

**THE ROLE OF FANNIE MAE AND FREDDIE MAC IN  
THE FINANCIAL CRISIS**

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**HEARING**

BEFORE THE

**COMMITTEE ON OVERSIGHT  
AND GOVERNMENT REFORM**

**HOUSE OF REPRESENTATIVES**

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

DECEMBER 9, 2008

**Serial No. 110-180**

Printed for the use of the Committee on Oversight and Government Reform



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## THE ROLE OF FANNIE MAE AND FREDDIE MAC IN THE FINANCIAL CRISIS

TUESDAY, DECEMBER 9, 2008

HOUSE OF REPRESENTATIVES,  
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM,  
*Washington, DC.*

The committee met, pursuant to notice, at 10:04 a.m., in room 2154, Rayburn House Office Building, Hon. Henry A. Waxman (chairman of the committee) presiding.

Present: Representatives Waxman, Towns, Kanjorski, Maloney, Cummings, Kucinich, Davis of Illinois, Tierney, Clay, Lynch, Yarmuth, Braley, Norton, Cooper, Van Hollen, Murphy, Sarbanes, Speier, Burton, Shays, Mica, Souder, Platts, Turner, Issa, Westmoreland, McHenry, Foxx, Bilbray, Sali, and Jordan.

Staff present: Phil Barnett, staff director; Kristin Amerling, chief counsel; Karen Lightfoot, communications director and senior policy advisor; David Rapallo, chief investigative counsel; John Williams, deputy chief investigative counsel; Michael Gordon and David Leviss, senior investigative counsels; Russell Anello, Stacia Cardille, and Margaret Daum, counsels; Alison Cassady and Anna Laitin, professional staff members; Earley Green, chief clerk; Jennifer Berenholz, assistant clerk; Alexandra Golden, investigator; Caren Auchman, communications associate; Zhongrui "JR" Deng, chief information officer; Leneal Scott, information officer; Miriam Edelman, special assistant; Mitch Smiley and Matt Weiner, staff assistants; Lawrence Halloran, minority staff director; Charles Phillips, minority senior counsel; Brien Beattie, Molly Boyd, Christopher Bright, Alex Cooper, Adam Fromm, Todd Greenwood, and John Ohly, minority professional staff members; Larry Brady and John Cuaderes, minority senior investigators and policy advisors; Mark Lavin, minority Army fellow; Patrick Lyden, minority parliamentarian and Member services coordinator; and Brian McNicoll, minority communications director.

Chairman WAXMAN. The committee will please come to order.

Today, we are holding the committee's sixth hearing on the financial crisis. To date, we have examined the bankruptcy of Lehman Brothers, the fall of AIG, and the role of credit-rating agencies. We held a hearing with Federal regulators and one with the Nation's most successful hedge fund managers. Today's hearing will focus on the collapse of two government-sponsored mortgage financing enterprises, Fannie Mae and Freddie Mac.

On September 7th, the Treasury Department took control over Fannie and Freddie. The companies have now been given access to

\$200 billion in capital from the Federal Government. Our job today is to examine why Freddie and Fannie failed.

As part of our investigation, the committee obtained nearly 400,000 documents from Fannie Mae and Freddie Mac. These documents show that the companies made irresponsible investments that are now costing Federal taxpayers billions of dollars.

One key document is a confidential presentation from the files of Fannie Mae's CEO, Daniel Mudd. According to this document, the company faced a strategic crossroads in June 2005. The document states, "We face two stark choices: one, stay the course; or, two, meet the market where the market is." Staying the course meant focusing predominantly on more secure, prime and fixed-rate mortgages. The presentation explained that this option would "maintain our strong credit discipline and protect the quality of our book."

But, according to the confidential presentation, the real revenue opportunity was in buying subprime and other alternative mortgages. To pursue this course, the company would have to "accept higher risk and higher volatility of earnings." This presentation recognized that homes were being utilized like an ATM. It acknowledged that investing in subprime and alternative mortgages would mean higher credit losses and increased exposure to unknown risks, but the lure of additional profits proved to be too great.

The documents make clear that Fannie Mae and Freddie Mac knew what they were doing. Their own risk managers raised warning after warning about the dangers of investing heavily in the subprime and alternative mortgage market, but these warnings were ignored.

In 2004, Freddie Mac's chief risk officer sent an e-mail to CEO Richard Syron urging Freddie Mac to stop purchasing loans with no income or asset requirements as soon as practicable. The risk officer warned that mortgage lenders were targeting borrowers who would have trouble qualifying for a mortgage if their financial position were adequately disclosed and that the "potential for the perception and the reality of predatory lending with this product is great." But, Mr. Syron did not accept the chief risk officer's recommendation. Instead, the company fired him.

A year later, on November 10, 2005, a top Fannie Mae official warned, "Our conclusion has consistently been that the lowering of risk in many of these private-label securities has not adequately been reflected in their pricing."

On October 28, 2006, Fannie's chief risk officer sent an e-mail to company CEO Daniel Mudd warning about a serious problem at the company. He wrote, "There is a pattern emerging of inadequate regard for the control process." In another e-mail on July 16, 2007, the same risk officer wrote to Mr. Mudd again, this time complaining that the Board of Directors had been told falsely that "we have the will and the money to change our culture and support taking more credit risk." The risk officer wrote, "I have been saying that we are not even close to having proper control processes for credit market and operational risk. I got a 60 percent budget cut. Do I look stupid?"

But, these warnings were routinely disregarded. In one 2007 presentation, the management of Fannie Mae told the Board, "We want to go down the credit spectrum. Subprime spreads have wid-

ened dramatically to their widest level in years. We do not feel there is much risk going down to AA and A. We don't expect to take losses at AA and A level. Eventually, we want to go to BBB. We want to move quickly while the opportunity is still here."

Taking these risks proved tremendously lucrative for Fannie and Freddie's CEOs. They made over \$40 million between 2003 and 2007. But, their irresponsible decisions are now costing the taxpayers billions of dollars.

At an earlier hearing, the minority, Republicans, released a report that called Fannie and Freddie "the central cancer of the mortgage market, which has now metastasized into the current financial crisis." The next day, John McCain made a similar statement during a Presidential debate in Nashville, stating that, "Fannie and Freddie were the catalyst, the match that started this forest fire."

The documents do not support these assertions. The CEOs of Fannie and Freddie made reckless bets that led to the downfall of their companies. Their actions could cost taxpayers hundreds of billions of dollars. But, it is a myth to say they were the originators of the subprime crisis. Fundamentally, they were following the market, not leading it.

It is also a myth to blame the Nation's affordable housing goals. The bulk of Fannie and Freddie's credit losses, nearly \$12 billion so far this year, are the result of their purchases of Alt-A loans and securities. Because many of these risky loans lack full documentation of the borrower's income, they did not help the companies meet their affordable housing goals.

At today's hearing, we will have the opportunity to question four former CEOs of Fannie Mae and Freddie Mac, and I thank them for their cooperation. I also want to thank the companies themselves for cooperating with the committee's investigation.

But, I especially want to thank and congratulate the members of this committee for their work in this Congress. This will be the last full committee hearing we will hold this year, and it will be the last Oversight Committee hearing that I will chair.

It has been a tremendous honor to chair this committee. We began our oversight efforts in February 2007, with 4 days of back-to-back hearings on waste, fraud, and abuse in Federal spending. We investigated the missing \$8 billion in cash handed out in Iraq, the actions of Blackwater's private security guards, the politicization of Federal science, high drug prices, and CEO pay. We took testimony from Valerie Plame and Condoleezza Rice, Kevin Tillman and Donald Rumsfeld, Roger Clemens and Brian McNamee, and dozens of corporate and government leaders. And our actions were the catalyst for legislative changes that will save the taxpayers billions of dollars.

It has been a busy schedule, but the one constant of all of this has been the dedication and commitment of the members of the committee. Oversight is not easy. To have an impact, you have to work hard and know your facts, and that is what the Members have done in hearing after hearing. I will always be proud of the work of this committee and even prouder of the Members with whom I have had the great fortune to serve.

I know that this committee will do great things next year under the leadership of your new chairman and your new ranking member. And I want you to know that I will miss being here, and it has been a tremendous privilege for me to serve with you.

And I want to recognize the ranking member of the committee, Mr. Issa, for his opening statement.

[The prepared statement of Hon. Henry A. Waxman follows:]

**Opening Statement of Rep. Henry A. Waxman  
Chairman, Committee on Oversight and Government Reform  
The Role of Fannie Mae and Freddie Mac in the Financial Crisis  
December 9, 2008**

Today we are holding the Committee's sixth hearing on the financial crisis. To date, we have examined the bankruptcy of Lehman Brothers, the fall of AIG, and the role of credit rating agencies. We held a hearing with federal regulators and one with the nation's most successful hedge fund managers.

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We face two stark choices: (1) Stay the course; or (2) Meet the market where the market is.

“Staying the course” meant focusing predominantly on more secure, prime and fixed-rate mortgages. The presentation explained that this option would “maintain our strong credit discipline” and “protect the quality of our book.”

But according to the confidential presentation, the real “revenue opportunity” was in buying subprime and other alternative mortgages. To pursue this course, the company would have to “accept higher risk and higher volatility of earnings.”

This presentation recognized that homes were “being utilized ... like an ATM.” It acknowledged that investing in subprime and alternative mortgages would mean “higher credit losses” and “increased exposure to unknown risks.” But the lure of additional profits proved to be too great.

The documents make clear that Fannie Mae and Freddie Mac knew what they were doing. Their own risk managers raised warning after warning about the dangers of investing heavily in the subprime and alternative mortgage market. But these warnings were ignored.

In 2004, Freddie Mac's chief risk officer sent an e-mail to CEO Richard Syron urging Freddie Mac to stop purchasing loans with no income or asset requirements "as soon as practicable." The risk officer warned that mortgage lenders were targeting "borrowers who would have trouble qualifying for a mortgage if their financial position were adequately disclosed" and that the "potential for the perception and the reality of predatory lending with this product is great."

But Mr. Syron did not adopt the chief risk officer's recommendation. Instead, the company fired him.

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We want to go down the credit spectrum. ... Subprime spreads have widened dramatically to their widest level in years. We do not feel there is much risk going down to AA and A. ... We don't expect to take losses at AA and A level. Eventually, we want to go to BBB. ... We want to move quickly while the opportunity is still there.

Taking these risks proved tremendously lucrative for the Fannie and Freddie CEOs. They made over \$30 million between 2003 and 2007. But their irresponsible decisions are now costing the taxpayers billions of dollars.

At an earlier hearing, the minority released a report that called Fannie and Freddie "the central cancer of the mortgage market, which has now metastasized into the current financial crisis." The next day, John McCain made a similar statement during a presidential debate in Nashville, stating that "Fannie and Freddie were the catalysts, the match that started this forest fire."

The documents do not support these assertions. The CEOs of Fannie and Freddie made reckless bets that led to the downfall of their companies. Their actions could cost taxpayers hundreds of billions of dollars. But it is a myth to say they were the originators of the subprime crisis. Fundamentally, they were following the market, not leading it.

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I know you will do great things next year under the leadership of your new chairman and your new ranking member. But I want you to know that I will miss being here and that it has been a tremendous privilege to serve with you.

Mr. ISSA. Thank you, Mr. Chairman.

Before I begin, I would ask unanimous consent that my colleagues from Financial Services, the ranking member, Mr. Bachus, and Mr. Garrett of New Jersey, would be permitted to participate in this hearing today.

Chairman WAXMAN. Without objection, that will be the order.

Mr. ISSA. Mr. Chairman, I additionally ask unanimous consent that documents produced pursuant to the request by the committee, including certain e-mails, memorandum, and presentations of Fannie Mae and Freddie Mac, be inserted into the record of this hearing.

Chairman WAXMAN. If you gentlemen would withhold that unanimous consent request, we just want to be sure we are talking about the same documents.

Mr. ISSA. Of course, Mr. Chairman.

Chairman WAXMAN. Thank you.

Mr. ISSA. Mr. Chairman, also before I begin, on behalf of Ranking Member Tom Davis, who, as you know, has now left the Congress just slightly early, I have had the honor of serving with you and serving with Mr. Davis for these last 2 years. Although we have not always agreed—as a matter of fact, we have not often agreed—the elevation of this committee by your tireless effort has, in fact, put this committee where it should be: at the center of Congress's oversight of this large economy, both public and private.

And, for that, this committee will owe you—and hopefully, the picture to be hung soon—a debt of gratitude, because to elevate a committee is one of the hardest things in the world to do. Many chairmen spend years at the helm of a committee and see it reduced or, at best, held the same. But, you truly have left this committee much stronger than when you found it. And, for that, both sides of the aisle will always be grateful.

[Applause.]

Mr. MICA. Mr. Issa, would you yield to me?

Mr. ISSA. And I would yield to the gentleman.

Mr. MICA. You know, I think one of the reasons Mr. Waxman has probably sought the position on Energy and Commerce was to escape the claws of Mr. Issa and Mr. Mica. But we wish him well in his new endeavor.

Two things. One, there is no substance, as I told you before, to the fact that our steering committee is moving the two of us over to that committee. So, that will be very good. And, also, could you please keep me posted on the exact date of the hanging of Henry Waxman? Because I want to be here for it.

Thank you.

Mr. ISSA. Thank you.

Thank you for your indulgence, Mr. Chairman.

Chairman WAXMAN. The gentleman's time has expired—no. [Laughter.]

Mr. ISSA. Thank you, Mr. Chairman, for scheduling this important hearing. And thank you, again, for the second panel of expert witnesses. That shows a great deal of bipartisan cooperation, and, for that, again, I am grateful.

As we attempt to deal with the ongoing financial crisis, it is critical that we look at all the factors that caused the collapse of the

financial system. The one thing we know for certain is that the overinflated housing market and defaulting subprime loans are at the center of the problem. And it is no secret that I believe that Fannie Mae and Freddie Mac had either the primary role or certainly a primary cause of this failure.

The analogy of the Chicago fire and Mrs. O'Leary's cow is particularly appropriate here. The cow was the immediate cause of the fire, but there were a number of factors that made the fire inevitable. The fire spread quickly because homes were densely packed and made of wood. It wasn't a question of whether the disaster would happen, but when. I believe that Freddie and Fannie had a great deal to do with packing that great deal of wood close together for a number of years.

These two government-sponsored enterprises were repeatedly urged by politicians to deliver affordable housing to the American people. There was an inevitability in this policy, just as the events that led to the Chicago fire. Traditional home loans were replaced with easy credit, no-document, and no-downpayment loans. Instead of human judgment assessing risk, those responsibilities were shifted to rely on computer modeling. Outright fraud and greed wasn't isolated to just Wall Street, although I appreciate the chairman's work on uncovering the portion that was on Wall Street. Fannie and Freddie shared in this disgrace as it drove much of the poor decisionmaking that have led us to where we are here today.

Mr. Chairman, the time for double talk, not in this committee but outside this committee, is over. Mr. Chairman, the election is behind us. So, let us get to the bottom of this crisis and find out what really happened. We must work together to get to the root causes of this crisis, not just a root cause, but all root causes. It is important that we find out what factors interacted with each other to bring about the degree of financial destruction.

Of all the work we have done to date, it is inconceivable that we have not had any discussion of the role that we played, the role that congressionally mandated policies played in this crisis. We must ask ourselves, did Congress advocate policies that fermented this crisis? Did individual Congressmen and/or -women advocate because, in fact, it was a convenient relationship, both politically and perhaps personally?

Some will consider what I am about to say not politically correct. A few weeks ago, when the topic of Fannie Mae and Freddie Mac affordable housing loans were raised as a cause of this crisis, Chairman Barney Frank said it was racist to suggest as much. I will say here today, it is not racist to suggest anything and everything as a cause of this problem until it is properly eliminated by those who are not affected directly by it but, in fact, can dispassionately and objectively analyze what was or was not a cause of this problem.

In a recent Senate hearing on the automobile bailout, Chairman Christopher Dodd continued to point a finger at Wall Street as the culprit of the current crisis and many crises. Those two men are chairmen of the two most important committees, notwithstanding ours, dealing with the financial crisis, yet they appear to be wearing blinders in not wanting to discuss the full range of issues underlying this crisis.

Mr. Chairman, the goal of affordable housing is one of the most laudable goals we, as legislators, should seek to attain. But, we should do it in a way that does not destroy the whole financial system, which is, in fact, what has happened.

Let me draw a contrast. For decades, under the GI Bill of Rights, we allowed and encouraged servicemen to get VA home loans with little or no money down. And that program, Mr. Chairman, works well. What I am saying is that affordable housing is a desirable goal, and it can be done the right way.

But, in the case of the GSEs, how we encourage the program is something we have to come to grips with. We have to recognize that what we have done with the GSEs hasn't worked. Rather, it has allowed the most vulnerable in our society to be subject to predatory lenders. We gave hope to people with the promise of homeownership without telling them the American dream could turn into their personal nightmare. Mr. Chairman, we in the Congress have to look in the mirror because part of the blame clearly lies at our footsteps.

I have introduced legislation to establish a 9/11-type independent, nonpartisan commission composed of experts, not politicians, to assess what went wrong and how the system should be remedied. Mr. Chairman, in your new role, I would hope that you would sign on in the next Congress as a cosponsor of this legislation.

I believe that this committee and others should continue to actively look into the causes. We should, in fact, do our oversight role. But, the worst thing Congress can do now is to start legislating or advocating for regulation without a clear, nonpartisan analysis of what went wrong, including a look inward.

Business Week just ran an article indicating that many of the current reworked FHA loans will default in the near future and a second bailout will be necessary. Mr. Chairman, for all the committees in the Congress, this committee has a unique obligation and opportunity to work in a bipartisan way to follow the causes of this crisis, both independently and through a commission that can provide us with additional insight in all directions, including that which comes to our footsteps.

Mr. Chairman, I would hope that we will continue in the next Congress to make sure that the Financial Services Committee does not supplant this committee in making sure that government does what it should do, not only to encourage and allow homeownership to all, but, in fact, to protect the financial system that today is teetering on the edge of yet another precipitous fall.

If the Congress cannot do this in an objective and dispassionate way, then I assure you the minority will continue to pull at every possible lever to ensure that we can play a constructive role in ensuring that the wood will not be piled up again, that homes, whether in Chicago or throughout America, will not be built close together and of wood in order to have yet another Mrs. O'Leary's fire.

Mr. Chairman, thank you again for holding this important hearing. And I look forward to perhaps you being an original cosponsor of the legislation calling for a nonpartisan commission in the next Congress.

Chairman WAXMAN. Thank you, Mr. Issa.

I'm pleased to introduce our witnesses today.

We have Leland Brendsel, the former CEO of Freddie Mac. He worked at Freddie Mac for 21 years and left the company in June 2003.

Daniel Mudd, former CEO of Fannie Mae, served as the president and chief executive officer of Fannie Mae from June 2005 until September 2008. Mr. Mudd was also a member of the Fannie Mae Board of Directors from February 2000 until September 2008.

Franklin Raines is the former chief executive officer of Fannie Mae from 1999 until his retirement in December 2004. He previously served as Fannie Mae's vice president from 1991 until 1996.

And Richard Syron, a former CEO of Freddie Mac, served as the chairman and CEO from December 2003 to September 2008.

I want to welcome each of you to our hearing today.

It is the custom of this committee that all Members that testify do so under oath. So, I would like to ask, if you would, please stand and raise your right hands.

[Witnesses sworn.]

Chairman WAXMAN. The record will indicate that each of the witnesses answered in the affirmative.

Your prepared statements will be in the record in their entirety. We will have a clock that will indicate a time for 5 minutes. At 4 minutes, it will be green. The last minute, it will turn orange. And then, when the 5 minutes is up, it will turn red. That will be an indication to you that we would like you then to conclude your comments. Even though it may not be the complete testimony, the whole testimony will already be in the record.

We will start with you, Mr. Syron. Why don't we start with you? There is a button on the base of the mic. Be sure to push it and have the mic close enough so that it can be picked up.

**STATEMENTS OF RICHARD SYRON, FORMER CEO, FREDDIE MAC; DANIEL MUDD, FORMER CEO, FANNIE MAE; LELAND BRENDSSEL, FORMER CEO, FREDDIE MAC; AND FRANKLIN RAINES, FORMER CEO, FANNIE MAE**

**STATEMENT OF RICHARD SYRON**

Mr. SYRON. Thank you, Chairman Waxman and members of the committee. Good morning. I appreciate the opportunity to testify today and address your issues of concern in light of the current financial crisis. As you know, I served as CEO of Freddie Mac essentially from 2004 to September of this year.

Let me start with a very basic proposition. Freddie Mac was, is and, by law, must be a nondiversified financial services company, limited to the business of residential mortgages. Given the recent severe nationwide downturn in housing market, the only nationwide housing decline in housing values since the Great Depression, any company limited exclusively to that line of business alone would be severely impacted. As Treasury Secretary Paulson recently noted, given that GSEs were solely involved in housing, and given the magnitude of the housing correction we have had, the losses by the GSEs should come as no surprise to anyone.

