this entire period you were, according to the standards, adequately capitalized, the rating agencies, stress tests, but I don't think it will be useful in any kind of a dialogue right now.

In your response to him, Mr. Bushnell, I didn't get a feel for what you believe. I mean, I heard, should you want to conceptually expand that, I always love ephemeral, non-committed, general philosophical discussions. You guys made an impassioned plea that you were worth what you got. So I want to get something back in terms of after what you went through -- and I'm really looking at all of you, notwithstanding the fact that I'm looking at Mr. Bushnell -- I want to know, from your experience, and I understand that it was an extraordinary circumstance, but then there should be a willingness to be extraordinary about your openness and frankness about what would help.

I understand additional capital, but once again, the standards that we had. I'm not going to ask you now what you think of the financial regulation moving through Congress, because there's going to be a whole series of legislation moving through Congress, but I do want to enter into a discussion, we'll structure it, give you plenty of time if you will be willing to respond back.

And I know, Mr. Maheras, you took umbrage with my talk about you not thinking things go down. I believe you said that you didn't anticipate so many people walking away from their houses. That was a statement you made.

Most of them wouldn't call them houses. They call them homes. And they didn't walk away from them. They were dragged away from them, through circumstances they believe that were beyond their control, but somebody other than themselves was at fault.

So if you put the context of what we're looking at in trying to explain it to people, when you get these kinds of responses, it makes it very, very difficult to fairly talk about you in the circumstances you were in, regardless of remuneration and structure of financial reward, that you get it. That's all. It's tough.

Thank you, Mr. Chairman.

CHAIRMAN ANGELIDES: Thank you, Mr. Thomas. All right. Commissioners and witnesses, this is the stretch run, here. I have a number of questions. I'll try to see if we can't get yes, no's, pretty quick answers to these.

EXAMINATION BY CHAIRMAN ANGELIDES

CHAIRMAN ANGELIDES: I want to get a sense of your view on a couple big matters.

So the first is just the size and complexity of Citigroup, an institution that had assets, I think, that were about 690 billion or so in 1998, grew to -- by 2007 to 2.188 trillion on balance, another 1.26 trillion off-balance-sheet, so 3.4 trillion.

Leverage, I think, by 2008, of tangible, common equity assets were 61 to 1. When you take the off-balance-sheet, 97 to 1, I'm going to ask you, Mr. Maheras, and particularly because you said you spent -- I think in one of your interviews -- you spent about 1 percent of your time thinking about CDOs which ultimately produced a 30-plus-billion-dollar write-off. Is this institution just too big to manage, too big to regulate, too complex?

MR. MAHERAS: It's an important question. I -- by the way, I was given different points in time, and 1 percent referred to an earlier time when it was -- it warranted less focus. Later in `07, it was much more than that.

But in terms of Citigroup being too large of a -- too complex to manage? I don't -- I don't necessarily subscribe to that, I think it's more complicated to manage a company with the breadth and range of activities of a Citigroup than that of a mono-line investment bank, but I don't think it's too big.

I think you have examples out there of firms that are just as large that are perceived to be well managed. And so I don't think that, by definition, Citigroup is too big to manage.

CHAIRMAN ANGELIDES: All right. Mr. Bushnell, Mr. Thomas referred you to, I believe, a meeting you attended with Mr. Rubin, but albeit, I guess he attended it briefly. This was the November 17th, 2007, meeting with the senior supervisors from the Federal Reserve of New York, Federal Reserve Board, the OCC, the SEC, the UK FSA.

He referred -- and in that, and I don't expect you to have these notes in front of you, but you did make a number of comments about poor communication across businesses. You said that the firm did not have adequate firm-wide consolidated understanding of its risk factor sensitivities. Senior management business and risk management did not fully appreciate the market risk of the leverage loan pipeline, the routine super senior CDOs.

These are actually notes, these aren't verbatim, these are notes of your comments. You left the institution, too big to manage, too complex, because your comments here indicate a significant level of concern about the ability to manage this well.

MR. BUSHNELL: I think that there was very definitely I had lessons learned and was trying to -- I set those forth to our board of directors during the crisis, as they come into my mind, and at that meeting with the regulators, I said, here's areas that we could improve upon given what's happened, et cetera.