With respect to the housing market, the prolonged glut of credit certainly was one factor that contributed to the housing bubble and its subsequent collapse. Another important factor was the shift from a system in which mortgage originators held loans to maturity to a system in which mortgage originators immediately sold or securitized a loan and retained no risk. In more recent years, increasingly complex financial techniques were also applied to the process with the objective of minimizing, shifting, or, some believed, virtually eliminating risk.

We all recognize that homeownership provides benefits and generates substantial social advantages beyond just shelter. We have learned the hard way, however, that the rapid expansion of homeownership is not without risk and ultimately not without cost if the choices made by individual homeowners are unaffordable.

What was the role of Fannie Mae and Freddie Mac in the credit crisis? These institutions were established by Congress to promote liquidity, affordability, and stability in housing finance. They do so primarily by guaranteeing the timely payment of principle and interest on mortgages originated by banks in order to facilitate the purchase of those mortgages by institutional investors, thereby enabling banks to make new loans. Congress has reaffirmed this role for Fannie and Freddie many times, including quite recently.

When the dramatic and widespread downturn in housing prices occurred, the pressures on Freddie Mac and Fannie Mae were enormous. The GSEs are a nondiversified business focused solely on residential housing in the United States. As the guarantor of almost half the home mortgages in the country, it is not surprising that these two firms would get hit hard by the biggest housing collapse in 75 years. This lack of diversification was extremely challenging for the GSEs, even though their credit standards were higher than other lenders.

There has been a lot of attention in the media and elsewhere to the problems associated with the nontraditional or subprime market. There is no question that Freddie Mac has incurred losses associated with nontraditional loans. But, it is important to remember that Freddie and its sister institution, Fannie, did not create the subprime market, I think as the chairman said. Freddie was, in fact, a late entrant into the nontraditional, i.e. non-30-year-fixed-rate conventional market, such as Alt-A.

The subprime market was developed largely by private-label participants, as were most nontraditional mortgage products. Freddie Mac entered the nontraditional slice of the market because, as the private lending sector shifted toward those type of loans, Freddie needed to participate in order to carry out its public mission of promoting affordability, stability, and liquidity in housing finance. In addition, if it had not done so, it could not have remained competitive or even relevant in the residential mortgage market we were designed to serve. Moreover, if you're going to take the mission of providing low-income lending seriously, then, by definition, you're going to take a somewhat greater level of risk.

Freddie's delinquency rates and default rates, both overall and for each type of loan, were much lower than those of the market overall and were especially lower than for mortgages underwritten by purely private institutions, many of which were severely im-

paired for some of the same reasons as Fannie and Freddie. Every institution with significant exposure to residential mortgages has been negatively impacted by the generally unforeseen magnitude and volatility and rapidity in the collapse of the housing price market.

Before I conclude, I just want to take a moment to recall the public mission of the GSEs. As everyone is aware, Freddie Mac is a shareholder-owned corporation, chartered for the purpose of supporting America's mortgage finance markets and operating under government mandates. We had obligations to Congress and to the public to promote our chartered purposes of increasing affordability, liquidity, and stability in housing finance, which included some very specific low-income housing goals. But, we also had obligations to our regulator to pursue our goals in a manner that was prudent and reasonable. At the same time, we had the fiduciary obligation to our shareholders that were identical to any other publicly traded company.

Freddie Mac always worked hard to balance these multiple objectives, and for decades, the company was effective. There is much to be said about the success of the GSE model, and those successes should not be totally overlooked because of the current crisis. As Congress looks to the future of residential housing finance, the GSEs can and should play an important role.

I would be pleased to answer your questions about my time at Freddie Mac and any lessons that might be learned. Thank you, sir.

[The prepared statement of Mr. Syron follows:]

Statement of  
Richard F. Syron  
Before the Committee on Oversight and Government Reform  
United States House of Representatives  
December 9, 2008

Thank you, Chairman Waxman, Ranking Member Davis, and members of the Committee. Good morning. I appreciate the opportunity to testify today and address your issues of concern in light of the current financial crisis. As you know, I served as CEO of Freddie Mac from 2004 to September of this year.

Let me start with a very basic proposition: Freddie Mac was, is, and—by law—must be, a non-diversified financial services company, limited to the business of residential mortgages. Given the recent severe, nationwide downturn in the housing market—the only nationwide decline in home values since the Great Depression—any company limited exclusively to that line of business alone would be severely impacted. As Treasury Secretary Paulson recently noted, given that the GSEs were “solely involved in housing,” and given the “magnitude of the housing correction we’ve had,” the losses by the GSEs should come as no surprise to anyone.

With respect to the housing market, the prolonged glut of credit certainly was one factor that contributed to the housing bubble and its subsequent collapse. Another important factor was the shift from a system in which the mortgage originators held loans to maturity, to a system in which mortgage originators immediately sold or securitized a loan and retained no risk. In more recent years, increasingly complex financial techniques were also applied to this process with the objective of minimizing, shifting, or—as some believed—virtually eliminating risk. We all recognize that homeownership provides benefits that generate substantial social advantages beyond just shelter. We have learned the hard way, however, that rapid expansion of homeownership is not without risk and, ultimately, not without cost if the choices made by individual homeowners are unaffordable.

What was the role of Fannie Mae and Freddie Mac in the credit crisis? These institutions were established by Congress to promote liquidity, affordability and stability in housing finance. They do so primarily by guaranteeing the timely payment of principal and interest on mortgages originated by banks in order to facilitate the purchase of those mortgages by institutional investors, thereby enabling banks to make new loans. Congress has reaffirmed

this role for Fannie and Freddie many times, including quite recently. When the dramatic and widespread downturn in housing prices occurred, the pressures on Freddie Mac and Fannie Mae were enormous. The GSEs are in a non-diversified business focused solely on residential housing lending in the United States. As the guarantor of almost half the home mortgages in the country, it is not at all surprising that these two firms would get hit hard by the biggest housing collapse in 75 years. This lack of diversification was extremely challenging for the GSEs, even though their credit standards were tighter than other lenders.

There has been a lot of attention in the media and elsewhere to problems associated with the non-traditional or “subprime” market. And, there is no question that Freddie Mac has incurred losses associated with non-traditional loans. But, it is important to remember that Freddie, and its sister institution, Fannie Mae, did not create the subprime market. Freddie was in fact a late entrant into non-traditional (i.e., non-30-year fixed interest/traditional underwriting) markets, such as Alt-A. The subprime market was developed largely by private label participants, as were most non-traditional mortgage products. Freddie Mac entered the non-traditional slice of the market because, as the private lending sector shifted toward those types of loans, Freddie needed to participate in order to carry out its public mission of promoting affordability, liquidity and stability in housing finance. In addition, if it had not done so, it could not have remained competitive or even relevant in the residential mortgage market we were designed to serve. Moreover, if you are going to take the mission of promoting low-income lending seriously, then you are, by definition, going to take on a somewhat greater level of risk.

Freddie’s delinquency rates and default rates, both overall and for each type of loan, were much lower than those of the market overall and were especially lower than for mortgages underwritten by purely private institutions—many of which were severely impaired for some of the same reasons as Fannie and Freddie. Every institution with significant exposure to residential mortgages has been negatively impacted by the generally unforeseen magnitude and rapidity in the collapse of housing prices.

Before I conclude, I just want to take a moment to recall the public mission of the GSEs. As everyone is aware, Freddie Mac is a shareholder-owned corporation, chartered for the public

purpose of supporting America's mortgage finance markets, and operating under government mandates. We had obligations to Congress and to the public to promote our chartered purposes of increasing affordability, liquidity and stability in housing finance, which included some very specific low-income housing goals. We also had obligations to our regulator to pursue our goals in a manner that was prudent and reasonable. And, at the same time, we had fiduciary obligations to our shareholders that were the same as any other publicly traded company. Freddie Mac always worked hard to balance these multiple obligations, and for decades the company was effective.

There is much to be said about the successes of the GSE model, and those successes should not be overlooked because of the current crises. As Congress looks to the future of residential housing finance, the GSEs can and should play an important role. I would be pleased to answer your questions about my time at Freddie Mac and any lessons that might be learned.

Thank you.

Chairman WAXMAN. Thank you very much, Mr. Syron.  
Mr. Mudd.

#### **STATEMENT OF DANIEL MUDD**

Mr. MUDD. Mr. Chairman, Representative Issa, members of the committee, thank you all for the opportunity to appear before you this morning. My name is Daniel Mudd. I joined Fannie Mae in 2000, following a decade at General Electric. I served consecutively as chief operating officer and interim chief executive officer of Fannie Mae.

In June 2005, the Board of Directors, with the approval of our regulator, asked me to stay on as CEO, complete the accounting restatement, work cooperatively with our regulator, remediate a number of control weaknesses, and restore the company's position and standing in the capital markets. The company made significant progress in these areas, returning to timely and current filings with the SEC, settling matters with OFHEO and the SEC, meeting housing goals, and earning \$13.3 billion of net income from 2005 through mid-2007. I also worked with Members of this Congress to support legislation passed into law in July to create a strong world-class regulator for the GSEs.

As background, I believe the roots of this crisis go back to the enormous increase in consumer and commercial leverage in the 1990's. The trend built up through 2007, when the financial sector entered what most observers view as the worst conditions ever seen in the capital markets.

The GSEs were chartered by Congress to provide liquidity, affordability, and stability to the mortgage market at all times. In fact, in the midst of the present turmoil, when other companies decided not to invest, the GSEs were specifically charged to take up the slack. This had worked in several recessions, the Russian debt crisis of 1998, the aftermath of 9/11, but not—not—in 2008. The housing market went into a free-fall, with some predicting a decline now of as much as 30 percent from peak to trough. A business model requiring a company to continue to support the entire market could not work.

Through the spring and summer of this year, my colleagues and I worked with government officials, regulators, our customers in the banking system, housing advocates, and others to maintain what was really an excruciating balance between providing liquidity to keep the market functioning, protecting Fannie Mae regulatory capital, and advancing the interest of the company's owners. At the time the government declared conservatorship over the company, we were still maintaining regulatory capital in accord with all relevant standards, and we were still, along with Freddie Mac, the principal source of financing to the mortgage market.

While I deeply respect the myriad challenges facing the Treasury Department and the regulator, I did not believe that conservatorship was the best solution in the case of Fannie Mae. I believe that more modest government support, basically a program something like the banks are now eligible for, would have maintained a better model. Admittedly, it would not have been a magic bullet, but this market seems to defy magic bullets, whether they are fired by the private sector or by the government.

In any case, I think that is now water under the bridge, and the GSEs, like many other institutions, are stuck mid-crisis. I would, therefore, advocate moving the GSEs out of no man's land. Events have shown—events have certainly shown me—how difficult it is to balance financial, capital, market, housing, shareholder, bond holder, homeowner, public and private interests in a crisis of these proportions. We should examine whether the economy and the markets are better served by fully private or fully public GSEs. I hope we have a debate on the future structure of the housing finance market in the country before events themselves produce a fait accompli that answers this question.

It is possible, I think, in all of this, to forget the many positive achievements of the GSEs. We finance tens of millions of homes to Americans of low to moderate income. We made mortgages fairer, more transparent, and available to a broader spectrum of society. We developed colorblind underwriting. We assured the banking system that their loans would garner a predictable price, around the globe, 24 by 7. When asked by Congress and the administration, we stepped up and provided the only source of funding for loans in high-cost areas and elsewhere.

Let me end by suggesting that homeownership does remain a central dream for many Americans. I believe that, once the present crisis resolves itself, owning a home will again be a way for Americans to express confidence in their future.

Thank you.

[The prepared statement of Mr. Mudd follows:]

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**WRITTEN STATEMENT OF  
DANIEL H. MUDD  
BEFORE THE  
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM  
U.S. HOUSE OF REPRESENTATIVES  
DECEMBER 9, 2008**

**Written Statement of  
Daniel H. Mudd  
Before the  
Committee on Oversight and Government Reform  
U.S. House of Representatives  
December 9, 2008**

Mr. Chairman, Representative Issa, and Members of the Committee, thank you for the opportunity to appear before you this morning. My name is Daniel Mudd. I joined Fannie Mae in 2000, following a decade at General Electric. I served consecutively as Chief Operating Officer and interim Chief Executive Officer of Fannie Mae. In June of 2005, the Board of Directors, with the approval of our regulator, asked me to stay on as CEO, complete the accounting restatement, work cooperatively with our regulator, remediate a number of control weaknesses, and restore the company's position and standing in the capital markets. The company made significant progress in these areas, restating ten quarters of financial filings, returning to timely and current filings as an SEC registrant, settling matters with the SEC and OFHEO, meeting all housing goals and three of four subgoals in 2005, all subgoals in 2006, and two of four subgoals in 2007, and earning \$13.3 billion of net income from 2005 through mid-2007. I also worked with Members of Congress to support legislation, passed and signed into law in July, to create a strong, world-class regulator for the GSEs.

Fannie Mae, as a GSE, is required by law to support the housing finance market under all conditions, good or bad. As this market—the only one Fannie was permitted to operate in—went through an unprecedented depression, the company bore commensurate and unprecedented losses; hence we are here today to examine the causes and prescriptions.

By way of background, I believe the roots of the current crisis go back to the enormous increase in consumer and commercial leverage in the 1990s. Indeed, as we entered that decade, there was a significant lag in the supply of homes, particularly for working class and professional families. This lag drove a run-up in home prices, followed by an increase in supply, both of which drove a notable growth in the rate of US homeownership from 1998 to 2006. While Fannie Mae certainly participated in this expansion, others did as well. Interestingly, Fannie's market share fell from its historical level around 40%, to below 20% as competitors including banks, Wall Street, and mortgage specialists entered the market.

Starting in 2007, with the turmoil in the monoline insurance industry, the failure of subprime mortgage originators, and the first nationwide decline in average US home prices since the Great Depression, the financial sector grappled with what most observers view as the worst conditions ever seen in the modern capital markets. While Fannie Mae had made much progress in strengthening its routines, controls, procedures, and practices before this so-called tsunami hit, the business model itself was not immune to the shocks of 2008. To be sure, no financial institution was—and firms that survived both World Wars and the Great Depression were swept under as market conditions continued to worsen throughout 2008.

I will be pleased to elaborate later, but in short, the GSEs were chartered by Congress to provide liquidity, affordability, and stability to the mortgage market at all times. In fact, in the midst of turmoil, when other companies decided not to invest, the GSEs were specifically required to take up the slack. This had worked through several recessions, in the Russian debt crisis of 1998, in the aftermath of 9/11—but not in 2008. The housing market went into a free fall, and with some predicting a decline of as much as 30% from peak, a business model requiring a company to continue to support the entire market could not flourish.

Through the spring and summer of this year, my colleagues and I worked with government officials, regulators, our customers in the banking system, housing advocates, and others to maintain an excruciating balance between providing liquidity to keep the market functioning and protecting Fannie Mae's regulatory capital. At the time the government declared conservatorship over the company, we were still maintaining capital in accord with the relevant regulatory standards, and we were still—along with Freddie Mac—the principal source of lending to the mortgage market. Based on ongoing examinations and frequent, if not daily meetings, our regulator had declared us in full compliance with our capital requirements throughout the period. We were also balancing our HUD housing goals, our role in the global capital markets, our fiduciary responsibility to our shareholders, and critically, our need to help individual homeowners afford their mortgages, stay in their homes, and avoid unnecessary foreclosures. We sought this balance consistent with a strict interpretation of our Congressional charter.

While I deeply respect the myriad challenges facing the Treasury Department and the regulator, I did not believe that conservatorship was the best solution in the case of Fannie Mae. I made that argument at the time and proposed that more modest government support could be used to encourage private investment capital—basically something more like the program many banks are now eligible for. That approach would have maintained the GSE model; admittedly it would not have been a magic bullet, but this market seems to defy magic bullets whether they are fired by the government or the private sector.

I did not prevail with my viewpoint, and events took their course; the issue now presented is how to fashion a more durable solution for the market, the taxpayers, and homeowners. On that topic, I hope there is an opportunity to engage in a debate on the future structure of the US

housing finance markets and to develop consensual solutions accordingly. It should be possible to specify a modernized role for the GSEs.

I think it would be a mistake to back into the future by making decisions or eliminating options in the present. I would advocate moving the GSEs out of No Man's Land. Events have shown how difficult it is to balance financial, capital, market, housing, shareholder, bondholder, homeowner, private, and public interests in a crisis of these proportions. We should examine whether the economy and the markets are better served by fully private or fully public GSEs.

It is possible, in all this, to forget the many positive achievements of the GSEs. We financed tens of millions of homes to American families of low-to-moderate income. We provided a set of standards to the industry that made mortgages fairer, more transparent, and available to a broader swath of society. We developed a color-blind underwriting system that became the industry standard. We assured the banking system that their loans, packaged into Fannie and Freddie securities, would garner a predictable, liquid price, around the globe, 24x7. When asked by Congress and the Administration in the spring of 2008, we stepped up and provided the only source of funding for loans up to 125% of local price medians. And, in years when the company did well, we were proud to support organizations that revitalized communities, helped the homeless, sheltered hurricane refugees, and provided our veterans with homes to return to. I hope the good that was done will not be forgotten as we weigh the lessons of 2008.

Let me end by suggesting that homeownership remains a central dream for many Americans. I believe that once the present crisis resolves itself, the fundamental and solid economics of homeownership will be reasserted. Hopefully, there will be a new framework that

will encompass comprehensive and judicious reform of the origination and disclosure structure of the mortgage industry, as well as the secondary market where Fannie Mae's role is executed.

Thank you for your attention.

Chairman WAXMAN. Thank you very much, Mr. Mudd.  
Mr. Brendsel.

#### STATEMENT OF LELAND BRENDEL

Mr. BRENDEL. Thank you, Mr. Chairman, Representative Issa, and other distinguished members of the committee. I am Leland Brendel, and I was formally the chairman and chief executive officer of the Federal Home Loan Mortgage Corp., more commonly referred to as Freddie Mac. And I want to thank you for the opportunity to address this committee as you consider the future of the government-sponsored enterprises and their importance to housing finance system in the United States of America.

I believe that we have had the best housing finance system in the world and that Freddie Mac and Fannie Mae have been vital to its success, and they are vital to its future. In particular, Freddie Mac and Fannie Mae have been instrumental in ensuring the continued availability of long-term fixed-rate mortgage loans. And I hope this hearing and future examinations will examine the critical importance of those mortgage loans and Freddie Mac's and Fannie Mae's essential role.

Before I do go further, I want to provide a little information on my background. I joined Freddie Mac in 1982 and devoted 21 years of my life to it. I left Freddie Mac in June 2003 after more than two decades of service, and I have not had any role in the company now for over 5½ years.

I do feel very fortunate to have been the leader of such a great company with such an important public mission. I was raised on a family farm in South Dakota, attended public schools in the Sioux Falls area. And after that, I graduated from the University of Colorado and ultimately earned a Ph.D. in financial economics from Northwestern University in Illinois in 1974. I spent 8 years teaching and working as an economist, first at the Farm Credit Administration here in Washington and later at the Federal Home Loan Bank in Iowa.

But, as I mentioned, I spent the bulk of my career at Freddie Mac. When I joined it in 1982, I served as Freddie Mac's chief financial officer, and then I assumed the role of chief executive officer in 1985. I was elected chairman of the Board beginning in 1989 at the time that Freddie Mac became publicly owned and listed on the New York Stock Exchange.

By the time I left Freddie Mac in 2003, the secondary mortgage market had become a major source of stability and reliability for financing housing and homeownership. Indeed, this is a tribute to the wisdom of Congress in chartering Freddie Mac with the mission of increasing the availability and affordability of mortgage credit by tapping the world's capital markets.

Today, many homeowners and the secondary markets certainly are in distress. Congress is rightly considering many proposals for restoring stability. And, in doing so, I hope that Congress will take steps, as it has in the past, to assure the continued availability and affordability of long-term fixed-rate mortgage loans. These mortgages have not contributed in any meaningful way to the present crisis, but their survival is in jeopardy because of it.

Freddie Mac was chartered in 1970 by Congress to provide stability and liquidity to the secondary market for residential mortgages. When I began at Freddie Mac in 1982, the secondary market was an embryonic market, and the company was still a small participant in it. At that time, in 1982, savings and loan associations and thrift institutions were still the primary mortgage lenders, they were portfolio lenders, but many of them had recently failed or were failing. The housing and mortgage markets were in turmoil, and the homeownership rates, in fact, were declining at that time.

A family trying to buy a home was faced with mortgage rates that swung between 13 and 17 percent alone for 30-year fixed-rate mortgage loans over the course of 1982. Because there was not widespread access to the national financial markets, the availability of mortgages depended on the amount of local bank deposits that could be loaned. In addition, the mortgage application and underwriting process was arbitrary, inconsistent. There were large regional disparities in the mortgage market, and too frequently, the process disfavored minority and rural communities.

During the 1980's and 1990's, Freddie Mac played a major role in addressing the deficiencies in the mortgage markets. Freddie Mac broadened the potential sources of financing for residential loans. We helped preserve the 30-year fixed-rate mortgage, which had fallen out of favor with many portfolio lenders. We drove down origination costs, made it more efficient. We improved the speed, reliability, and fairness of the underwriting process. And we increased access to mortgages for minorities and underserved communities. As a result, one of which I am proud, by 2001, 2 years before I left, Freddie Mac had answered Congress's call by financing homes for 30 million Americans.

I still care deeply about Freddie Mac and its mission, and I share the committee's concern about how to best protect America's homeowners and communities. I thank the committee for the opportunity to be here today.

[The prepared statement of Mr. Brendsel follows:]

**TESTIMONY OF LELAND BRENDSEL TO THE HOUSE  
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM  
DECEMBER 9, 2008**

Mr. Chairman and Distinguished Members of the Committee, my name is Leland Brendsel and I was formerly the Chairman and Chief Executive Officer of the Federal Home Loan Mortgage Corporation, more commonly referred to as Freddie Mac.

I want to thank you for the opportunity to address this Committee as you consider the future of the government sponsored enterprises and their importance to the housing finance system in the United States of America. I believe that we have had the best housing finance system in the world, and that Freddie Mac and Fannie Mae have been vital to its success.

In particular, Freddie Mac and Fannie Mae have been instrumental in ensuring the continued availability of long-term fixed rate mortgages. I hope this hearing will examine the critical importance of those mortgages and Freddie Mac's and Fannie Mae's essential role.

Before I go further, I want to provide a little information on my background. I joined Freddie Mac in 1982 and devoted 21 years of my life to it. I left Freddie Mac in June of 2003, after more than two decades of service, and I have not had any role in the company for over 5 years.

Before I came to Freddie Mac, I was raised on a family farm in South Dakota and attended public schools in the Sioux Falls area. After that, I graduated from the University of Colorado and ultimately earned a Ph.D in financial economics from Northwestern University in 1974.

I spent the next eight years teaching and working as an economist, first at the Farm Credit Administration and later at the Federal Home Loan Bank of Des Moines. But as I mentioned, I spent the bulk of my career at Freddie Mac.

When I joined Freddie Mac in 1982, I served as its Chief Financial Officer. I assumed the role of Chief Executive Officer in 1985. I was elected Chairman of the Board beginning in 1989 when Freddie Mac became publicly owned and listed on the New York Stock Exchange.

By the time I left Freddie Mac in 2003, the secondary market had become a major source of stability and reliability for financing housing and home ownership. Indeed, this is a tribute to the wisdom of Congress in chartering Freddie Mac with the mission of increasing the availability and affordability of mortgage credit by tapping the world's capital markets. Today the secondary market is in distress. Congress and others are rightly considering many proposals for restoring stability. In doing so, I hope that the Congress will take steps, as it has in the past, to ensure the availability

and affordability of the 30-year fixed rate mortgage. These mortgages have not contributed in any meaningful way to the present crisis, but their survival is in jeopardy because of it.

Freddie Mac was chartered by Congress in 1970 to provide stability and liquidity to the secondary market for residential mortgages. When I began at Freddie Mac in 1982, the company was still a small participant in what was an embryonic secondary mortgage market. At that time, savings and loan associations and thrifts were still the primary mortgage lenders, but many of them had recently failed or were failing. The housing and mortgage markets were in turmoil, and homeownership rates were declining. A family trying to buy a home was faced with mortgage interest rates swinging between 13% and 17% for thirty-year mortgages over the course of 1982. Because there was not widespread access to national financial markets, the availability of mortgages depended on the amount of local bank deposits that could be loaned. The application process was arbitrary. This resulted in huge regional disparities and disfavored minority and rural communities.

During the 1980s and 1990s, Freddie Mac played a major role in addressing the deficiencies in the mortgage markets. Freddie Mac broadened the potential sources of financing for residential loans; helped

preserve the 30-year fixed-rate mortgage, which had fallen out of favor with many portfolio lenders; improved the speed, reliability, and cost of underwriting; and increased access to mortgages for minorities and underserved communities. As a result—one of which I am proud—by 2001, Freddie Mac had answered Congress' call by financing homes for thirty million Americans.

I still care deeply about Freddie Mac and its mission, and I share the Committee's concern about how to best protect America's homeowners and communities. I thank the Committee for the opportunity to share my views.

Chairman WAXMAN. Thank you very much, Mr. Brendsel.  
Mr. Raines. Wait a second, until the bell stops. OK, now.

#### STATEMENT OF FRANKLIN RAINES

Mr. RAINES. Thank you. Chairman Waxman, Mr. Issa, and distinguished members of the committee, my name is Franklin Raines. And I would like to thank the chairman for accepting my longer written testimony as part of the record.

I've worked in the financial services and investment industry for 27 years. I have had 12 years' experience in investment banking and 11 years of experience in the mortgage industry as vice chairman and chairman and CEO of Fannie Mae. I was appointed chairman and CEO by an independent board of directors, with 13 of its 18 members elected by public shareholders.

In my 6 years as chairman and CEO, Fannie Mae provided over \$3.4 trillion of financing, serving more than 30 million low-, moderate- and middle-income families. The company's revenue, book of business, and economic value more than doubled during this period, and the stock outperformed the S&P 500.

On December 21, 2004, I announced my retirement from Fannie Mae, and I've had no management role at the company since that time. My experience in financial services, along with my tenure as the Director of the Office of Management and Budget, will form the basis for much of my testimony today.

The current financial crisis has a variety of complex sources. However, in my view, it did not result from Fannie Mae's recent risk management decisions or from its accounting practices 4 years ago. There is no doubt that the crisis afflicting the national and international financial system is without precedence since the Great Depression. Yet, the Federal Government's response, while large in dollars, has had limited success.

Financial market convulsions are not a new phenomena. The past quarter-century alone has witnessed the junk bond meltdown, the Internet stock implosion, and several others, including the present mortgage and credit derivatives crisis. These separate events have many features in common that I have outlined in my written statement.

Fannie Mae managed to avoid the major causes of the current crisis through 2004. The company had significant experience during the 1980's and early 1990's with the impact of falling housing prices on the value of mortgages. The company was also quite familiar with the different credit performance characteristics of mortgages with certain features, such as adjustable rates or negative amortization; with certain underwriting approaches, such as no documentation of assets or income; and with certain borrower types, such as marginal credit or housing speculators. The company undertook the quantitative research in the 1990's that showed all these features created greater credit risk.

As a result, Fannie Mae developed tools to evaluate and manage the new types of mortgages that had begun to come on the market in the early part of this decade. As subprime and Alt-A loans began to grow as a share of the overall mortgage market, the risk management restrictions Fannie Mae had in place limited the compa-

ny's involvement with those products. And, as a result, in 2004, the company's share of the overall secondary market plummeted.

The company's public disclosures demonstrate that the credit risk profile of Fannie Mae changed after 2004. Fannie Mae, like a lot of smart investors, expanded its appetite for credit risk. However, it is important to note that, rather than lead the market toward looser credit standards, Fannie Mae generally resisted pressures to significantly lower its standards until about 2006.

There have been many assertions by commentators about the role of affordable housing lending regulation and financial services regulators as causes of the current financial crisis. There was no regulation that forced banks or GSEs to acquire loans that were so risky they imperiled the safety and soundness of the institution. The riskiest loans in the system tended to be originated by lenders not covered by the Community Reinvestment Act or the GSE affordable housing goals. On the other hand, the absence of consumer protection regulation allowed many bad loans to be made to the detriment of consumers.

The question remains, why did the regulators of banks and the GSEs not criticize or restrict the acquisition of risky loans by regulated institutions? It is remarkable that, during the period that Fannie Mae substantially increased its exposure to credit risk, its regulator made no visible effort to enforce any limits. This was true even though the regulator only oversaw two companies, had greatly increased its budget, and was then enforcing a form of quasi-conservatorship on the company.

Preventing future crises in the financial services industry and their attendant damage to consumers will require three things, in my judgment. First, executives will have to exercise greater discipline in managing risk. Second, there needs to be a better-informed regulation of large, leveraged financial entities. And third, there must be greater protection of consumers from financial products they cannot be reasonably expected to understand.

Finally, Mr. Chairman, the GSE model is not perfect. However, if we maintain the public goal of marshalling private capital to achieve the public purpose of homeownership and affordable rental housing, it will be hard to find a model that has more benefits and fewer demerits than the model that worked reasonably well for almost 70 years at Fannie Mae.

It has been almost 4 years since my decisions have had any impact on Fannie Mae, the housing market, or the global market for mortgages and mortgage-backed securities. Even so, I continue to believe in the mission Congress gave to Fannie Mae and Freddie Mac. I also believe these companies can play an important role in helping to solve today's mortgage financing crisis.

Thank you, Mr. Chairman. I would be happy to answer any questions the committee might have.

[The prepared statement of Mr. Raines follows:]

**Embargoed until:  
10:00 a.m.  
December 9, 2008**

**Testimony by Franklin D. Raines  
Before the House Committee on  
Oversight and Government Reform  
December 9, 2008, 10:00 a.m.**

**Introduction**

Chairman Waxman and distinguished Members of the Committee, my name is Franklin D. Raines. Although I have had the opportunity to testify before congressional committees on many occasions, this is my first testimony before this committee. Let me introduce myself.

In the 32 years since I graduated from law school, I have practiced law for less than one year, served in government for four years, and worked in the financial services and investment industry for 27 years.

I have 12 years of experience in investment banking, having served as a financial advisor to state and local governments and agencies while a General Partner at Lazard Freres & Co. in the 1980s. Many of these clients faced financial crisis or needed to borrow large sums of money for investment projects. I assisted the cities of Chicago, Washington, D.C., and Cleveland and the states of Iowa and Texas to eliminate deficits, to finance their operations, and to restore their credit ratings. I advised on some of the largest public infrastructure projects in the country, such as the redevelopment of airports in Chicago, Washington, D.C., and San Francisco, and of the water, sewer, electric power, and transit systems in Seattle, Cleveland, and Milwaukee.

I have 11 years of experience in the mortgage industry as a Vice-Chairman and then as Chairman and CEO of Fannie Mae. I was appointed Chairman and CEO by the independent Board of Directors of Fannie Mae. This Board included Republicans, Democrats, and Independents, with 13 of 18 directors elected by shareholder vote.

In my six years as Chairman and CEO, Fannie Mae provided over \$3.4 trillion of financing, serving more than 30 million low-, moderate-, and middle-income families. The company's revenue, book of business, and economic value more than doubled during this period, and the stock outperformed the S&P 500. The company became a leader in e-commerce with more than \$1.6 trillion in transactions over the internet in 2004. Fannie Mae was cited as a *Fortune* magazine Most Admired Company, a *Business Ethics* 100 Best Corporate Citizen, and as a Best Company to Work For in several publications, including those reporting on minorities, women, working mothers, and information-technology employees. In 2003, the company received the Ron Brown Award from the U.S. Department of Commerce for corporate leadership.

I announced my retirement on December 21, 2004, and I have had no management role at the company since that time. For the past four years, I have been an investor in start-up businesses in the fields of health and financial services.

My national partisan political experience during my 32-year career is limited to having volunteered on the issues staff of Michael Dukakis when he was the Democratic nominee for President in 1988. I had no role in the recent presidential election. I did not contribute money to any candidate's presidential campaign nor did I advise any candidate.

My government experience includes service in the administrations of two Presidents. I was the Director of the Office of Management and Budget in the Cabinet of President Bill Clinton. In that position I was able to play a role in creating the first balanced federal budget in a generation. Earlier, I was a member of the Domestic Policy Staff and an Associate Director of the OMB under President Jimmy Carter. My service to these Presidents totaled four years.

As is readily apparent from this summary, my predominant career experience has been in business, and, in particular, in financial services. My experience in financial services, along with my tenure at OMB, will form the basis of much of my testimony today.

### **Causes of the Current Financial Crisis**

The current financial crisis—which has now been confirmed as a recession—has a variety of complex sources. It did not result from Fannie Mae's recent business decisions or its accounting practices of four years ago. I will discuss my view of the separate causes of the financial crisis before I address the recent losses and conservatorship at Fannie Mae.

The crisis afflicting the national and international financial system is without precedent since the Great Depression. Everyone from large financial institutions to the families and businesses of Main Street has suffered dramatic reductions in net worth, and many face insolvency. Credit has dried up for banks, large corporations, small businesses, and consumers alike. The country faces a significant contraction in economic activity and perhaps the deepest and longest recession in a generation.

The federal government's policy in response has been large in dollars but limited in its success. As a former budget director, I can attest that the interventions by the Congress, the Treasury, and the Federal Reserve System involve staggering amounts. But the tepid response of the markets to the various rescue plans is not surprising given the lack of coordination between the plans.

Financial market convulsions are not new phenomena. The past quarter century alone has witnessed the Third World debt crisis, the junk-bond meltdown, the savings-and-loan collapse, the oil-patch debt bubble, the overextension of financial-derivatives trading, the municipal-market crunch, the international foreign-currency-reserve run, the internet-stock implosion, and the present mortgage and credit-derivatives crisis. These separate events have many features in common.

First, these cases all began when the financial markets discovered a new asset class that was not well understood. Because it was not well understood, the asset class was illiquid. The new asset

class was usually growing or capable of great growth, and had profit margins that far exceeded those of other assets.

The lack of understanding about the asset class allowed financial-services companies to offer customers a differentiated product that had not yet been turned into a commodity. Banks and investment banks increased the asset's liquidity by making a market in the securities and by supporting the market with their own balance sheets. In this way, the banks could add value to the market, for which they would be handsomely compensated. While traditional asset classes tend to grow with the economy, the new class could be made to grow more quickly. Moreover, because there was initially less competition in trading in the new asset, the profit margin was wider than in commoditized asset classes.

The second common element is that the new asset class soon morphed from a prosaic form to a more exotic form, with greater potential for explosive growth. For example, junk bonds were originally corporate bonds issued by creditworthy companies that had fallen on hard times. These corporate debt securities were nicknamed "fallen angel" bonds because the debt, although backed by substantial assets and rated investment grade at issuance by the credit rating agencies, was now rated below investment grade. The track record for these bonds created a small but consistent market among specialist investors. Certain Wall Street entrepreneurs went one step—and then several steps—further. They reasoned that if investors would buy the junk bonds of established industrial companies, then perhaps they would buy the debt of companies with far fewer assets, or they would buy junk bonds issued as part of mergers or acquisitions. The entrepreneurs grew their new market by advertising the performance track record of fallen angel bonds as applying to these far riskier junk bonds. After a period of explosive expansion, this market caved in on itself.

The third commonality is financial leverage. An investment firm's use of a small base of equity capital and a large component of debt magnifies the returns derived from buying or trading in the new asset class but simultaneously magnifies the firm's exposure. A derivative trade, for example, might lead to a profit of only a few basis points and to a small return on equity if equity was the only source of funding. But if the firm uses financial leverage, those basis points would be multiplied into quite substantial sums of money. Long Term Capital Management employed this model to significant profit until the markets turned on its investments and the firm collapsed. Periods of easy credit and monetary liquidity amplify the temptation to add leverage.

The fourth and final commonality is commission-based compensation on Wall Street and in financial-services firms generally. Financial entrepreneurs are often paid by the volume of securities in a deal, rather than by the ultimate success of the transaction. Bankers who specialize in mergers, for example, are paid a percentage of the overall deal's value. Underwriters of bonds and stocks are paid similarly. This compensation structure causes the professionals to focus on the size and volume of deals, often to the exclusion of the deal's quality. The flow of deals, rather than their ultimate business success, is also the primary driver for many financial executives. Only an executive's own sense of professionalism and longevity tempers this attention to deal flow rather than to deal success. In periods in which a firm is making money-positioning deals on its own books, this focus on volume to the exclusion of success is exacerbated, and the "carry trade" needs constant nourishing through new deals.

It has been often said, and is generally true, that it is hard to spot a bubble contemporaneously. But it is my view that when these four common elements are present, history suggests a bubble is occurring and a bust is coming.

So how does this analysis explain the current subprime mortgage meltdown?

Subprime mortgages predate this current crisis. Mortgage-finance companies have long issued such mortgages to “house poor” homeowners who cannot find affordable credit elsewhere. The loans were almost always refinances because they were based on the assumption that the homeowner had substantial equity in their home. Lending under these circumstances at a 25 to 50 percent loan-to-value ratio, at very high interest rates, was a good business. If the borrower defaulted, the lender could seize and sell the house for more than the amount owed. To the financial entrepreneurs of the later part of the 1990s, this looked like a new, illiquid asset class. Not only did the profit margins look healthy, but, with a few innovations, this class of mortgages could be made to grow more rapidly than the sleepy conforming-mortgage market.

Similar to the transformation of fallen angel bonds into riskier junk bonds, subprime mortgages soon morphed from loans backed by substantial assets into loans used to buy new assets, with little in the way of equity or down payment. The whole theory of subprime loans had been that payment was assured by the low loan-to-value ratio. But the new subprime loans were backed by nothing but the credit of the borrower. And although the history of traditional subprime loans showed predictable performance, that performance was based on the strength of the collateral and not on the credit score of the borrower, someone who had already demonstrated an inability to manage consumer credit.

The mortgage originators who first offered this new form of subprime mortgage were not depository institutions with large balance sheets, and their lack of financial leverage restrained the growth of the asset class. The ratings agencies solved this problem when they agreed to give investment-grade ratings to mortgage-backed securities, or MBS, backed by these subprime loans—ratings equivalent to those given to MBS backed by prime loans. As subprime origination changed from asset-based lending to lending based on a credit score, the credit agencies did not substantially toughen the criteria for a triple-A rating on MBS backed by such riskier mortgages. With triple-A ratings and the creative financing of so-called “support” tranches, the entrepreneurs now had almost unlimited liquidity and leverage.

Finally, traditional subprime mortgages always had high interest rates, which lenders employed to offset the inherent credit risk of the loans. But the entrepreneurs behind the new subprime mortgages thought that if ratings agencies and MBS investors could be convinced that the credit risk was not in fact that high, then profits from the high interest rates consumers paid could be diverted from MBS investors to the loan originators and their intermediaries. The ratings agencies obliged, which resulted in a turbo-charging of volume for the new asset class. The rewards of originating a subprime loan versus a prime loan were so high that originators had a financial incentive to convince consumers to take a subprime loan even when they qualified for a prime loan. Indeed, lenders securitizing their subprime loans would boast in their offering documents that many of the loans were really of prime quality, and the lenders were often

correct. The commissions on these MBS, in turn, were so large for Wall Street traders and salespeople that there was an enormous incentive to convince their asset-buying customers to load up on these new securities with impressively high credit ratings.

The same analysis explains the rise in origination and securitization of Alternative-A mortgages and option-adjustable-rate mortgages.

There is little new in the underlying causes of the current mortgage crisis. The global financial markets have seen such financial-product bubbles before and are likely to see them again, in the absence of any change in regulatory practice.

But note that prior financial-product dislocations did not have the widespread impact of the current mortgage meltdown. There are several reasons for the difference.

First, the market for residential property is enormous in this country, and residential mortgages are one of the nation's biggest asset classes. The value of American residential mortgages outstanding far exceeds the value of corporate bonds, consumer credit cards, or commercial loans. Even so, a meltdown affecting a discrete \$500 billion market will not infect the entire international financial system. But the nation's mortgage market, even in normal times, requires substantial leverage in the origination, servicing, securitization, and guarantee of individual mortgages. A meltdown involving trillions of dollars of mortgage products closely tied to the asset-backed securities, commercial paper, bank deposits, and derivatives markets will have an effect several orders of magnitude larger than a problem in a discrete market alone. Beyond size, the interconnectedness of the residential-mortgage market and its supporting markets contributed to the breadth of the crisis.

A second reason for the magnitude of this crisis is that regulators significantly loosened the capital requirements for international banks and investment banks holding American mortgage assets. The Basel II capital standards first applied only to international banks, and the Securities and Exchange Commission's later decision to apply them to investment banks substantially reduced the amount of capital a bank was required to hold for each dollar of U.S. mortgages in its portfolio. This capital change greatly increased a bank's leverage to acquire American mortgage assets. The decision to apply Basel II to investment banks was based on the credit experience of Fannie Mae and Freddie Mac with these assets. But the GSEs employed strict credit standards for the mortgage assets they held, while, by contrast, banks and investment banks were not limited to holding mortgages that met those credit standards.