As to that relation to complexity, Chairman Angelides, I'd answer it slightly differently, and it has to do with the nature of our global economy, et cetera. I think that from customer's side, when you think of customers in a broad sense, the inevitability of an institution that can service global capital flows will be a reality, whether it's going to be in the United States or somebody else is going to take us over from that, that by nature, will mean that there's multiproduct, multi-types of customers, corporate customers, consumer customers, institutions, et cetera.

So I think we have to sort of face the reality that we will have these huge global financial institutions and, therefore, concentrate on their governance and regulations rather than saying, no, that we're going to somehow make them smaller.

CHAIRMAN ANGELIDES: All right. Let me move on, I want to talk about these super senior CDOs, that the various tranches, but I want to see if I can simplify them. I mean, in the end, Commissioner Georgiou I think made a good point. You are taking a pile of blank and taking stuff in the middle or the bottom of that, and all of the sudden shoving it to the top, and the lead becomes gold.

And I want to pick up on something that Mr. Thompson said, just about intuitive. It is very clear you didn't really underwrite the underlying collateral. I think it was -- was it Ms. Duke who reported up to you or vice versa?

MR. BARNES: Vice versa.

CHAIRMAN ANGELIDES: You reported to Ms. Duke?

MR. BARNES: Right.

CHAIRMAN ANGELIDES: She said her comment in an interview with us, we were seduced by structuring and failed to look at the underlying collateral.

So just reflecting on these CDOs, these -- you know, you take an original loan with original collateral, and just by way of background, I'm a real estate person, so sticks and bricks is what I relate to real value, real assets.

You take it through the next stage; it

securitizes as an RMBS. Now you take it to the next CDO, and then you can have synthetic CDOs. And I guess I want to talk about the underlying value of these, because the fact is, I don't know what kind of stress test you did but here's just some basic facts. From `90 to `91, real home prices did drop nationwide in this country by a cumulative 3 percent. By the fourth quarter of 2007, at which point these CDO super -- super senior tranches are in free fall and market value, you write off 18 billion, but home prices have only fallen 5 percent.

So I guess what I'm saying is, what was the stress test? Was it never going down? They'd fallen from `90 to `91 at 3 percent, and I know I lived it. I was in California and in the land development business.

So the question is how -- how stressful was the stress test? Doesn't seem like much, 5 percent is all the prices had dropped by the time you guys had taken an 18-billion-dollar write-off.

MR. BARNES: Let me -- let me comment on that, because I think, you know, one of the things, and I referred to the Commissioner earlier about the intrinsic cash flow model, and that was really the first quarter was actually it was in October, I believe, that -- that the initial loss, the 8- to 10-billion-dollar estimate of the fourth quarter was disclosed.

And based on this model, based on an assumed further decline in home prices, which was produced out of our economics and market analysis group, the bulk of the super seniors, I believe, all of the liquidity puts which were backed by older vintage collateral, did not break, in other words, they -- they recovered a future value of par. But because we were required to mark to fair value under the accounting standards and there really was no market, it was really the -- the use of a very large discount factor applied to those future cash flows that contributed to that large write-down.

CHAIRMAN ANGELIDES: Well, so here's the problem with models, again having been in real estate, you know, sometimes you can use your Argus models, but at some point the lease either renews or it doesn't. They either buy your lots or they don't. And it doesn't sound like this was very binary and calculated in this possibility. I mean, that's obviously -- it did not calculate this in, correct?

MR. BARNES: And the bine- -- the binary reference is critical because this really is an out-of-the-money option, which suddenly has -- has zero intrinsic value to then suddenly has a substantial loss associated with it.

CHAIRMAN ANGELIDES: But that happens in markets.

MR. BARNES: Yeah, and based on the market surveillance that we got, the market was commanding a very, very small premium across not just banks, like ourselves, but other market participants, including insurers and the mono lines.

In hindsight, we didn't -- we didn't develop the models. We didn't look through not only to the RMBS, but looked through to the underlying rentals.

CHAIRMAN ANGELIDES: Right, the real assets.