Third, the country's monetary policy also contributed to the size of the present financial crisis. Before 2005, central bankers in the United States and other industrialized nations were concerned about the prospect of deflation. To combat deflation, monetary policy leaned toward lower interest rates, which made it possible for commercial and investment banks to engage in a carry trade: borrowing at low, short-term rates and investing in higher-interest-rate bearing mortgages and mortgage securities. Mortgage originators began to alter the terms of the mortgages they offered to take advantage of these secondary-market investors. Adjustable-rate mortgages, with very low interest rates in the first two years that jumped to market rates for the next 28 years, became very popular with income-stretched consumers and with speculators in

residential housing. Upon securitization, the secondary-market investors obtained assets with nominal, short maturities matching their short-term funding, and the borrower received a bargain-basement interest rate for two years with the clear expectation of refinancing before the higher, 28-year rate kicked in. (Of course, many borrowers found refinancing impossible as the financial crisis spread in 2007 and 2008.)

There is a fourth and final reason for the enormity of the present financial crisis emanating from the mortgage market meltdown. A large number and wide range of the financial institutions that invested in private-label MBS were new to the market, not natural holders of 30-year obligations, and unfamiliar with how to value the assets underlying the securities they purchased. When the market began to drop, these players panicked, drove down the prices of MBS, and dried up the liquidity of the market.

#### **Fannie Mae and the Current Financial Crisis**

This hearing is focused on Fannie Mae and Freddie Mac, so I should explain how my analysis of the causes of the financial crisis applies to those firms. I will focus on Fannie Mae.

Fannie Mae is, of course, not new to the mortgage business. Residential mortgages in the United States are the only asset class in which it is permitted to invest. The company had significant experience during the 1980s and early 1990s with the impact of falling housing prices on the value of mortgages. In the 1980s, the company experienced significant credit losses as a result of the economic meltdown in the oil patch areas of the Southwest. In the early 1990s, the overheated housing markets in California and New England also caused significant losses.

The company also studied the different credit performance characteristics of mortgages with certain features, such as adjustable rates or negative amortization; mortgages with certain underwriting approaches, such as no documentation of assets or income; and mortgages with certain borrower types, such as those with marginal credit or housing speculators. These features create greater credit risk. Furthermore, the layering of more than one of these characteristics on an individual loan greatly magnifies the risk. In many cases, there is no precedent to rely on to calculate the performance of such risk layering.

As a result of its experiences and research, Fannie Mae developed tools to evaluate and manage the new types of mortgages that began to come into the market in the early part of this decade. The automated underwriting system that Fannie Mae developed allowed the company to evaluate more precisely the risk of mortgage products and borrowers. Risk-based pricing insured that the company was compensated for the risk it took. Economic capital requirements and caps on the aggregate amount of risk limited the number of risky loans the company took onto its books. This risk management structure was put into place over a number of years and was formally adopted by the Board of Directors of the company in 2003, while I was CEO.

As subprime and Alt-A loans began to grow as a share of the overall mortgage market, the risk management restrictions Fannie Mae had in place limited the company's involvement with those products. Indeed, during 2004 the company's share of the overall secondary market in

residential mortgages plummeted. Commercial banks and investment banks saw their share grow significantly as private-label MBS flourished.

So, before 2005, Fannie Mae had a limited market presence in promoting or investing in subprime or Alt-A loans. It had certainly not taken the lead in “morphing” these loans into riskier types.

Fannie Mae was certainly leveraged. The company typically held only 2.5% of capital for each dollar of assets it held on its books, and, over the last decade, regulators, commentators, and company executives paid an extraordinary amount of attention to Fannie Mae’s leveraged investments held in its mortgage portfolio. However, the company avoided the largest problem with excess leverage, namely, a wide “duration gap,” which is the gap between the duration of assets and liabilities. For example, the typical thrift institution might hold two or three times the percentage of capital as Fannie Mae, but it also might have a duration gap of a two- to three-year mismatch between its assets and liabilities, compared to a gap of one to six months for Fannie Mae. By holding down its duration gap, Fannie Mae significantly reduced the risk of its leverage, but at a great cost to its margins. This discipline held true both before and after 2005.

Fannie Mae’s risk profile was not as affected by its compensation structure as were the risk profiles of most participants in the mortgage industry. Importantly, very few Fannie employees received commissions or deal-related compensation. While market share was one part of a comprehensive compensation scheme, Fannie Mae rewarded profitability of the book of business both in the short-run and the long-run and weighed risk management as a major factor in pay.

As explained below, the credit risk profile of Fannie Mae changed after 2004 because Fannie Mae, like a lot of smart investors, changed its appetite for credit risk in response to the changing market. Fannie Mae was a late entrant to the market for these risky mortgages, and, rather than lead the market in the direction of looser credit standards, Fannie Mae initially resisted pressures to relax its credit standards until 2006 to 2007. This helps to explain why Fannie’s losses, while large in absolute dollar amount, are relatively small compared to mortgage credit losses suffered by the market as a whole. Indeed, even among the risky Alt-A loans the company acquired after 2004, the loans held by Fannie Mae performed better than Alt-A loans in general.

#### **Causes of Conservatorship, 2005–2008**

Fannie Mae did not cause the current crisis. By the time the GSE began its most significant investments in riskier loans in 2005, the roots of the present crisis had long taken hold. If anything, Fannie Mae played catch-up to the banks and investment banks who drove the securitization of the most toxic subprime mortgages. In fact, to this day, Fannie Mae has invested relatively little in subprime mortgages, which account for less than one percentage point of Fannie Mae’s guaranty book of business. Most of Fannie Mae’s losses are related to credit losses on Alt-A loans, not subprime loans, as I will explain.

Despite the size of its overall book of business, Fannie Mae is a small player in the present crisis. For example, the Troubled Asset Relief Program (“TARP”), the government’s plan to purchase

the nation's illiquid mortgage assets, is funded at \$700 billion. Fannie Mae's total provision for credit losses in the first three quarters of this year are no more than \$20 billion, less than 3% of TARP.

Fannie Mae did incur losses in the first three quarters of 2008, and its financial performance ultimately caused the federal government to step in and place the entity under the control of the newly-established Federal Housing Finance Agency ("FHFA").<sup>1</sup> I will give my understanding of the nature and cause of this situation, but I note at the outset that the losses Fannie Mae has reported, and the actions and events that resulted in those losses, occurred after I announced my retirement from Fannie Mae in December 2004. Since I retired from Fannie Mae, I have not been a manager, consultant, or employee of Fannie Mae. Accordingly, what I say today is based solely on what I have gleaned from my review of the public disclosures made by Fannie Mae.

A significant part of Fannie Mae's business is its so-called "guaranty business," also known as the "credit" business—that is, the business of assuming the credit risk of mortgages in exchange for a fee. Fannie Mae typically does so by taking a pool of mortgage loans from mortgage lenders and providing the lenders with Fannie Mae-issued mortgage-backed securities (known as "Fannie Mae MBS"), which are backed by the pool of mortgage loans and represent a beneficial ownership interest in each of the loans in the pool. Fannie Mae guarantees the timely payment of principal and interest on the mortgages underlying the Fannie Mae MBS. As of September 30, 2008, Fannie Mae's total guaranty book of business was \$2.94 trillion, nearly all of that representing the unpaid principal on loans underlying Fannie Mae MBS or held in Fannie Mae's portfolio.<sup>2</sup> The vast majority of the loans in Fannie Mae's guaranty book of business are single-family conventional mortgages, which represented approximately \$2.7 trillion of Fannie Mae's guaranty book of business as of September 30, 2008.<sup>3</sup>

The most serious losses reported by Fannie Mae in 2008 have stemmed from its guaranty book of business. Specifically, in the first three quarters of 2008, Fannie Mae was forced to recognize nearly \$18 billion in credit-related expenses, of which nearly \$17 billion was the result of provisioning for credit losses associated with its guaranty book of business.<sup>4</sup> By way of comparison, in 2004—my last year at Fannie Mae—the entity recognized only \$352 million in credit-related expenses due to provisioning for credit losses, and only approximately \$1 billion in total over the last *three years* of my tenure.<sup>5</sup> Similarly, as of September 30, 2008, Fannie Mae

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<sup>1</sup> "Statement of FHFA Director James B. Lockhart," FHFA News Release (Sept. 7, 2008) (attached as Ex. 1).

<sup>2</sup> Fannie Mae 2008 Q3 10Q, at 17–18 (attached as Ex. 2).

<sup>3</sup> 2008 Q3 10Q, at 111–12; Fannie Mae 2008 Q3 10Q Credit Supplement, at 5, [http://www.fanniemae.com/media/pdf/newsreleases/2008\\_Q3\\_10Q\\_Investor\\_Summary.pdf](http://www.fanniemae.com/media/pdf/newsreleases/2008_Q3_10Q_Investor_Summary.pdf) (attached as Ex. 3).

<sup>4</sup> 2008 Q3 10Q, at 56–57.

<sup>5</sup> Fannie Mae 2004 10K (restated), at F-4 (attached as Ex. 4).

estimated that, using its Credit Loss Performance Metrics—terms not defined within Generally Accepted Accounting Principles (“GAAP”), it had incurred approximately \$4.3 billion in actual credit losses during the first three quarters of 2008.<sup>6</sup> By contrast, in 2004, Fannie Mae estimated only \$221 million in credit losses, and only \$550 million in total for 2002, 2003, and 2004.<sup>7</sup>

These losses are attributable in large part to Fannie Mae’s guaranteeing of certain high-risk loans, largely so-called “Alt-A” loans, and, to a lesser extent, subprime loans. Although the public record is not entirely clear, it appears that at some point in 2005 or 2006, Fannie Mae began to increase substantially the number of Alt-A loans in its guaranty book of business.<sup>8</sup> In its report to Congress in 2007, Fannie Mae’s regulator, the Office of Federal Housing Enterprise Oversight (“OFHEO”), noted that “[h]igher risk products such as interest-only, sub-prime, Alt-A and negative amortization loans are growing,” although the regulator did not express any particular concerns.<sup>9</sup> By year-end 2006, Fannie Mae’s guaranty business included approximately \$257 billion in Alt-A loans, and by year end 2007 that number had grown to \$318 billion.<sup>10</sup> Moreover, it appears that in taking on these loans, Fannie Mae had altered its underwriting standards by, for example, not running many of those loans through its DesktopUnderwriter (“DU”) system, an automated tool that helps lenders evaluate and price credit risk.<sup>11</sup> Perhaps not surprisingly, Fannie Mae has now reported that its serious delinquencies are disproportionately represented by Alt-A loans from its 2006 and 2007 vintages, and that default rates for 2005 vintage Alt-A loans are increasing.<sup>12</sup>

The high-risk loans—in particular Alt-A loans—that Fannie Mae guaranteed from 2005 to 2007 have driven the losses the company has experienced this year. Over 70% of Fannie Mae’s 2008 credit losses are attributable to high-risk loans.<sup>13</sup> Nearly half of Fannie Mae’s 2008 single-family credit losses are attributable to its Alt-A loans even though those loans make up less than 11% of Fannie Mae’s single-family conventional guaranty book of business.<sup>14</sup> Similarly,

<sup>6</sup> 2008 Q3 10Q, at 64–65

<sup>7</sup> 2004 10K (restated), at 151–52.

<sup>8</sup> Chares Duhigg, “Pressured to Take More Risk, Fannie Reached Tipping Point,” *N.Y. Times* (Oct. 5, 2008) (attached as Ex. 5).

<sup>9</sup> OFHEO, *Report to Congress* 24 (March 2007) (attached as Ex. 6).

<sup>10</sup> Fannie Mae 2007 10K, at F-83 (attached as Ex. 7).

<sup>11</sup> Fannie Mae 2008 Q2 Investor Conference Call, at 25 (Aug. 8, 2008) (T. Lund: “Well just to be clear. A significant portion of Alt-A doesn’t go through DU.”), <http://www.fanniemae.com/media/pdf/webcast/080808transcript.pdf> (attached as Ex. 8); 2008 Q3 10Q, at 13 (discussing Underwriting Changes).

<sup>12</sup> 2008 Q3 10Q, at 58.

<sup>13</sup> 2008 Q3 10Q, at 65.

<sup>14</sup> 2008 Q3 10Q, at 115; 2008 Q3 10Q Credit Supplement, at 5.

approximately 2% of Fannie Mae's 2008 single-family credit losses are attributable to subprime loans, which make up only a third of a percent of its single-family book.<sup>15</sup>

These high-risk loans were mostly placed on Fannie Mae's books after 2004. Nearly three-quarters of the Alt-A loans in Fannie Mae's single-family book were originated from 2005 to 2007, as were over 80% of the subprime loans.<sup>16</sup> Similarly, of the non-Alt-A or subprime categories of high-risk loans, between approximately 60% to 80% were originated from 2005 to 2007.<sup>17</sup> Moreover, it appears that the loans generated in the 2005 to 2007 time period were riskier than their pre-2005 counterparts. For example, over 95% of the credit losses attributable to Alt-A loans this year are attributable to Alt-A loans guaranteed after 2004.<sup>18</sup> And, more generally, between 70-85% of the credit losses incurred in the first three quarters of 2008 are attributable to loans (of whatever quality) originated after 2004, even though only approximately 60% of the single-family book of business consists of post-2004 loans.<sup>19</sup> In short, it appears that the credit-loss expenses that Fannie Mae has recognized in the first three *quarters* of this year—nearly 17 times the total credit loss expenses incurred in the last three *years* of my tenure at Fannie Mae—are the result of a significant increase in the number of high-risk loans, and in particular Alt-A loans, guaranteed by Fannie Mae from 2005 to 2007.

In addition to the loans it guarantees, Fannie Mae also owns a portfolio of “private-label” MBS issued by third parties. As of September 30, 2008, Fannie Mae held approximately \$117 billion of such securities.<sup>20</sup> Approximately \$55 billion of those securities were backed by either Alt-A or subprime mortgages.<sup>21</sup> In the first three quarters of 2008, Fannie Mae recognized other-than-temporary impairment of approximately \$2.4 billion related to its available-for-sale private-label MBS backed by Alt-A and subprime.<sup>22</sup> (Fannie Mae has not quantified publicly the extent to which fair value losses on trading securities are attributable to private-label MBS backed by Alt-A or subprime mortgages.<sup>23</sup>)

Although these losses do not appear to be as significant as the losses in the guaranty business, it is clear that, like the credit losses, these securities losses are principally attributable to

<sup>15</sup> 2008 Q3 10Q Credit Supplement, at 5.

<sup>16</sup> 2008 Q3 10Q Credit Supplement, at 5.

<sup>17</sup> 2008 Q3 10Q Credit Supplement, at 5.

<sup>18</sup> 2008 Q3 10Q Credit Supplement, at 11.

<sup>19</sup> 2008 Q3 10Q Credit Supplement, at 6.

<sup>20</sup> 2008 Q3 10Q, at 74.

<sup>21</sup> 2008 Q3 10Q, at 183.

<sup>22</sup> 2008 Q3 10Q, at 161–62.

<sup>23</sup> 2008 Q3 10Q, at 159–62.

investments made after 2004. Over 75% of Fannie Mae's holdings in private-label MBS backed by Alt-A or subprime mortgages are from a 2005 or later vintage.<sup>24</sup> Similarly, Fannie Mae has observed that its private-label Alt-A and subprime-backed MBS from 2005 to 2007 were subject to "relaxed underwriting and eligibility standards,"<sup>25</sup> and that the 2006 to 2007 loans underlying those securities "have experienced significantly higher delinquency rates than other vintages."<sup>26</sup>

### **Role of Regulation and Regulators**

There have been many assertions made by commentators about the role of financial services regulation and regulators in the causation of the current financial crisis. While much of this commentary is erroneous, there are legitimate criticisms that can be made of the regulatory system.

A very common allegation that has been made is that the Community Reinvestment Act ("CRA") forced mortgage originators to make loans that were too risky and burdened banks with assets that would later default. This claim is incorrect. The most risky loans in the system tended to be originated by lenders not covered by the CRA. Also, both Ben Bernanke, the Chairman of the Federal Reserve, and, John Dugan, the Comptroller of the Currency, have stated that they have found no evidence that the CRA contributed in any substantive way to the current mortgage difficulties or is in any way to blame for causing the subprime loan crisis.<sup>27</sup> Indeed, an analysis by the Federal Reserve found that only a small portion of subprime mortgage originations are related to the CRA and that most foreclosure filings have taken place in middle- or higher-income neighborhoods.<sup>28</sup>

A variation on this accusation is that affordable housing goals caused Fannie Mae and Freddie Mac to acquire loans made to low- and moderate-income households that subsequently went bad. However, as presented earlier, the majority of losses at Fannie Mae came from Alt-A loans. Alt-A loans were disproportionately *not* made to low- and moderate-income borrowers. As such,

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<sup>24</sup> 2008 Q3 10Q, at 81–83.

<sup>25</sup> 2008 Q3 10Q, at 78.

<sup>26</sup> 2008 Q3 10Q, at 80.

<sup>27</sup> Letter from Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Reserve Sys., to Hon. Robert Menendez, U.S. Senate (Nov. 25, 2008), <http://menendez.senate.gov/pdf/112508ResponsefromBernankeonCRA.pdf> (attached as Ex. 9); John C. Dugan, Comptroller of the Currency, Remarks Before the Enterprise Annual Network Conference (Nov. 19, 2008), <http://www.occ.gov/ftp/release/2008-136a.pdf> (attached as Ex. 10).

<sup>28</sup> Randall S. Kroszner, Bd. of Governors of the Fed. Reserve Sys., "The Community Reinvestment Act and the Recent Mortgage Crisis," Speech at the Confronting Concentrated Poverty Policy Forum (Dec. 3, 2008) <http://www.federalreserve.gov/newsevents/speech/kroszner20081203a.htm> (attached as Ex. 11).

Alt-A loans purchased actually hurt the ability of the GSE to meet its affordable housing goals, which were expressed as a percentage of Fannie Mae's total business. Moreover, a recent study by researchers at the University of North Carolina of a subset of affordable housing loans guaranteed by Fannie Mae found that these loans had performed as expected, with losses close to those of prime loans and substantially lower than subprime loans.<sup>29</sup>

No regulation or law forced banks or the GSEs to acquire loans that were so risky they imperiled the safety and soundness of the institutions. The acquisition of such loans was a business judgment made by management and the boards of directors. However, there remains the question of why regulators did not criticize or restrict the acquisition of such loans by regulated institutions.

Fannie Mae was clearly under close regulatory scrutiny from 2003 through 2008. In early 2004 the company entered into a series of agreements with its regulator, OFHEO, subjecting the company to unprecedented supervision of its business activities.<sup>30</sup> In the 2005 to 2007 time period, as Fannie Mae acquired the vast majority of the loans that caused its subsequent problems, OFHEO did not seek to restrict the amount of credit risk taken on by the company. The regulator limited its intervention to the size of the on-balance sheet mortgage portfolio and the attendant interest rate risk.<sup>31</sup> Indeed, right up until the time Fannie Mae was placed into conservatorship, the Director of OFHEO maintained that the company was well capitalized to withstand the losses it would face.<sup>32</sup>

While it is primarily the responsibility of the regulated financial institution to manage its own credit risk, it is remarkable that during the period that Fannie Mae substantially increased its exposure to credit risk its regulator made no visible effort to enforce any limits. This was true even though that regulator oversaw only two companies and was then enforcing a form of quasi-conservatorship.

While regulations did not *force* financial institutions to make bad loans, the absence of consumer protection regulation *allowed* many bad loans to be made to the detriment of consumers. The mortgage finance system does not have just one consumer protection regulator. That responsibility is divided among the Federal Reserve Board, the other bank regulators, the Federal

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<sup>29</sup> Lei Ding et al., "Risky Borrowers or Risky Mortgages?" at 11, Presentation at the HUD Tuesday Series (Oct. 28, 2008), [http://www.ccc.unc.edu/documents/HUD\\_Oct2008\\_final.pdf](http://www.ccc.unc.edu/documents/HUD_Oct2008_final.pdf) (attached as Ex. 12); Lei Ding et al., *Risky Borrowers or Risky Mortgages: Disaggregating Effects Using Propensity Score Models* 16 (Ctr. for Cmty. Capital, UNC, Working Paper, Oct. 27, 2008), [http://www.ccc.unc.edu/documents/RiskyBorrowers\\_RiskyMortgages\\_1008.pdf](http://www.ccc.unc.edu/documents/RiskyBorrowers_RiskyMortgages_1008.pdf) (attached as Ex. 13).

<sup>30</sup> 2004 10K (restated), at 1–4.

<sup>31</sup> 2007 10K, at 17.

<sup>32</sup> "Statement of OFHEO Director James B. Lockhart," OFHEO News Release (July 10, 2008) (attached as Ex. 14).

Trade Commission, the Department of Housing and Urban Development, and state and local officials. Fannie Mae and Freddie Mac exercise quasi-regulatory authority through the promulgation of their Seller/Service Guides. During the height of the mortgage boom the only entities actively seeking to protect consumers from abusive mortgage practices were the state and local officials and the GSEs. Fannie Mae began trying to improve consumer protection for impaired-credit borrowers as early as 1999. The company issued rules restricting the types of subprime loans it would purchase, and these rules led to major reforms in the market, such as the elimination of mandatory credit life insurance. The Federal Reserve Board did not exercise its statutory authority to regulate subprime loans until 2008.

Preventing future financial-services industry crises and the attendant damage to consumers will require three things. First, executives will have to exercise greater discipline in managing risk. Second, there will need to be increased and better informed regulation of large, leveraged financial entities, regardless of charter, by a single regulator. And third, there must be greater protection of consumers from financial products they cannot reasonably be expected to understand.

#### **Accounting Restatement, 2004–2006**

On December 15, 2004, the SEC announced that certain of Fannie Mae's accounting practices did not comply with GAAP.<sup>33</sup> The SEC required Fannie Mae both to restate its financial statements to eliminate the use of hedge accounting and to reevaluate other information prepared under GAAP for possible restatement.<sup>34</sup> Fannie Mae completed its restatement on December 6, 2006.<sup>35</sup>

My understanding is that this restatement did not contribute to Fannie Mae's recent losses. The main result of the restatement was to eliminate hedge accounting, and this accounting change did not affect the credit-risk management function at Fannie Mae.

The large losses that Fannie Mae has reported so far in 2008 derive from its credit-guaranty activities. By contrast, the financial restatement announced in 2004 and completed in 2006 primarily related to accounting concerning Fannie Mae's mortgage portfolio. Indeed, most criticism of the company and of the risks it was undertaking before 2008 related to the portfolio, and some commentators even suggested that the company should solely focus on its financial guaranty activities as the safer of the two.<sup>36</sup>

<sup>33</sup> "Office of the Chief Accountant Issues Statement on Fannie Mae Accounting," SEC Press Release 2004-172 (Dec. 15, 2004) (attached as Ex. 15).

<sup>34</sup> *Id.*

<sup>35</sup> 2004 10K (restated).

<sup>36</sup> Peter J. Wallison, "Regulating Fannie Mae and Freddie Mac: Now It Gets Serious," *Financial Services Outlook* (AEI May 2005), [http://www.aei.org/publications/pubID.22514/pub\\_detail.asp](http://www.aei.org/publications/pubID.22514/pub_detail.asp) (attached as Ex. 16).

While the actual restatement took two years, Fannie Mae had mitigated the economic consequences by the end of 2004. Just before I departed the company, Fannie Mae initiated the sale of \$5 billion of new preferred stock that, together with a surplus of \$6 billion on the books, restored the company's capital to meet regulatory requirements.<sup>37</sup> The company reported in its 2004 annual report to the SEC that it had capital surplus at year-end of \$2.4 billion.<sup>38</sup> The stock price remained at about \$70 per share both before and after the SEC ordered the restatement, proof that the restatement did not indicate a fundamental economic problem for Fannie Mae. The stock price did not decline until mid-January 2005 when the company—without my input or advice—made the business decision to cut its dividend in half and, later, when OFHEO placed additional restrictions on the company's business. In a related securities suit, a federal judge recently held that the relevant information about the restatement was available to investors shortly after the SEC decision was made public, when Fannie Mae filed an 8-K on December 22, 2004, advising investors that they should no longer rely on previously filed financial statements.<sup>39</sup>

Even under the restated financials, on a marked-to-market basis the fair value of Fannie Mae's assets and liabilities actually rose during the period I ran the company.<sup>40</sup>

#### Accountability

On September 20, 2004, OFHEO delivered to Fannie Mae's Board of Directors a report of the findings to date of its "Special Examination." The report raised questions about Fannie Mae's use of two accounting standards, FAS 91 and FAS 133. Fannie Mae requested that the SEC review Fannie Mae's accounting practices with respect to these two standards.

On October 6, 2004, I testified before the House Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises, of the Committee on Financial Services, and answered questions about the allegations in the OFHEO report. I told that Subcommittee that if "after a thorough review of all the facts, it is determined that our company made significant mistakes, our board and our shareholders will hold me accountable." I also said that "I will hold myself accountable. That comes with being a CEO. I accepted that burden on the day I took the job, and I accept it today."<sup>41</sup>

<sup>37</sup> 2004 10K (restated), at 182.

<sup>38</sup> 2004 10K (restated), at 180.

<sup>39</sup> Mem. Op. 11, *In re Fed. Nat'l Mortgage Ass'n Sec., Derivative, and "ERISA" Litig.*, MDL No. 1668 [Dkt. No. 568] (RJL Jan. 7, 2008) (attached as Ex. 17).

<sup>40</sup> 2004 10K (restated), at 72.

<sup>41</sup> *The OFHEO Report: Allegations of Accounting and Management Failure at Fannie Mae: Hearing Before the Subcomm. on Capital Markets, Insurance, and Government Sponsored Enterprises of the H. Comm. on Fin. Servs.*, 108th Cong. 76 (2004) (attached as Ex. 18).

On December 15, 2004, the SEC's Office of the Chief Accountant announced that its "review indicate[d] that during the period under [its] review, from 2001 to mid-2004, Fannie Mae's accounting practices did not comply in material respects with the accounting requirements" of FAS 91 and FAS 133. The SEC advised Fannie Mae that it should (i) restate its financial statements to "eliminate the use of hedge accounting," (ii) evaluate the accounting under FAS 91 and restate its financial statements "if the amounts required for correction are material," and (iii) reevaluate the information prepared under GAAP and non-GAAP information that Fannie Mae previously provided to investors.<sup>42</sup>

Following the SEC's announcement, I held myself accountable even though I never had personal knowledge that Fannie Mae's accounting practices failed to comply with GAAP, as was confirmed by the \$80 million independent investigation of the accounting controversy. In February 2006, Senator Warren Rudman and the law firm of Paul, Weiss, Rifkind, Wharton & Garrison LLP, hired by Fannie Mae's independent Board members and approved by OFHEO, completed their investigation into OFHEO's allegations. Senator Rudman and his team "did not find that [Raines] knew that the Company's accounting practices departed from GAAP in significant ways."<sup>43</sup> In particular, Sen. Rudman "saw no indication that [Raines] knew that the Company's application of FAS 133 contained substantial departures from GAAP."<sup>44</sup>

Although I never had personal knowledge or independent reason to believe that Fannie Mae's accounting practices failed to comply with GAAP, I nevertheless announced my retirement from Fannie Mae on December 21, 2004, one week after the SEC's announcement regarding the Company's accounting. Through Fannie Mae, I released a public statement making clear that I was holding myself accountable:

I have advised the Board of Directors today that I am retiring as Chairman and Chief Executive Officer of Fannie Mae.

I previously stated that I would hold myself accountable if the SEC determined that significant mistakes were made in the Company's accounting. Although, to my knowledge, the Company has always made good faith efforts to get its accounting right, the SEC has determined that mistakes were made. By my early retirement, I have held myself accountable.<sup>45</sup>

<sup>42</sup> "Office of the Chief Accountant Issues Statement on Fannie Mae Accounting," SEC Press Release 2004-172 (Dec. 15, 2004).

<sup>43</sup> Paul, Weiss, Rifkind, Wharton & Garrison LLP & Huron Consulting Group Inc., *A Report to the Special Review Committee of the Board of Directors of Fannie Mae, Executive Summary 5* (Feb. 23, 2006) (attached as Ex. 19)

<sup>44</sup> *Id.* at 9.

<sup>45</sup> "Statement by Franklin D. Raines, Chairman and CEO, Fannie Mae," Fannie Mae Press Release (Dec. 21, 2004) (attached as Ex. 20).

I have held myself accountable for the accounting practices that led to the restatement because I was CEO during the time those practices were in use. I told the House Subcommittee in 2004 that I would hold myself accountable if the SEC found significant problems, and I acted on this commitment by announcing my retirement from Fannie Mae in December 2004.

I have been held accountable financially, as well.

OFHEO has stated that I was paid \$90 million as Chairman and CEO of Fannie Mae, a period when the company earned in excess of \$20 billion on a restated basis. At least \$36 million, or about 40 percent, of the \$90 million amount has been rendered worthless because the company's recent financial problems make the stock options awarded to me worthless. In addition, I gave up or did not receive approximately 351,127 of the shares of Fannie Mae common stock that were reported in the company's annual proxy statements as target Long-Term Incentive Plan Awards to me. According to those proxy statements, the expected payout of these stock awards would have totaled approximately \$27 million. In addition to these amounts, I, along with other investors, lost millions of dollars on the shares of Fannie Mae stock that I held.

The large discrepancy between the reported expected value of my compensation and the compensation that I actually realized demonstrates that the Fannie Mae compensation system functioned as designed—to tie executive compensation to Fannie Mae's performance over a blend of short-term, medium-term, and long-term horizons, thereby ensuring that an executive's financial interest would never be disproportionately tied to any single period. When the company's performance faltered—in this case, years after my departure—the value of my previously awarded compensation was likewise reduced or clawed-back. It should not be surprising that Fannie Mae tied executive compensation to corporate performance—Congress mandated that the company do so. The company's charter requires “a significant portion of potential compensation” for its officers to be “based on the performance of the corporation,” and the company complied.<sup>46</sup> The charter also requires the company to pay compensation “comparable with compensation for employment in similar businesses (including publicly held financial institutions or major financial services companies) involving similar duties and responsibilities.”

OFHEO itself confirmed the reasonableness of Fannie Mae's compensation policies. OFHEO periodically reviewed Fannie Mae's executive compensation because OFHEO's statute required the agency to prohibit Fannie Mae from providing excessive compensation to any executive officer of the GSEs.<sup>47</sup> While I was CEO of Fannie Mae, OFHEO in fact retained expert consultants to help assess the GSEs' compensation. As OFHEO reported to Congress in 2003, “[i]n 2002, an executive compensation consultant retained by OFHEO completed a study initiated in 2001, which compared the components and levels of executive compensation of executive officers at the Enterprises with those of executive officers in other similar businesses

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<sup>46</sup> 12 U.S.C. § 1723a(d)(2) (attached as Ex. 21).

<sup>47</sup> 12 U.S.C. § 4518(a) (attached as Ex. 22).

involving similar duties and responsibilities.”<sup>48</sup> The study assisted OFHEO in its supervisory review of executive compensation, and OFHEO reported no problems to Fannie Mae or to Congress with the level of executive compensation while I was CEO.

OFHEO has also stated that it believes it has held me financially accountable. As part of a settlement of litigation that the agency initiated against me, OFHEO announced earlier this year that it had required me to forfeit or pay a total of \$24.7 million. The bulk of this amount involved my surrendering and relinquishing claims to some of the stock and options referenced earlier.<sup>49</sup>

### **Role of Government Sponsored Enterprises**

A number of commentators have suggested that there are inherent flaws in the government sponsored enterprise model. Some suggest these flaws merely lead to a lack of transparency regarding risk. Others have alleged that the GSE model caused the current financial crisis. I believe these views to be mistaken.

What exactly is a government sponsored enterprise? Originally that term was created merely as a convenient way to refer to a variety of entities in the federal budget process. These entities had in common a corporate form and the use of private shareholder capital to carry out, for profit, business activities that also advanced public policy objectives. The Federal National Mortgage Association was a subsidiary of a government-owned corporate entity at its birth in 1938. Over time, lenders who transacted business with the association were required to buy stock. In 1968, the government sold its remaining interest in Fannie Mae and the activities of the company were removed from the unified federal budget. The federal budget continued to report on Fannie Mae’s activities in its appendix, therein referring to it as a government sponsored enterprise.

Once the government sold its interest in Fannie Mae, the company looked a lot like other government-chartered national associations—for example, national banks—except that the government retained the right to appoint members to the Fannie Mae board. The company did not have a safety and soundness regulator until 1992, lacked any explicit guarantee or insurance from the government, and had the ability to borrow up to \$2.5 billion from the Treasury. Despite the lack of a formal guarantee of Fannie Mae’s debt, the market assumed that the government would take steps to keep the company functioning if Fannie Mae threatened to fail. The ambiguity of this assurance meant that the company did not receive the full benefit of a guarantee in lower interest rates on its debt and that buyers of the company’s debt were at risk for some unknown percentage of their investment.

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<sup>48</sup> OFHEO, *Report to Congress* 5 (June 2003) (attached as Ex. 23).

<sup>49</sup> “OFHEO Issues Consent Orders Regarding Former Fannie Mae Executives,” OFHEO News Release (Apr. 18, 2008) (attached as Ex. 24).

Federal legislation in 1992 moved Fannie Mae closer to the traditional model of a regulated financial institution and made explicit that its public policy role went beyond providing liquidity to the general mortgage market to making affirmative efforts specifically to serve households below the median income. (A similar expansion of public responsibility was applied to depository institutions much earlier, through the Community Reinvestment Act.)

It has been argued that this mixing of public purpose with a for-profit enterprise leads to irreconcilable conflicts. However, such an admixture is not new or unique. As mentioned, depository institutions operate under government charters and receive substantial benefits from the government, including a full faith and credit guarantee of deposits. In return, they have been given certain obligations to serve their communities. Defense contractors primarily serve a public purpose with their production, but are, in most cases, ordinary, for-profit corporations. Deregulated electric energy companies can exercise certain governmental powers, such as eminent domain, while also earning private profits. This is not to say there are not conflicts to be resolved; only that the need to resolve those conflicts exists in many businesses whose work significantly affects public policy objectives. (The issue of conflicts does not go away simply by changing the ownership of the entity from common shareholders to a cooperative-type structure.)

It has also been argued that Fannie Mae receives a subsidy that is not adequately reflected in the budget or paid for by the company. First, there is no doubt that Fannie Mae receives a benefit from its status as a GSE. Second, if those benefits are treated as a subsidy there is already a mechanism for recording them in the federal budget. Under credit reform, the present value cost of a government guarantee is supposed to be recorded as an outlay in the budget. To date, this has not been done with Fannie Mae. One reason for that may be that, until recently, under the economic assumptions of the government and the risk-based capital rules imposed on Fannie Mae, the likely outcome of the calculation would be that there was no present value cost of the implicit guarantee. Finally, as a federal taxpayer, Fannie Mae was subject to the corporate income tax, which would have more than compensated the government for any reasonable cost of its implicit guarantee in the pre-financial-meltdown period. Obviously, no level of fee from Fannie Mae, commercial banks, investment banks, or insurance companies could have compensated the federal government for the extraordinary costs it has incurred in dealing with the financial crisis.

In light of the costs the federal government may incur in addressing the financial problems of Fannie Mae and Freddie Mac, some people have said that the GSEs had a deal where the profits they made were privatized and the costs were socialized. That, of course, can be said of any situation where the government bails out a for-profit enterprise. But the assertion is not entirely correct in the cases of Fannie and Freddie. When the government sold its interest in Fannie Mae in 1968, the company had less than \$2 billion of equity capital. When I announced my retirement as CEO at the end of 2004, the company had \$38.9 billion of equity capital. By the end of 2007, shareholder equity had risen to \$44 billion. This capital, all the property of private shareholders, stood between the losses of the company and the U.S. Treasury as the company incurred losses in 2008.

Some might allege that stockholders prospered by receiving dividends from the company, which is true. However, the company paid out dividends equal to less than 25 percent of its after-tax

income. That means that three-quarters of the profits remained in the company to absorb the risks of the business.

Moreover, at the end of 2004, the common stock of Fannie Mae had a market value of about \$70 billion despite the accounting controversy. The stock value was 1.8 times the book value of the company measured by shareholder equity. That multiple indicated that common stock shareholders had high expectations for the future profitability of the company. The value of the company's stock has moved down over the last four years and is currently worth less than \$1 billion. Thus, Fannie Mae shareholders can argue that they, not the government, have been the biggest losers from the company's current problems.

The GSE model is a far from perfect way to achieve the goal of using private capital to achieve the public purpose of homeownership and affordable rental housing. However, if the public policy goal remains the same, it will be hard to find a model that has more benefits and fewer demerits than the model that worked reasonably well for almost seven decades at Fannie Mae.

### **Conclusion**

It has been almost four years since my decisions have had any impact on Fannie Mae, the housing market, or the global market for mortgages and mortgage-backed securities.

I continue to believe in the mission for which Congress created Fannie Mae and Freddie Mac, to expand middle- and low-income home ownership by providing liquidity to the primary mortgage market. This function frees capital so that lenders can help prospective home buyers into homes. I believe that, properly regulated, these entities have a more important role than ever to play in increasing the liquidity in the mortgage market and innovating solutions to today's mortgage-financing crisis.

Thank you, and I would be happy to answer any questions.

**Embargoed until:  
10:00 a.m.  
December 9, 2008**

**Testimony by Franklin D. Raines  
Before the House Committee on  
Oversight and Government Reform  
December 9, 2008, 10:00 a.m.**

**Exhibit List**

1. "Statement of FHFA Director James B. Lockhart," FHFA News Release (Sept. 7, 2008)
2. Fannie Mae 2008 Q3 10Q (excerpts)
3. Fannie Mae 2008 Q3 10Q Credit Supplement,  
[http://www.fanniemae.com/media/pdf/newsreleases/2008\\_Q3\\_10Q\\_Investor\\_Summary.pdf](http://www.fanniemae.com/media/pdf/newsreleases/2008_Q3_10Q_Investor_Summary.pdf)
4. Fannie Mae 2004 10K (restated) (excerpts)
5. Chares Duhigg, "Pressured to Take More Risk, Fannie Reached Tipping Point," *N.Y. Times* (Oct. 5, 2008)
6. OFHEO, *Report to Congress* (March 2007) (excerpts)
7. Fannie Mae 2007 10K (excerpts)
8. Fannie Mae 2008 Q2 Investor Conference Call (Aug. 8, 2008),  
<http://www.fanniemae.com/media/pdf/webcast/080808transcript.pdf> (excerpts)
9. Letter from Ben S. Bernanke, Chairman, Bd. of Governors of the Fed. Reserve Sys., to Hon. Robert Menendez, U.S. Senate (Nov. 25, 2008),  
<http://menendez.senate.gov/pdf/112508ResponsefromBernankeonCRA.pdf>
10. John C. Dugan, Comptroller of the Currency, Remarks Before the Enterprise Annual Network Conference (Nov. 19, 2008), <http://www.occ.gov/ftp/release/2008-136a.pdf>
11. Randall S. Kroszner, Bd. of Governors of the Fed. Reserve Sys., "The Community Reinvestment Act and the Recent Mortgage Crisis," Speech at the Confronting Concentrated Poverty Policy Forum (Dec. 3, 2008)  
<http://www.federalreserve.gov/newsevents/speech/kroszner20081203a.htm>
12. Lei Ding, et al., "Risky Borrowers or Risky Mortgages?" Presentation at the HUD Tuesday Series (Oct. 28, 2008),  
[http://www.ccc.unc.edu/documents/HUD\\_Oct2008\\_final.pdf](http://www.ccc.unc.edu/documents/HUD_Oct2008_final.pdf)

- 13 Lei Ding, et al., *Risky Borrowers or Risky Mortgages: Disaggregating Effects Using Propensity Score Models* (Ctr. for Cmty. Capital, UNC, Working Paper, Oct. 27, 2008), [http://www.ccc.unc.edu/documents/RiskyBorrowers\\_RiskyMortgages\\_1008.pdf](http://www.ccc.unc.edu/documents/RiskyBorrowers_RiskyMortgages_1008.pdf)
- 14 “Statement of OFHEO Director James B. Lockhart,” OFHEO News Release (July 10, 2008)
- 15 “Office of the Chief Accountant Issues Statement on Fannie Mae Accounting,” SEC Press Release 2004-172 (Dec. 15, 2004)
- 16 Peter J. Wallison, “Regulating Fannie Mae and Freddie Mac: Now It Gets Serious,” *Financial Services Outlook* (AEI May 2005), [http://www.aei.org/publications/pubID.22514/pub\\_detail.asp](http://www.aei.org/publications/pubID.22514/pub_detail.asp)
- 17 Mem. Op., *In re Fed. Nat'l Mortgage Ass'n Sec., Derivative, and "ERISA" Litig.*, MDL No. 1668 [Dkt. No. 568] (RJL Jan. 7, 2008)
- 18 *The OFHEO Report: Allegations of Accounting and Management Failure at Fannie Mae: Hearing Before the Subcomm. on Capital Markets, Insurance, and Government Sponsored Enterprises of the H. Comm. on Fin. Servs.*, 108th Cong. (2004)
- 19 Paul, Weiss, Rifkind, Wharton & Garrison LLP & Huron Consulting Group Inc., *A Report to the Special Review Committee of the Board of Directors of Fannie Mae, Executive Summary* (Feb. 23, 2006)
- 20 “Statement by Franklin D. Raines, Chairman and CEO, Fannie Mae,” Fannie Mae Press Release (Dec. 21, 2004)
- 21 12 U.S.C. § 1723a(d)(2)
- 22 12 U.S.C. § 4518(a)
- 23 OFHEO, *Report to Congress* (June 2003)
- 24 “OFHEO Issues Consent Orders Regarding Former Fannie Mae Executives,” OFHEO News Release (Apr. 18, 2008)

Chairman WAXMAN. Thank you very much, Mr. Raines. We appreciate your testimony.