MR. BARNES: The real factors --

CHAIRMAN ANGELIDES: Both the real assets and the real borrowers.

MR. BARNES: And the real factor that actually drove the losses, which is something which is extremely difficult to model, was the fact that it was actually massive ratings downgrades, which because of the underlying characteristics of the RMBS and specifically the CDOs that were backed by RMBS, altered the allocation of cash flows associated with those downgraded securities. And, as a result, effectively, these CDOs got starved of cash because they were actually backed by these mezzanine tranches of RMBS.

CHAIRMAN ANGELIDES: Right, right, which were subordinate to the senior, which goes back to the very nature of the product.

MR. BARNES: And that was something which the industry didn't model well. And -- and -- and it's to some degree given the challenges that the rating agencies have had, is rather behavioral. When they elected to downgrade securities by multiple notches --

CHAIRMAN ANGELIDES: But lead does melt.

MR. BARNES: I'm sorry?

CHAIRMAN ANGELIDES: That's the point, lead melts where gold doesn't, and so the underlying collateral is a huge flaw in this.

All right, let me ask this next question about how things were booked. So here's a basic question I have, and it really goes to how you booked these assets, because it goes to how Citigroup was able to report profits and executives were able to take compensation.

I think we understand the fact that you really couldn't sell these super senior tranches; correct? No, you really -- and, well, you didn't sell much.

MR. BARNES: I think in the case of the liquidity puts, most of which predated my time and the risk management group covering the business, but my understanding was that it wasn't an intention to sell the liquidity puts. But there were other deals where the super seniors were sold to European banks, U.S. banks, as well as bond --

CHAIRMAN ANGELIDES: At par?

MR. DOMINGUEZ: Yes.

MR. BARNES: Yes.

CHAIRMAN ANGELIDES: But what kind of trading volumes? Because here's my --

MR. DOMINGUEZ: The typical trade would be very chunky. So, in other words, a -- a conduit would buy 500 million in one transaction or a billion. It was -- it was common to do billion-dollar.

CHAIRMAN ANGELIDES: Well, this is something I think we can explore in a written interrogatory, but here's my question: If you had these assets, and I guess in the spring of `07 for the first time under that new FASB rules you did have to lay out your Level 1, your Level 2, your Level 3 assets, and these were Level 3 assets, correct, for which there was no discernible market activity in pricing?

But you booked them at a hundred percent, which then of course allowed Citi until you did write them down, to book profits, which then resulted in compensation. So the organization in a sense is booking profits on these values.

I have a basic question. I'll make it simple for everyone watching this. If I have a home I think is worth 200,000 but there's no market for it and no one would pay me 200, it's not going to be worth 200.

So I guess I would ask, and maybe if you have a quick answer, how the heck did you book these at par and keep them there so long?

MR. BARNES: I'm not an accountant but in terms -- I have been involved in the -- in the discussions around that, and from my standpoint, we looked, as I said in my opening statement, we looked at comparable analysis, and other deals were pricing at similar levels.

We were able to -- we were able to buy protection from bond insurers at very, very tight spread levels, ten basis point spread levels.

And in the absence of an observable market I think it is acceptable to use the most comparable analysis that you can in what was always a very illiquid and non-traded market.

CHAIRMAN ANGELIDES: All right. I think I want to probe this, because I want to understand whether across the industry, these things were booked at levels that just weren't reflective of reality, they were illiquid assets, they were put in Level 3, and I -- and in -- and so I -- I -- I think we would like to explore that, a couple --

MR. MAHERAS: I think --

CHAIRMAN ANGELIDES: Yes, go ahead, Mr. Maheras.

MR. MAHERAS: I think -- I think you said that they were booked at par. When they were booked at par, my recollection is it's when these things were trading at par, when there were observable quotes.

I think what these gentlemen are referring to is when the market stopped and there were no longer observable, quote, trading activity. That's when they began --

CHAIRMAN ANGELIDES: All right. Well, that's what I would like to see.

MR. MAHERAS: There were other methodologies to mark them which resulted in them taking current markdowns.

CHAIRMAN ANGELIDES: Because the ABX does start moving down slightly, but I would like to at least look at where the ABX was. Yes.