Before we go to questions by the members of the committee, I would like to ask unanimous consent that all Members may be permitted to enter an opening statement into the record. And, without objection, that will be the order.

By a previous agreement with the minority, I would ask unanimous consent that we start off the questioning with 12 minutes on the Democratic side and 12 minutes on the Republican side before we then go to the 5-minute rule. And, without objection, that will be the order.

The Chair, starting the questions for our side, would yield 10 minutes to the gentleman from Massachusetts, Mr. Tierney.

Mr. TIERNEY. Thank you, Mr. Chairman.

And before I start my questions, I just want to take one moment and appreciate your services here as chairman. I share with Mr. Issa the observation that you have lifted the stature of this committee substantially, and all the Members and the staff are grateful for that.

When you were in the minority as the ranking member, you certainly made every attempt and were successful in refocusing the Congress and the committee on important matters. As chairman, you have focused on a number of important matters that were essential to the country and to the Congress. Now, you bring your duties and your skills over to the Commerce Committee at our loss but, I think, the Nation and Congress's benefit.

And so we thank you very much, and I've been proud to serve with you.

Chairman WAXMAN. The gentleman will be given the full 10 minutes. [Laughter.]

Mr. TIERNEY. I thank all of you gentlemen for being here this morning and working with us on this.

Mr. Mudd, if you might, I would like to ask you a couple of questions, in particular about a document that we found in your internal files at Fannie Mae. It says, "A single family guarantee business facing strategic crossroads," dated in June 2005. And it is listed as confidential and highly restricted.

I'd like to get your responses to it. We have some slides up there, if you find that helpful, sir.

The first slide in this says, "The risk in the environment has accelerated dramatically," and the bullets under that say that there has been a proliferation of higher-risk alternative mortgage products, there is a growing concern about housing bubbles, there is a growing concern about borrowers taking on increased risk and higher debt, and lenders have engaged in aggressive risk layering.

The next slide, if we switch over on that, says the growth in adjustable-rate mortgages continues at an aggressive pace. And here the presentation says that there has been an emphasis on the lowest possible payment, and homes are being utilized more like an ATM.

It appears, Mr. Mudd, that you were aware of both the accelerating risk in this environment, as well as the concerns about housing bubbles as far back as 2005. Is that correct?

Mr. MUDD. Yes.

Mr. TIERNEY. The next slide says, “We are at a strategic crossroads, and we face two stark choices. One is stay the course, and the other is meet the market where the market is.” The next slide shows the benefits of staying the course. It says, “Fannie could maintain our strong credit discipline, it would protect the quality of the book, it would intensify our public voice on concerns about the housing bubble and accelerating risk, and, most importantly, it would preserve capital.”

The next slide shows the other alternative, meet the market where the market is. In other words, you would meet current consumer and customer demands for alternative mortgage products. This was viewed as a revenue opportunity and a growth area. But, under the alternative, you accept higher risk and higher volatility of earnings.

And the next slide puts these pros and cons side by side. If you stay the course, you’ll have lower revenues and slower growth, but you will have more security. On the other hand, if you invest in riskier mortgages, you have potential for high revenues and faster growth. But, as the slide says, you also have increased exposure to unknown risks.

Based on these slides, Mr. Mudd, you faced a fundamental decision in 2005: Do you keep your focus on the more secure fixed-rate mortgages but potentially lose out on some profits, or do you compete with private lenders by entering into riskier sectors of the market?

It doesn’t seem that there was any real question that you were aware that you were increasing your risk significantly by entering the market. Is that correct?

Mr. MUDD. No, it is not exactly correct, Congressman.

Mr. TIERNEY. Now, the document indicates that you were aware that you were increasing your risk. You’re saying that you weren’t aware you were increasing your risk?

Mr. MUDD. Well, if I might give you a response in context, the process and what we were doing at that time was thinking through what our various alternatives were, in terms of the marketplace. The choice, as you do in corporations or other institutions, was presented relatively starkly in order to identify what the key issues were, but, in fact, the real choice that was made on the ground was not, do you do A, do you do B, do you do black, do you do red. The choice was, rather, what are the pros and cons of this decision, to make clear what the choices were.

Mr. TIERNEY. And that is reflected in that document.

Mr. MUDD. Yes, sir.

Mr. TIERNEY. And one of those is that you are increasing your risk significantly by entering that market, if you were to enter that market.

Mr. MUDD. If you were to make the full B decision—and that is not, in fact, what we did. So, your choice was, how far do you adjust from where you are to meet the market, ultimately?

Mr. TIERNEY. It looks as if you made the choice to enter the alternative market. But, let me put up two more slides, and we’ll discuss it.

The first slide we are going to put up is the recommendation that was made in 2005 based on all the factors you just talked about.

It starts by admitting that realistically we are not in a position to meet the markets, and that is because you had less experience with the riskier loans and you didn't have enough data to evaluate the credit risk. The slide says, "Therefore, we recommend that we pursue a stay-the-course strategy." However, the slide at the bottom recommends that you dedicate resources and funding to, "underground efforts" to develop a subprime infrastructure and modeling for alternative markets.

The last slide says this: "If we do not seriously invest in these underground-type efforts, we risk becoming a niche player, becoming less of a market leader, and becoming less relevant to the secondary market."

So, Mr. Mudd, I reviewed your written statement, and I listened to what you had to say here today. You didn't seem to take any acknowledgement that you may have made some mistakes. And looking back in hindsight and directed by the slide that we just saw, you may not have led the market—and I really believe that is true; you didn't lead the market into the situation—but you faced a choice of whether to enter it, and it appears to me that you made the choice to enter that market, and that was a wrong decision.

Do you agree that was the wrong decision to make?

Mr. MUDD. No, sir. And what I would point to on this slide is the phrase that says we need to invest in these efforts if—and if the market changes prove to be secular. And the context I would point out to you on that was: We weren't sure. We weren't sure whether those changes in the marketplace were secular or whether they were cyclical, was it temporary or was it a permanent change in the market.

And we thought it was important that we couldn't afford to make the bet that the changes were not going to be permanent. We couldn't afford to make the bet that somebody who has a subprime mortgage, who, at the end of the day, is simply an American with a credit blemish, would never be able to get a loan in the country if the Fannie Mae approach, Fannie Mae standards, Fannie Mae qualities couldn't be applied there.

So, when we looked at the market, we made a tradeoff between the choices, and we said, no, we are going to focus back on our bread and butter, but we're going to do this work to make sure we understand these new emerging markets and we can develop a better view of them.

Mr. TIERNEY. But, in actuality, starting in 2005, you actually purchased hundreds of billions of dollars of those loans, correct?

Mr. MUDD. No, sir. I think it is important in that to break out the various categories of loans, because, in your question, you were asking about ARM loans, which were adjustable-rate mortgages, which many of us have; Alt-A loans, which are an alternative to an A loan, different documentation than an A loan; and subprime loans, which are a different matter entirely.

Going back through those, 85 percent of the book at Fannie Mae was standard A loans, the basic loans that had been done throughout time. A percentage around 10 percent or so was in the Alt-A category. And a much smaller percentage that never amounted to

more than a percent or two of this total book was actually in subprime.

Mr. TIERNEY. I think, Mr. Mudd, that it's important that we make a distinction between the Alt-A and the subprime on that. And I think because some of the rhetoric that we have heard back and forth here, the subprime, as you said, was a very small part of the portfolio?

Mr. MUDD. Yes.

Mr. TIERNEY. All right. Explain for us the Alt-A. You didn't really get any credit, did you, on meeting your goals for affordable housing by buying the Alt-As because, in my understanding, they are not really clarified as to just what the basis of those loans are?

Mr. MUDD. I'm sorry. I missed the end of your question.

It would depend on whether the actual character of the loan met the socio-economic categories that would count toward a goal per se. On their face, they might or might not count. The Alt-A loans were essentially a subset of overall A loans. As I indicated, Alt-A means an alternative to an A loan. So, they bear many of the same characteristics. Otherwise, they qualified or counted—they might or might not count toward those affordable housing goals.

The market produced those loans, and Fannie Mae's participation in those loans, in fact, goes all the way back to 2000. We were doing, starting in the year 2000, \$10 billion, up to 2003 about \$100 billion, of Alt-A loans, down to \$79 billion in 2005. I could go on. But, those loans varied in terms of what the market was producing, as did the balance between fixed-rate loans.

Mr. TIERNEY. June 2005 was when you decided to go into Alt-A's a little more heavily, right?

Mr. MUDD. We decided to examine the market more carefully. In 2004, we were doing a rate of about \$63 billion. In 2006, we were up to \$106 billion, and in 2007, \$198 billion.

Mr. TIERNEY. Up in 2005. And in this year, substantially the largest part of your losses come from your Alt-A loans, right?

Mr. MUDD. I am not completely up to date on the figures, Congressman. But, I think that, of a single segment of the book—the largest losses come from Alt-A. But, the predominance of the book, the old A rate, 85 percent of the book is also producing about half of the loans, as the housing market has gone down by 35 percent.

Mr. TIERNEY. Let me sum up. I don't think that Fannie Mae or Freddie Mac caused the slide, but the facts also indicate that you bear some responsibility for aggravating it, some responsibility for accepting those risks, knowing that those risks were not insignificant—in fact, they were substantial—and plunging into that market, sort of following the Wall Street gang into that market. I think we are all going to pay the price for that, and we are going to have to deal with that now.

Chairman WAXMAN. Thank you, Mr. Tierney.

Mr. Issa.

Mr. ISSA. Thank you, Mr. Chairman.

I look at all four of you, and the one thing that I seem to find is that all four of you still seem to be in complete denial that Freddie and Fannie are in any way responsible for this. Your testimony says you are not accepting any blame for this at all. You are either standing behind the mandate of the Congress or the man-

date of your stockholders, perhaps the mandate of your bonus packages.

And you are telling us that, in fact, everyone was doing it. Your whole excuse for going to risky and unreasonable loans that are defaulting at an incredibly high rate is, "Everyone is doing it. If we don't do it, we will be left out." Well, I am sorry that you wanted to be the most popular girl in the school, and you forgot what your mother told you about your activities.

Mr. Mudd, you seem to have the clearest reason. And with Mr. Tierney's questions, you seem to be able to clearly articulate something I would like to have all four of you acknowledge today: that, in fact, there are compliant A conventional—I met the criteria loan—and then there were all others, Alt-A and subprime being the two best known of those. Is that correct?

Mr. MUDD. What I was hoping to describe, Congressman, was that the loans exist in a spectrum. And at the, sort of, core, heart and soul of the spectrum would be A loans. And the market operates, if you might imagine, in a series of concentric circles around that. The further out you go, the riskier the loans are.

Mr. ISSA. What I would like to do today—and we'll grapple with this for the next 2 years—is, Alt-A and subprime are substantially the same. You get credit if they are in underserved areas. And, in fact, since my understanding of a subprime is, if you have a FICO score of less than 660, you are essentially subprime, and a great many of Alt-A not only had a credit score of less than 660's but they didn't tell you what their income was, or they told you, but they didn't prove it.

Now, that creates an Alt-A that is an Alt-A, but it is also a subprime. Isn't that true?

Mr. MUDD. The way I would answer the question, Congressman, is that the combination of features in the loan defines the type of loan it is. So, yes, in the market, there are Alt-A subprime loans, and in the market, there are high-FICO subprime loans. Any of those things is possible, depending on the combination of the borrowers and the product features.

Mr. ISSA. So, it is relatively fair, for those of us who don't do this every day, that this is a distinction without a real difference, relative to the default, relative to the problem, to the extent that these practices are part of the problem. They are reasonably equally part of the problem, because today they are equally part of the default; is that reasonably fair?

Can I get a consensus that—remembering that none of you said that you were part of the problem, but they are defaulting at substantially the same rate. Is that correct?

Mr. Mudd.

Mr. MUDD. I believe that it is more likely that the more variable features or the more credit characteristics that apply to a loan, those things can aggregate to increase the risk in that loan, yes.

Mr. ISSA. Mr. Raines, in your testimony, you said that Fannie Mae did not contribute significantly to the housing collapse. You acknowledge that your former company holds \$300 billion of Alt-A, which do not verify the borrower's income.

Now, if those are defaulting and, in fact, were defaulting at a time in which unemployment was still at a historic low, then

wouldn't the failure to verify income be a leading part of why you would have a default in a loan that, if the person's income was, in fact, honestly stated, they would be able to maintain? Meaning, if they didn't lie, they would make the payments and they wouldn't be in default. Isn't that true?

Mr. RAINES. It is a very complex question that you—

Mr. ISSA. Trust me, I spent a lot of time making sure it was as simple as can be.

If, in fact, unemployment was still at a historic low level when Alt-A's began defaulting but housing had stopped its precipitous rise, wouldn't you say, by any reasonable assessment, that, in fact, the liars getting loans was a significant part of it? Because those people, records are showing more and more, counted on a rise in value to make those loans, rather than a falsely stated income.

Mr. RAINES. I think that is correct. I think that the experience with Alt-A loans in that period—again, this is after I had left—and the period 2006–2007 was affected by fraud, where people did not tell the truth about their assets or their income and they obtained mortgages that they otherwise wouldn't have qualified for.

Mr. ISSA. So, here, today, if we take with us one take-with, if you will, wouldn't it be fair to say, in retrospect—and I appreciate the fact that you had mixed signals sent from Congress and others. If you had it to do all over again, particularly Alt-A, but to a certain extent subprime, wouldn't you, if you could have, ensured that people who were looking for a home greater than, in retrospect, they could afford, if it didn't go up in value, had been sent back to go find a home they could afford rather than the one they chose? Isn't that at the root of why we are here today?

You know, the demise of various financial institutions didn't start until the default started. We can appreciate the default is the beginning of this problem. So if default is the beginning of this problem, and default began—and I was with Mr. Kucinich in Cleveland well before this became described as a crisis: unemployment low, housing prices simply no longer going up, defaults begin to escalate.

In retrospect, would each of you say, both as observers and almost current CEOs, that, in fact, had people been told to go back and find a home they could better afford, thus not ratcheting down people to a liar mortgage, that this crisis could have been reduced or averted?

And I will take a "yes" from everyone and walk away happy.

Mr. BRENDSEL. I would like to comment on that.

Mr. ISSA. Although I will take first, the yeses.

Mr. BRENDSEL. I think the failure to underwrite a mortgage loan properly is certainly at the core of what could be default on that mortgage loan. So, the question is, to what are the underwriting requirements?

So, certainly making a mortgage loan to someone that can't afford that mortgage loan or who might be surprised by big payment shock down the road, a lender or investor in that mortgage loan has to be very cautious about that and, in my view, should do everything they can to at least educate the marketplace as to what is a sound mortgage loan and what is not.

With regard to documentation, that is a second question as to failure to document or to verify someone's income, which, again, I think a responsible lender should do.

Mr. ISSA. Mr. Raines, would you concur with that?

Mr. RAINES. I concur with what Mr. Brendsel just said, that underwriting standards, proper underwriting standards could have avoided many of the losses that were experienced on loans that were originated in 2005, 2006, and 2007.

Mr. ISSA. Would that pretty well summarize the other two?

We are looking back to make sure this doesn't happen again. Generally, those are the lessons we need to take with us for future legislation and messages to your former organizations.

Is that right? Is it?

Mr. MUDD. If you could go back and look at the loans that were made and pick out the ones that are delinquent or defaulted or too close to the loan-to-value ratio, yes, absolutely.

Mr. ISSA. Thank you.

I reserve the balance of my time.

Chairman WAXMAN. Mr. Towns, you are recognized for 5 minutes.

Mr. TOWNS. Thank you very much, Mr. Chairman.

Also, let me join in saying that it has been a delight working with you. And, of course, I am happy to know that you are not leaving the Congress, and we will still be able to continue to work with you, probably in a different capacity, of course. So, again, you provided excellent leadership, and you have done a lot of major things for this committee, and, of course, we are very grateful for that. We look forward to seeing you on the other committee.

And, also, let me thank you for holding this hearing. I think it is very, very important that we have this hearing.

Let me just begin by saying, since the crisis started, I just want to ask all of you, we have heard some people claim that poor people are to blame for this. That is the problem, they are saying. And the way this argument goes, the Federal Government forced the banks to give mortgages when they shouldn't have—this is what they say—to people who were not creditworthy, then forced Fannie Mae and Freddie Mac to buy up those bad mortgages.

And you are the experts here. Is that the main reason that Fannie Mae and Freddie Mac had to be taken over, because they made too much financing available to low-income homeowners? Is that the problem?

Let me just run right down the line.

Mr. SYRON. Sir, I think the main reason for the problems with Freddie Mac and Fannie Mae, these are organizations that were not diversified and faced the most violent correction and the largest correction in 75 years in housing prices, which is, we were in the business of ensuring housing prices, in effect, when that happened.

I would think that it wasn't mostly trying to do things for poor people. I do think that we have to realize that we need a balanced housing program. And I personally am in favor of, in a progressive sort of way, good rental housing that people can have while they are getting ready to become homeowners.

Thank you, sir.

Mr. TOWNS. Mr. Mudd.

Mr. MUDD. I would just observe, Congressman, that when the market goes down, it is the folks who are the closest to the margin who get hurt first and longest every time. And that is what has produced the great human tragedy of this, which is the crisis of foreclosures in a lot of the towns and cities across the country.

Fannie Mae's business was to be able to provide lending all across the spectrum of affordable housing. And, as part of that, you had individuals who are in those communities. And now, and during my time, the company is doing everything it could to try to stem that wave of foreclosures and difficulties in those communities.

Mr. TOWNS. Mr. Brendsel.

Mr. BRENDSEL. As I testified, I was CEO of Freddie Mac for a long, long period of time. I cannot recall ever being forced to make or to purchase a mortgage loan that I didn't feel, as a matter of policy at Freddie Mac, was a good mortgage loan, a sound mortgage loan, and an attractive mortgage loan for the home buyer or the owner of an apartment building.

Mr. TOWNS. Mr. Raines.

Mr. RAINES. I do not believe that poor people are the cause of the current financial crisis, nor do I believe defaults on the loans that they might hold is the cause. They have much too small a share of the market. Most of the losses, as I read the record, have come on mortgages that were made to middle-class and upper-middle-class people, not to poor people.

And I do not believe that community reinvestment loans are the cause of the concern, and apparently neither does the comptroller of the currency nor the chairman of the Fed, each of whom have said that the act requirements had no role in the current financial crisis.

So, I think I agree with you that it is just simply untrue to blame the current financial crisis on low-, moderate-income people or on the act or on Fannie Mae's affordable housing goals.

Mr. TOWNS. Let's face it, we do have a mess. What do we do now? What do you propose?

Mr. SYRON. I think what we need to do is first be cognizant, as some people have said, that if you want to have long-term fixed-rate mortgages, which the United States as an industrial nation, is pretty unique as having, you need to have something like the GSEs. I think it is worth doing a very thorough review of how these organizations are structured and see what we can learn from this and how we can capture the benefits of the long-term fixed-rate mortgage and ameliorate some of the concerns that come out of being, for example, a mono-line company.

Mr. TOWNS. Mr. Mudd.

Mr. MUDD. Sir, my observation would be that there are, kind of, three tiers of homeowners out there right now. There is a tier of folks who are continuing to make payments, continuing to stay in homes. To get ahead of the problem there, things that Congress or these companies or the financial industry can do is to reduce the rates and reduce the monthly payments. Perhaps even using the Tax Code would be helpful in avoiding that segment becoming a problem.

There is a second tier who are folks that are maybe or maybe not making their payments, struggling but staying in the homes. That group needs not only the reduction in the monthly payments but probably some restructuring, such as, say, balloon note or reduction in principal.

Unfortunately, there is also a set of folks who are already in the process of default and foreclosure. And my recommendation there for society is we do everything we can to keep them in those homes—government relief programs, charitable relief programs, providing a conversion from ownership back into rental. Those types of things are probably going to be most successful.

So, I think you have to attack the problem, because it is a little different depending on the type of homeowner you are addressing.

Mr. BRENDSEL. My response, to answer the question, would be I think, first, in agreement with Mr. Mudd, we need to take action to reduce the rate of mortgage home foreclosures. And, really, what results ultimately from that is that cascading effect on home prices and dumping of homes on the real estate market. So, I think some careful review of foreclosure practices, loan workout practices and so forth, mortgage modification practices by all lenders and servicers and owners of these mortgage loans is extremely important. Our experience at Freddie Mac at a much earlier time was it is really important to the stability of the housing market as to how one reacts to it in a time of distress and increase in mortgage loan defaults.

Longer term, going forward, I think actions there need to look at, first, how to regulate better the origination practices in the country. I think they are doing spotty regulation over time as to the types of mortgage loans that get made, how they get made, the origination practices, and so forth.

Part of that goes to the definition even as to what is a subprime mortgage loan, what is covered under HOPE and what is not and all that. And I do think that there are parts of this market in terms of the origination practices that were really very flawed.

Finally, as I said explicitly in my testimony, I think one certainly needs to review, as part of the work of this committee and others, the appropriate structure of Freddie Mac and Fannie Mae and the regulation of them. I am absolutely convinced that preserving a viable fixed-rate mortgage market in the United States is critical to this Nation and that Freddie Mac and Fannie Mae, as government-sponsored enterprises with this public mission, relying on private capital is essential to it.

Mr. RAINES. I agree with much of what has been said, and I think there are four steps that—or, really, five steps that need to be taken to resolve the overall financial crisis but particularly with regard to housing.

Step No. 1 is we have to provide financing to the system. The system is frozen up, piecemeal. The administration and the Fed have begun to provide financing, for the good and bad. That needs to expand.

Second, we need to separate the good assets from the bad assets and recapitalize financial institutions, such as Freddie Mac and Fannie Mae, but also the banks and others. They need to recognize that the bad assets are bad assets and separate them, so people

can look at these institutions without having to guess what their real financial condition is. They need to be recapitalized because the bad assets—you need to replace that capital.

The third step is to work out the bad assets. To me, I have been stunned at the reluctance to actually work out these millions of loans because houses, as assets, are depreciating assets. An empty house can overnight become worthless as people come in and strip out the copper, take out the plumbing, remove other things. The only thing you can do with that home is tear it down. To me, it is a crime that we are not investing funds to keep people in these homes. It is too late to worry about moral hazard with regard to these loans.

The last two things relate to regulation. We need to have more extensive regulation of big, leveraged financial entities, whether they are called GSEs or banks or insurance companies or hedge funds, whatever their name. If they are big enough to threaten the economy, there has to be intelligent regulation.

And the last point, there needs to be regulation to protect consumers. There is no way that the average consumer can understand the documents that are placed in front of them when they get a mortgage. I know I can't, and I have tried. I made it through one time, and I got to all but one that I could understand. That one, to this day, I don't know what it said.

And every day we are asking ordinary consumers to understand negative amortization, to understand what it means for them to have a subprime versus a prime loan, to understand a two/30 mortgage. It is impossible for the average person to keep up with this. We need to have more rigorous protection of consumers in the mortgage market.

Mr. TOWNS. Thank you, Mr. Chairman.

[The prepared statement of Hon. Edolphus Towns follows:]

**EDOLPHUS "ED" TOWNS**  
MEMBER OF CONGRESS  
10TH DISTRICT, NEW YORK

**ENERGY AND COMMERCE**  
HEALTH  
TELECOMMUNICATIONS AND  
THE INTERNET  
COMMERCE, TRADE, AND  
CONSUMER PROTECTION

**OVERSIGHT AND  
GOVERNMENT REFORM**  
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**Statement of Rep. Edolphus "Ed" Towns**

**Committee on Oversight and Government Reform Full  
Committee Hearing Entitled "The Role of Fannie Mae and  
Freddie Mac in the Financial Crisis."**

**Tuesday, December 9, 2008 at 10:00 a.m. in Room 2154 of the  
Rayburn House Office Building**

I want to thank the Chairman and Ranking Member for holding this hearing to investigate the role of Fannie Mae and Freddie Mac in the current financial crisis.

Congress created the government-sponsored enterprises, Fannie Mae and Freddie Mac, to both encourage and stabilize the housing market in the United States. In the past couple of years, these institutions have failed to perform such a role. They have instead undertaken some of the same risky practices, and fallen victim to the same market forces, as so many other businesses and financial firms. The federal government has backed up these

*Statement of Rep. Towns for Oversight and Government Reform Full Committee Hearing on "The Role of Fannie Mae and Freddie Mac in the Financial Crisis," December 9, 2008 at 10:00am, 2154 RHOB*

institutions at a potential considerable cost to the American taxpayer to prevent these enterprises from causing any more damage to the economy as a whole.

It is very troubling that institutions established by Congress to provide support to the housing market engaged in the types of activities that has contributed to the crisis in the domestic housing market and threatened the stability of the entire economy. Through our investigation, I hope that we can find out what precisely went wrong. Did the establishment of these institutions fail to include appropriate safeguards? Has the government failed to create clear and consistent regulatory and oversight goals to guide the operation of these institutions? Did the temptation to realize short-term profits for shareholders overwhelm considerations about the long-term outlook for these institutions and the housing market? -- Or, did those at the helm of these institutions simply not realize the risks of certain business practices and the increasingly fragile state of the housing market? I sincerely hope that we can get to the bottom of these issues.

*Statement of Rep. Towns for Oversight and Government Reform Full Committee Hearing on "The Role of Fannie Mae and Freddie Mac in the Financial Crisis," December 9, 2008 at 10:00am, 2154 RHOB*

As we investigate what transpired at Fannie Mae and Freddie Mac, I urge my colleagues to focus on turning whatever we discover here today into constructive solutions that will ensure the recovery of the housing market. Now that the federal government is intimately involved with these firms, we have an opportunity to take a close look at what it was that led these firms down the wrong path so that we can put in place clear and responsible mechanisms to help these firms carry out the function for which they were created. I look forward to working with my colleagues on both sides of the aisle to make certain that this happens.

Thank you Mr. Chairman.

# # #

Chairman WAXMAN. Thank you, Mr. Towns.

I would like to request Members, if you have an open-ended question, to ask it in the beginning rather than at the end.

Mr. Mica.

Mr. MICA. Thank you, Mr. Chairman.

We have before us some of the perpetrators of the financial meltdown of our country. It is interesting how the committees operated. If you want to see where we are going today, read today's Washington Post. Commend the staff working diligently with the Washington Post to see where they are trying to lead the public. The committee tried to lead the public first in its Wall Street's fault. Today, we are going to concentrate on 2005 forward, or 2004 forward. But, you have also heard some of the perpetrators, most recently named here, of our financial downfall blame it on somebody else. And Mr. Raines, of course his hands are clean, and he is telling us how to behave in the future.

Just for the record, let me read from Investor Daily a different take on this: "Fannie and Freddie, the main vehicle of Clinton's multicultural housing policy, drove the explosion of the subprime housing market by buying up literally billions of dollars of substandard loans, funding loans that ordinarily wouldn't have been made, based on much time-honored notions as putting money down, having sufficient income, and maintaining a payment record indicating creditworthiness."

With all the old rules out the window, Fannie and Freddie gobbled up the market. Using extraordinary leverage, they eventually controlled 90 percent of the secondary market mortgages. Their total portfolios top \$5.4 trillion, half of all U.S. mortgage lending.

They told you that they were following Wall Street. Mr. Raines mentioned, just in his little commentary to us, that we had to have good underwriting standards. Actually, if we go back and look at some of the underwriting standards, they start deteriorating under the Clinton administration. But, we don't want to talk about that today.

Mr. Raines, you were there when Mr. Cuomo decided to lower the reserve from 10 percent to \$2.5 billion. That was a little bit of lowering some of the standard. And then you came and testified before Congress that the reserves were adequate before you left.

Mr. Raines went on to say in 1999—let me read this quote from September 30, 1999. "Fannie Mae has expanded homeownership for millions of families by the 1990's by reducing down payment requirements. 'I guess that wouldn't be lowering standards,' said Franklin Raines, Fannie Mae's chairman and chief executive officer." And continue to quote, "Yet, there remain too many borrowers whose credit is just a notch below what our underwriting has required who have been relegated to paying significantly higher mortgage rates than the so-called subprime market."

Mr. Raines was indeed part of the problem. Mr. Raines was also found that, under his watch, the Office of Federal Housing Enterprise Oversight, regulating the body of Fannie Mae, found that Mr. Raines, under his directorship, he received \$50 million in overstated—and he overstated earnings by some \$50 million—is estimated to gain huge bonuses.

Mr. Raines, I have some of your compensation here. Could you tell the committee how much compensation that you received from 1998 through the time you left? Bonuses, compensation, benefits.

Mr. RAINES. I don't have that.

Mr. MICA. Would you say it is \$90 million?

Mr. RAINES. OFHEO has estimated the number as \$90 million.

Mr. MICA. And when you found that, under your leadership, that some of these factors had been fudged—well, first of all, the two fellows over here—Mr. Syron, you just left in September.

Well, let's go back to Raines. We said that, 2004, you are still getting bonuses. In 2008, so far, you have gotten \$2,085,000—that is just year to date—in payments from Fannie Mae. Is that correct?

Mr. RAINES. That is what I am given. The number I think you are referring to is a result of the settlement I had with OFHEO.

Mr. MICA. It was a neat settlement, too, because you agreed to donate some of your stock rather than take the proceeds from the stock. Was that part of the settlement?

Mr. RAINES. That is part of the settlement.

Mr. MICA. That was pretty clever, because you had about a 1½ in stocks. But, if we get your tax returns, you donated that and then took an exemption for that. Is that correct?

Mr. RAINES. I didn't file tax returns for 2008. No.

Mr. MICA. I am talking about your settlement with—I need an additional minute.

Mr. ISSA. I will give the gentleman a minute.

Mr. MICA. So, again, I know what you did. The settlement, you really didn't pay anything. You probably took a tax deduction to deduct the amount that you said you were donating, and then the insurance company actually paid the fine. Fannie Mae's insurance paid the fine that was levied on you. Is that correct?

Mr. RAINES. There was no fine.

Mr. MICA. There was \$3 million that was paid by the insurance. We can call it whatever you'd like.

The last thing—I don't have a lot of time here—is this is the bill Mr. Shays introduced in 1992 to further regulate some of the practices that were going on at Fannie Mae. And I know you helped to kill this. I was one of Mr. Shays's cosponsors. \$175 million was spent in lobbying from 1998, a good portion of that under Mr. Raines' reign.

Is that correct?

Mr. RAINES. I am not familiar with that number, no, sir.

Mr. MICA. But, you are familiar with the lobbying information that you had from 1998 until you left in 2004.

Mr. RAINES. Fannie Mae did have lobbyists, yes, sir.

Mr. MICA. And if I find some documents that showed you tried to influence killing legislation that would have regulated Fannie Mae, but that documentation doesn't exist?

Chairman WAXMAN. The gentleman's time has expired.

Mr. MICA. I want him to answer that last question.

Chairman WAXMAN. There is a pending question, and the gentleman will be given an opportunity to answer it.

Mr. RAINES. I have no idea what documentation you have. Fannie Mae, like any other corporation owned by shareholders, came to Congress and expressed its views. And we have done that

consistently in another committee where I've had the opportunity to testify many times, and that is a matter of public record.

Chairman WAXMAN. The gentleman's time has expired.

Mr. Kanjorski.

Mr. KANJORSKI. Thank you, Mr. Chairman.

Maybe I should make an observation that I thought the purpose of this hearing would be to uncover the potential causes of the real estate disaster in the country, but it seems we are going over testimony that I have heard in another life before the Financial Services Committee.

And I suggest, if the members of this committee want to get a good history, go back and read the volumes and volumes of testimony from 2000 on until 2005, while the Financial Services Committee and the Congress of the United States were under the control of the Republican majority. And the piece of legislation that Mr. Mica refers to was introduced by a Republican while he was in the majority of the Congress and under a Republican President. It failed to move through. But I am not going to make those points about gaming the politics, because it is really unimportant.

The question is, and I think Mr. Towns put his hand on it: Are there any observations that you can make to help us out as to how we can stop?

And I think my first question would be, as I understand it, Fannie and Freddie would be in trouble today even if they had not been involved in subprime lending purposes. Is that correct? Assuming that you never had packaged a subprime situation and the real estate devaluation in this country fell by approximately 30 percent, as it has. Under the formula that we had studied on the Financial Services Committee for 5 years, it was indicated to be the perfect worst storm.

I think, Mr. Raines, you recall when Mr. Baker was holding those hearings. And we were all saying, what would happen if we had a perfect terrible storm? And if I recall, I think your testimony was: If the real estate deflation in this country amounted to more than 25 percent, all real estate and all of the GSEs would be in trouble. And, lo and behold, that is exactly what has happened.

So I re-pose the question: If there had never been subprime mortgages in the portfolio of Fannie and Freddie, would it still have difficulty because of the precipitous fall of the valuation of the real estate market of this country, particularly where you are so heavily involved, in California, Florida, Nevada, and States that have really suffered that devaluation?

Mr. MUDD. As an analogy, if you are in the business of insuring against hurricanes, and hurricanes hit a third of the country, you are going to suffer. If you are in the business—solely the business of financing U.S. housing, and the U.S. housing market goes down by 30 percent, you are going to suffer, yes, sir.

Mr. KANJORSKI. We all knew that, didn't we? That was brought out in testimony 4 or 5 years ago. Is that correct?

Mr. MUDD. It was modeled and discussed and disclosed.

Mr. RAINES. I completely agree with your characterization that it was well-known that a significant decline in housing prices would have a dramatic effect, not just on GSEs, but on the entire financial system. The housing finance market is so big that you

cannot have a major impact there without affecting the entire economy. So, I think your characterization is exactly right.

Mr. KANJORSKI. We are thrusting around right now to find some underpinning to real estate valuation, stop the deflation in the real estate market, and to sustain people in houses, as you have all discussed, to prevent foreclosure. Hold the market and hold the house occupied, so that it doesn't depreciate in value.

Has either of you gentlemen participated in an analysis to see whether or not we could create a subsidiary corporation, a sponsored enterprise of the Federal Government, to aid or subsidize mortgages that are going underwater or going into foreclosure, to hold people in their homes, and what the relevant cost would be of doing that?

And would the value of rescue to the economy warrant taking that unusual action in the million or million-and-a-half mortgages that probably could be held in residence or foreclosure tenants in residence?

Mr. RAINES. I have done a little analysis of that, but without the benefit of a lot of staff resources. But, it is my view, and I think it is the view of a number of consumer-oriented groups, that amounts as small as \$10,000 to \$20,000 can go a long way to salvaging a lot of mortgages. In many cases, lenders and the homeowners are not that far apart in their ability to modify a loan and go forward.

And so, in my view, providing that kind of money at the table where there are negotiations going on to modify mortgages would have a substantial impact. And you can do that without having to go and buy up all the mortgages in the country. You can simply provide the additional funds to bridge the gap on a modification. I believe that would have a significant positive net present value for the taxpayer, as well as for the homeowner and the lender.

Mr. KANJORSKI. How would we get that analysis done quickly, and by whom?

Mr. RAINES. I think the best resources available to the Congress on understanding the housing market exists within Fannie Mae and Freddie Mac. And I believe that, through their contacts with their services, they can give you a pretty quick assessment of what level of funding would need to be available to greatly increase the rate of working out mortgages.

Mr. KANJORSKI. Could we take that action even though the real estate market has not ceased to deflate? In other words, could we do it at any point and plug in, or do we have to wait until we hit the bottom of the real estate market to start working the rescue?

Mr. RAINES. I think you can start now and work with those loans that are available to be modified. Certainly there are some where we will find that the market has gone down further. But, trying to wait until the market hits bottom I think will only make the bottom deeper.

And, therefore, I think starting now and ramping up over time is the right way to do it. You can't charm the market back into having confidence, but if you start working out loans one by one, people will begin to have confidence.

[The prepared statement of Hon. Paul E. Kanjorski follows:]

**STATEMENT FOR THE RECORD  
CONGRESSMAN PAUL E. KANJORSKI  
COMMITTEE ON OVERSIGHT & GOVERNMENT REFORM  
HEARING ON THE ROLE OF  
FANNIE MAE AND FREDDIE MAC IN THE FINANCIAL CRISIS  
TUESDAY, DECEMBER 9, 2008**

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Mr. Chairman, we meet today to examine the role that Fannie Mae and Freddie Mac played in our nation's current economic crisis that started with the collapse of the housing bubble. While Fannie Mae and Freddie Mac's role in this matter is no doubt an important issue worthy of review by the Congress, it is my hope that the Committee will also have the opportunity to discuss the role that the delay by Senate Republicans in passing legislation to provide effective government regulation of these entities played in this crisis.

Fannie Mae and Freddie Mac play a vital role in our housing markets and the wider economy during these uncertain times. They own or back about \$5.4 trillion of our nation's mortgages. In the current environment, they are also helping to finance about three-quarters of new mortgages.

As early as 2000, in my role as the Senior Democrat on the Financial Services Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises, I have consistently and vocally promoted a strong, independent, world-class regulator for Fannie Mae and Freddie Mac with the resources needed to get the job done. Unfortunately, President Bush, with the support of some Republican Members of Congress, obstructed efforts to improve the regulation of these government-sponsored enterprises.

For fiscal year 2001, Republican appropriators cut funds for the Office of Federal Housing Enterprise Oversight (OFHEO), the safety and soundness regulator for Fannie Mae and Freddie Mac, by almost \$5 million. When I joined many other House Democrats in attempting to restore this funding through an amendment, Republicans overwhelmingly opposed and defeated the full amount, even though it was requested by OFHEO's head.

In 2005, with my strong support, the House Financial Services Committee, on a bipartisan basis, passed a comprehensive government-sponsored enterprises reform bill. A short time later, the bill passed the House, but this legislation died in the Senate in part because of the lack of support in the White House. Mike Oxley, the Republican Chairman of the House Financial Services Committee at the time blamed the White House for failing to pass the bill and causing the current crisis with Fannie and Freddie, stating 'What did we get from the White House? We got a one-finger salute.'

When Democrats regained control of Congress in 2007, we made regulation of Fannie Mae and Freddie Mac a priority and passed a regulatory reform bill in May 2007, which the Senate passed and the President finally signed a year later. I only wish that the President had heeded warnings earlier about the need to act.

In closing, Mr. Chairman, I look forward to participating in today's hearing investigating the role that Fannie Mae and Freddie Mac played in the current economic crisis. I also look forward to spending a significant amount of time in 2009 considering how our nation's system of housing finance operates and how best to revise it.

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Chairman WAXMAN. Thank you, Mr. Kanjorski. Your time has expired.

Mr. BURTON.

Mr. BURTON. Have you ever heard a term, "Friend of Angelo" program?

Mr. RAINES. I have heard of that term in the newspapers.

Mr. BURTON. Have you ever had a home loan from Countrywide?

Mr. RAINES. Yes.

Mr. BURTON. Was this given to you through the term, "Friend of Angelo?"

Mr. RAINES. No.

Mr. BURTON. So, you didn't get any preferential treatment?

Mr. RAINES. No, I did not, in terms of the terms of my mortgage.

Mr. BURTON. So, you paid the same rate and same conditions as anybody else would under the same conditions?

Mr. RAINES. If they have the same credit profile, the same loan to value as I had, yes, sir.

Mr. BURTON. So, if we checked on that loan that you got from Countrywide, we wouldn't find anything different from anybody that borrowed from Countrywide in the whole country? You would not get preferential treatment?

Mr. RAINES. I am unaware of any preferential treatment.

Mr. BURTON. Would it be possible to get copies of the mortgage papers that you had made with Countrywide?

Mr. RAINES. I am sure that Countrywide has copies.

Mr. BURTON. Do you have copies?

Mr. RAINES. I no longer own that property.

Mr. BURTON. I am sure you kept those documents—I keep mine for a long, long time—if you had a mortgage on a home. Could you provide those to the committee for the record?

Mr. RAINES. If I can find them, I will be happy to.

Mr. BURTON. Thank you very much.

Did you or anyone at your direction discuss with Angelo Mozilo—I guess that is how you pronounce his name—or his subordinates who might be candidates for this kind of preferential program? Did you ever talk to him about this special treatment for any government officials?

Mr. RAINES. No.

Mr. BURTON. You never did?

Mr. RAINES. Never.

Mr. BURTON. You are sure?

Mr. RAINES. Yes.

Mr. BURTON. None of the U.S. Senators or Congressmen or anybody in the government, that you know of, you never discussed their loans with Mr. Mozilo?

Mr. RAINES. No, I never did that.

Mr. BURTON. OK.

Mr. Raines and Mr. Mudd, we have a September 2004 memo that discusses a 16-month outlook for Fannie Mae from Mr. Marzol, chief credit officer and later for financing credit. The memo was written to Mr. Mudd and was developed at Frank's request. I presume that was you, Mr. Raines. And Mr. Marzol writes that "the trend of rising home prices nationally will continue until near

term, but the downside risk will be greater due to declining affordability and signs of frothiness.”

This sounds like a clear warning as early as 2004 from him that a housing bubble is likely to occur. Yet, it was precisely in 2004 when Fannie Mae started increasing its purchases of risky subprime and Alt-A mortgages dramatically.