Let me see if I can move quickly through these. I want to just talk about risk, for a minute, and then I have one final set of questions, members, and that is, Mr. Bushnell or Mr. Dominguez, let me see if I can get the right document here. In October of 2006, your financial control group wrote a memo that's addressed to you about liquidity puts, and they say, the liquidity risk and the liquidity puts is the risk that Citigroup must purchase the ABCP, the asset-backed commercial paper, long-term notes that cannot quickly be sold enough to prevent or minimize a loss.

Part of liquidity risk and liquidity puts is the risk of a Citi downgrade, which can lead to 26 billion dollars in liquidity put exercises hitting our balance sheet simultaneously, in this scenario Citigroup is faced with severe concentration risk.

Did you do anything about that or look at that or --

MR. DOMINGUEZ: Yes.

CHAIRMAN ANGELIDES: Or at that point were you stuck?

MR. DOMINGUEZ: No, no, that -- that working paper engendered a lot of discussion, reexamination of how we were treating it. There were many more people involved that were on that distribution list.

And, again, it was decided that the -- the product was priced appropriately, it was marked appropriately, because we were seeing products that had as many comparable elements, sufficient comparable elements, at tighter levels than that.

And again, as I said before, the credit risk component was marked as if it was already on the books.

CHAIRMAN ANGELIDES: All right. Here's the final set of questions. And I just want to tell you, Mr. Bushnell, I am going to submit some questions to you. You made a presentation, just to let you know, on October 30th, `07, internally, and it was a presentation to the board of directors.

And so I am going to ask some questions for you about that presentation, which was basically review of the current environment, and I do want to ask you, so you might begin preparing. You had noted a bunch of significant events, like HSBC announcing losses associated with mortgage delinquencies, the Bear Stearns asset management funds having their problems, and I really would like to get a picture as these things happened in `07 what you did to react to those, so I'll get that to you.

But here's my final question, and I would like to see if anyone would like to comment on it. I want to understand the timeline, and these are questions I will pose to Mr. Prince and Mr. Rubin tomorrow.

June 30th, as I understand it, you still have everything marked, correct, at par?

MR. BARNES: Par.

CHAIRMAN ANGELIDES: All right. On July 20th, in an earnings call, your CFO, Mr. Crittedon, basically tells the world you have 13 million dollars in subprime exposure.

On October 15th, on an earnings call, it's announced, and I believe it's -- I can't remember who made the announcement -- but, again, Citigroup has 13 billion dollars of exposure and then, of course, on November 4th, it's, whoops, we've got 55 billion.

At what point did senior management know that 13 had become 55? No one? I mean, you are senior, but when did someone else above CEO level/board -- know that 13 had become 55.

MR. BUSHNELL: If my recollection goes into that, it comes into the definition of exposure and what we thought was possibly a loss. So I think that presentations to senior management, certainly the super senior numbers was not included in the July number that you've referenced there.

And we started to have discussions with that in early September in terms of a senior management standpoint. And we had some board tutorials and updates that struck me as late September, maybe the first week in October.

CHAIRMAN ANGELIDES: Is it fair to say that the CEO and the board did not know about the liquidity puts and the direct senior exposure, senior -- super senior exposure prior to that September time period?

MR. BUSHNELL: I think that's fair.

CHAIRMAN ANGELIDES: Anyone have a different recollection?

MR. MAHERAS: My recollection is pretty close to David's, except I -- I think I recall hearing about the exposure sometime in August and immediately elevated it. I can't tell you if it's August or late

August or early September, but it would be around that month, you know, within a month of David's recollection.

CHAIRMAN ANGELIDES: Okay. I assume you have nothing to add?

MR. DOMINGUEZ: I'm not involved in those discussions.

CHAIRMAN ANGELIDES: Okay. All right. Those are all my questions. Any other Commissioners have anything that they want to put on the table?

Gentlemen, thank you very much for coming today. We do appreciate your time and your answers and we will have additional questions. And we appreciate it all very much.

Thank you to the public, who has joined us today, and thank you, the Commissioners, for all their hard work. This meeting is recessed or adjourned until tomorrow morning at 9:00 A.M.

(FCIC Hearing adjourned at 5:30 P.M.)