And I can't understand, why would anyone enter into a risky market like the subprime business when he knew there was a possible bust in the housing bubble? Can you explain that to me? I mean, he sent this memo to you, and yet, you increased the risky mortgages and subprime Alt-A mortgages that you were supporting.

Mr. RAINES. If you are talking about 2004, when I was there, I can respond to that, which is, in fact—

Mr. BURTON. Mr. Mudd can respond subsequent to that.

Mr. RAINES. In 2004, Fannie Mae, in fact, lost a dramatic share of the market because it did not participate in these markets. And where we did buy subprime loans, we also sought to get insurance for covering those loans from mortgage insurance companies, where they would absorb the risk of these mortgages.

So, we were very cautious about any entry into that market and how we did it. And I think it has been proven by the performance of those loans. They performed better than the loans in the market as a whole.

Mr. BURTON. According to Mr. Marzol, in 2004, he said there was a real problem, that a housing bubble was likely to occur. And according to the information we have, Fannie Mae increased its purchases of risky subprime and Alt-A mortgages dramatically after that.

Mr. Mudd, you were in charge after that. Do you want to respond?

Mr. MUDD. Yes. From 2004 to 2005, the purchases of subprime securities actually went down from \$34.5 billion to \$16.3 billion and then went up again in 2006, largely as a reflection of what was being—

Mr. BURTON. But, was there a redefinition of subprime through your underwriting mechanisms? Your underwriting standards went down. So, if your underwriting standard went down, then a mortgage that was considered a risk would no longer be considered a risk because you lowered your underwriting standards. Did that take place during that timeframe? Did you change your standards at that time?

Mr. MUDD. The underwriting standards change constantly in response to a market.

Mr. BURTON. During the time when you were in charge, did the underwriting change dramatically so that the subprime risk went up?

Mr. MUDD. We did our best at the time to balance out both sides of the equation with respect to risk. The day you open—

Mr. BURTON. You were the ultimate person who made the decision on underwriting changes, were you not?

Mr. MUDD. Chief executive officer, so I am responsible, yes. And am I making—

Mr. BURTON. Were you, with change like that, when they changed the underwriting requirements—

Mr. MUDD. I think it is important, Congressman, to understand there are two sides to the underwriting equation. One is the risk side, and the other is the pricing side. So, one has to look both at what is incremental risk, and second, are you pricing for it, and are you getting appropriately compensated for that risk?

Based on everything we knew at the time, we did the best that we could to ensure that we were pricing for the risk that we were putting on the book, because the market had moved in a direction because of the affordability problem Mr. Marzol referred to.

Chairman WAXMAN. Your time has expired.

Mr. BURTON. How about Mr. Kanjorski?

Chairman WAXMAN. He didn't have extra time.

Mr. BURTON. I saw the light.

Chairman WAXMAN. You've forgotten what it is like to be at the end of the line waiting for your turn.

Now I am going to recognize Mrs. Maloney. But, before I do, I would like to ask unanimous consent that the documents from Fannie Mae and Freddie Mac productions, identified by the majority and minority as relevant to today's hearing, will be included in the record. Without objection, that will be the order.

You are recognized for 5 minutes.

Mrs. MALONEY. Thank you, Mr. Chairman.

You have been a spectacular chairman. It has been an honor to serve on this committee. And in your new position on the Commerce Committee, you will be trying, confronting, really, some of the most pressing issues we have: universal health care, health care for the 9/11 workers, global warming, energy independence. And my constituents wish you well, particularly those without health care. And I hope this committee can play a supportive role in the many challenges you confront.

My constituents are very angry about these bailouts, and they want to know why a \$100 billion line of credit was given to Freddie and Fannie, and that Freddie has drawn down \$15 billion of that \$100 billion line of credit. We are looking at what happened. They want to understand what happened.

So, in preparing, we interviewed your former chief risk officer, Mr. David Andrukonis, from 2003 to 2005. He said he held that position and reported directly to you. He told us that, during these years, mortgage lenders were making increasing demands for Alt-A loans, loans that had no documentation. He found them risky. I know that in New York, many people said it was easier to get a loan with no documentation than to pay your rent during those days. And he said, "Wall Street became, I think, pretty adept at packaging securities of loans that we would have considered to be higher-risk; that is, reduced or very little documentation."

According to him, big mortgage lenders like Countrywide and Lehman, put a lot of pressure on Freddie Mac to buy these risky, no-doc, Alt-A loans. And he said these lenders were constantly looking to reduce documentation because it was easier to produce these loans and sell them, get fees. And the toxic loans are now what we are confronting.

He said that he reached out to you. He said that he was opposed to these no-documentation loans, that he talked to you directly, that he sent you memo after memo outlining to you and the Board and others that this was risky and not the right way to go.

And I would like to put these memos in the record, along with the interview that was conducted with him and our staff.

Chairman WAXMAN. Without objection.

Mrs. MALONEY. And so, is it true that your chief risk officer advised you not to buy these reduced-documentation, Alt-A, no-doc loans?

Mr. SYRON. Well, first of all, I don't believe I have seen those memos that were addressed to me, but I am not sure.

Mrs. MALONEY. We will be glad to give them to you. Did he advise you not to buy those loans? And did he advise you that they might be risky?

Mr. SYRON. Yes, ma'am. But if you look—

Mrs. MALONEY. I only have 4 minutes.

Furthermore, I would like to say that he was right, because, under your leadership, Freddie Mac bought more than \$150 billion of no-doc, Alt-A loans. And, according to your most recent SEC report, your company's Alt-A purchases have resulted in more than \$8 billion this year in credit losses due to these risky products that your chief risk officer said do not buy.

Now, what happened to Mr. David Andrukonis? He was fired. He was fired. He felt that you agreed with him but that you still continued to buy what everyone was saying was high-risk. It is common sense: If you give a loan to someone and they don't even have to show you that they have a job, you are in trouble.

So, my question to you now, and my basic question to you in light of all of the money that Freddie has lost and that taxpayer money that has been supporting you—and you have spent \$15 billion of it—given the fact that you lost so much money on these Alt-A risky loans, wouldn't it have been better not to fire your risk manager, but to fire your portfolio manager of your Alt-A loans?

Do you regret firing your risk manager who told you that you were moving in the wrong direction, that it was risky and toxic and not what you should be doing? Do you regret firing him? Do you regret buying these risky loans? Do you regret the way you led and, I would say, mismanaged your company?

Mr. SYRON. Well, ma'am, if you go back and look at the records in Freddie Mac in—I think you said 2000, but it is about right—

Mrs. MALONEY. 2003 to 2005.

Mr. SYRON. I am not sure of the exact time. But, there was a long, long debate with people on both sides of what should be done with Alt-A. This was done, and the debate was in the context of an environment in which Freddie Mac's market share was declining and the question of our relevance and ability to influence markets—

Mrs. MALONEY. But, sir, with all due respect—

Chairman WAXMAN. Your question is pending, and the gentleman should answer, but then we have to move on. The time has expired.

The question is, do you regret the decision to fire the risk manager and not to fire the portfolio manager?

Mrs. MALONEY. And to buy the Alt-A loans that were risky and put the taxpayers' money at risk.

Mr. SYRON. First of all, Mr. Andrukonis was fired for a variety of reasons, and it was not primarily for his having a view on credit.

Second—I am trying to remember the different parts of the question. Second, in perfect hindsight, I think you always wish that any loan that went bad that we hadn't bought. But, given the information that we had at the time and given the balance that we were trying to achieve, we thought we made the right decision at the time.

Chairman WAXMAN. The gentlelady's time has expired.

Mr. Westmoreland.

Mr. WESTMORELAND. Thank you, Mr. Chairman.

I am going to ask each one of you this question.

Mr. Syron, what was your salary from 2003 to 2008, your total salary? And do you get any pension?

Mr. SYRON. My total salary over that period of time was about \$4 million a year. And I have pension rights that I am not quite sure, but I think, after tax, are worth in the neighborhood of a little less than \$2 million.

Mr. WESTMORELAND. About how much?

Mr. SYRON. I think a little less than \$2 million.

Mr. WESTMORELAND. \$2 million a year?

Mr. SYRON. No, no. The present value actuarial, depending on how long I live.

Mr. WESTMORELAND. Mr. Mudd, the same question to you. From 2005 to 2008, your total compensation?

Mr. MUDD. I have a different number, so if I can make an estimate to meet your request, it would be in the vicinity of probably \$7 million or \$8 million of compensation. That wouldn't be counting any stock, which obviously grants value, and very little value now.

Mr. WESTMORELAND. But, total, you are going to stay with \$7 million or \$8 million?

Mr. MUDD. I have numbers for 2004 to 2008. I would be happy to supply those later.

Mr. WESTMORELAND. Are you eligible for a pension?

Mr. MUDD. I believe so, yes.

Mr. WESTMORELAND. And what would that pension be?

Mr. MUDD. I can't be precise. I would have to research it.

Mr. WESTMORELAND. Did this pension come from just your 3 years of service?

Mr. MUDD. No. I had been with the company going back to 2000. So, I would assume that it would have been throughout that period.

Mr. WESTMORELAND. And you are going to get a pension of somewhere—

Mr. MUDD. If I can get you a precise number?

Mr. WESTMORELAND. All right.

Mr. Brendsel, how about you?

Mr. BRENDSEL. Yes. Of course, I left the company in June 2000. So, what years are you—

Mr. WESTMORELAND. From 1987 to 2003.

Mr. BRENDSEL. That is a matter, certainly, of public disclosure.

Mr. WESTMORELAND. Can you give me a hint?

Mr. BRENDSEL. I would have to say that, in the last few years, the amount disclosed, reflecting stock grants and everything, based on the valuations used, about \$10 million a year. Of that——

Mr. WESTMORELAND. About \$10 million a year?

Mr. BRENDSEL. Yes, including the stock grants. The salary was about \$1 million in 2002 and 2003.

Mr. WESTMORELAND. They got you cheap.

How about the pension?

Mr. BRENDSEL. I am eligible for a pension, and I am receiving a pension.

Mr. WESTMORELAND. And how much is that?

Mr. BRENDSEL. It's reflecting my 21 years of service; it is about \$400,000 a year.

Mr. WESTMORELAND. Now, Mr. Raines, I know it has been said that \$90 million, and I notice in your testimony you got some explanation of that, that it really wasn't \$90 million, but what was your total package for the time that you were there?

Mr. RAINES. I don't know off the top of my head. The number I referred to was a number that OFHEO has included in their documents.

Mr. WESTMORELAND. Well, you had \$90 million in there, and then you said there was some discrepancy in that and because——

Mr. RAINES. Not a discrepancy. Accepting the OFHEO number as the beginning point, 40 percent of that has effectively been clawed back as a result of my settlement with OFHEO and the stock options that I was awarded becoming worthless. So, 40 percent of the \$90, if you accept the \$90 as the number, has been clawed back by one means or another.

Mr. WESTMORELAND. That is still good money though, you know, it's still good money.

Mr. RAINES. Excellent money.

Mr. WESTMORELAND. What kind of pension do you get, sir?

Mr. RAINES. I am qualified for a pension based on my 11 years at Fannie Mae.

Mr. WESTMORELAND. And what would that be?

I know you got \$3 million in 1 year, \$400,000 1 year.

Mr. RAINES. My pension is approximately \$1.2 million.

Mr. WESTMORELAND. \$1.2 million for the 11 years of service. That is not good, I mean that is good. That is good money. And let me say this, you know, I'm glad that I came to the hearing today to learn that none of you all had anything to with Fannie Mae or Freddie Mac going south, that you all were getting paid millions of dollars a year, millions of dollars a year, but you didn't know anything was wrong. You didn't have any idea that it was going south, and none of you seem to have done anything about it. I haven't heard one person say today that you recognized that Fannie Mae or Freddie Mac was in trouble and that you did something about it. So, it's quite extraordinary, and I think the American people and the taxpayers are going to be kind of miffed that you all's job was basically as CEOs of these companies was rearranging the deck furniture on the Titanic as it went down and didn't know it was going down. That is amazing.

Chairman WAXMAN. Gentleman's time has expired. If the witness, I don't know if it's a pending question or not, but let's——

Mr. BRENDSEL. Mr. Chairman, I want to respond to that last comment.

When I left Freddie Mac in June 2003, Freddie Mac was safe and sound and well-capitalized and had a high quality mortgage portfolio.

Chairman WAXMAN. Thank you. Now, we go to Mr. Cummings.

Mr. CUMMINGS. Thank you very much, Mr. Chairman, and gentlemen, thank you for being here. I can tell you as I sit here I, you know, am just disturbed, and that is putting it lightly, because when I look at this fiasco, I think both of these companies did have something to do with it. And I'm not going to sit here and act like they didn't. I think Tom Friedman in his article dated November 25th, in the New York Times, put it right. He said so many people were in on it. People who had no business buying a home with nothing down and nothing to pay for 2 years. People who had no business pushing such mortgages but made fortunes doing so. People who had no business bundling those loans into securities and selling them to third parties as if they were AAA bonds but made fortunes doing so. People who had no business rating those loans as AAA but made fortunes doing so, and people who had no business buying those bonds and putting them on their balance sheets so they could earn a little better yield but had no—but made fortunes doing so. And you know, the thing that gets me is that I have constituents who, and I think Mr. Towns alluded to this, folks have tried to blame poor people and minorities, but a lot of those people, and I admire you for what you said, Mr. Raines, you talked about the dreams of folk and trying to help them get a home and how important it is, but what has happened as a result of all of these folks, including some of you guys, what has happened is that the people in my district have been left with two things, holding a bag. They have lost their houses, and they have zero in one bag and debt in the other. That is what they have.

And so, I want to go to you, Mr. Syron, because you have said some very interesting things that I would just like to hear a little bit more about. You know you talked about these no income, no asset loans. They call them NINA loans, is that correct?

Mr. SYRON. Yes, sir.

Mr. CUMMINGS. Keep your voice up. We want to hear clearly what you're saying. Banks use no income, no asset mortgages to lend money to a borrower, without requiring any information about the person's income or assets. This was an increasingly popular type of Alt-A loan in 2004, 2005, 2006, and Freddie Mac purchased a lot of them. Let me ask a common sense question. Why would anyone give a mortgage without requiring information on a borrower's income or assets? Help me with that.

Mr. SYRON. Well, sir, if you have information on their FICO score, right, and they have a strong FICO score and you have information on the loan-to-value ratio of the property and in many of these cases, you would see that the risk for the loan shouldn't be that great. These loans were developed in the first place for what you might call borrowers that had special characteristics; i.e., uneven income flows, actors, waitresses—

Mr. CUMMINGS. Well, obviously you're not familiar with Mr. Raines' testimony because what I read in his written testimony, he

said part of the problem was when we got into these subprimes. Before they were based on people who had equity, and then when they didn't and when we moved to these kinds of loans, they were more based on score, so, we got rid of the equity, a lot of times the equity that we really needed to secure these loans, I mean to truly secure them, and we went to this other form of basically what you're about to tell me now.

But, so, can you tell me why one of your top executives wrote in a memo to you on October 6, 2004, that Freddie should continue buying NINA loans because in his words, "it provides unique market growth opportunities to Freddie Mac."

Mr. SYRON. Sir, I don't have the memo before me, but I will try to answer on the basis—

Mr. CUMMINGS. Briefly because they only gave me 5 minutes.

Mr. SYRON. I think what had happened is the market had migrated away from the traditional kinds of products that Freddie Mac and Fannie Mae had provided, and I think what he was—I'm speculating.

Mr. CUMMINGS. Let me speculate. Let me tell you what I speculate. I speculate it was about profit, I speculate that it was about greed because a top Freddie credit official, Ray Romano, explained the rationale for doing so in June 4, 2007, in a memo to the Freddie Mac board where he warned about the, "increased reputation, fraud, predatory lending and credit risk posed by our current program." How about that? Let's see you speculate.

Mr. SYRON. Sir, we're an organization that had to develop balance, and we had to balance between the needs of safety and soundness, the needs of our mission, and the needs also to be relevant from the perspective of our shareholders because we were like any other privately held company, and I checked a number of times, and we had no ability to treat our shareholders differently than anyone else did.

Mr. CUMMINGS. I see my time is up. Thank you, Mr. Chairman.

Chairman WAXMAN. Thank you, Mr. Cummings.

Mr. Souder.

Mr. SOUDER. Thank you I want to followup just a little bit on a similar line that my friend, Mr. Cummings, just had. One of the extraordinary things about this series of hearings, whether it was the bond people or the AIG people or the hedge fund people, nobody takes responsibility for anything. Nobody comes up and says, I'm sorry, I may have made some judgments, I did the best I could. It's like, no, it wasn't us. And it gets very frustrating to figure out what to do next if nobody is responsible for anything.

I was really intrigued with the statement of with 20/20 hindsight, it would be reasonable to say that people who didn't have credible income to meet their payments, who were depending on house values going up to meet it, or who lied, would have been higher in defaulting. You know, I would say with 20/20 hindsight; in fact, I would say the average American could figure that out with foresight, and they don't need to get paid \$7 million a year to figure that out with foresight, that your model was not working.

Now, what is disturbing to me is that you said, Mr. Mudd, that you weren't sure whether it was systemic or cyclical so that you plunged into it, separating now subprime and the Alt-A types of

things, but then in addition to that, I think Mr. Syron said in his testimony and, Mr. Mudd, you said similar, that your organizations were there to make the market work, in order to provide somebody who supported affordable housing, Mr. Raines' statement really interested me because this isn't just about low-income housing, this is about what happened to the housing market as a whole, and if what you said—can I ask you a followup question to that? You said it wasn't just low income, it was higher. Are you saying that for Fannie and Freddie, your problems aren't just low income, that Fannie and Freddie was also going far beyond affordable housing in giving risky loans?

Mr. RAINES. What I was saying is that Fannie Mae provided service to low, moderate and middle-income Americans, and I was saying in answer to the question, that low-income Americans have not contributed disproportionately to the problems at Fannie Mae or Freddie Mac.

Mr. SOUDER. Reclaiming my time, I just wanted to make that clear that it wasn't just the lowest housing portion here, that Fannie and Freddie were risking dollars as they moved up the scale because, in fact, there appears to have been as much of a profit motive as there was just to get people into homes. And that is important as we develop the—where we go next. And the challenge here is that since I understand Mr. Syron's testimony, he says, I want to make sure, yes, that you do this enabling banks to make new loans; in other words, part of the purpose of these agencies was to expand and enable. So, when you went into this market, you pretended like you came in late, reluctantly, you were worried whether your business model, whether it was systemic or cyclical, but in fact you're the enabler's agency, in fact your two agencies enabled this market and gave it a security that it didn't otherwise have or it might have flattened out.

In fact, they can put this up, Mr. Syron, March 30, 2004, e-mail from one of your executives. The author describes loosening of Freddie Mac's underwriting standards in order to accommodate risky mortgages that do not require verifying the borrower's income or assets, which is extraordinary. He goes on to write, these are largely driven by a need to allow lenders to compete with Countrywide's Fast and Easy program and Bank of America's Paper Saver programs. I view these programs as fundamentally changing the underwriting process for as much as 30-plus percent of the mortgage loans we purchase.

Now, the question here is, is what were Fannie and Freddie trying to compete with Countrywide's Fast and Easy programs for? You're supposed to be the more—you're supposed to not be the enabler of risky programs. What was your check? Mr. Syron, do you want to—

Mr. SYRON. Sir, I would debate whether we were, that this market wouldn't have developed even if we weren't involved in it. I mean what we saw in the subprime market is the subprime market developed around that, and so did the Alt-A market.

Mr. SOUDER. Let me ask a followup to that. Do you believe that if Fannie and Freddie would not have gotten involved in this market, that the market would have flattened? In other words, I'm not saying it wouldn't have started, but would it have flattened, or in

fact, did your involvement accelerate the market, give a glint of Federal, because people don't know whether you're private, public, or whatever, approval to that market in a different way, and in fact, the taxpayers have wound up now holding your share, and in fact, then wound up with a bigger problem than we would have had?

Mr. SYRON. Sir, in all due respect, I think we would be speculating on my part whether the market would be flattened or not because other markets that we were not in expanded and expanded quite rapidly.

Mr. SOUDER. So, you don't believe you had any basic responsibility for the crisis; that is your testimony? That you believed it was OK, you went and competed with Countrywide and put Fannie and Freddie at risk and gave the patina of cover for this for a profit motive?

Mr. SYRON. Sir, I can honestly say I am not saying we made decisions perfectly. We certainly didn't, as you pointed out. But, I can honestly say that in what we were trying to do at the time, we were trying to balance the interests of our mission, regulatory objectives, and our obligation to shareholders.

Mr. SOUDER. By taking in 20/20 loans that did not use reasonable standards, didn't have income verification and depended on—

Mr. TOWNS [presiding]. Thank you very much. Gentleman from Ohio, Mr. Kucinich.

Mr. KUCINICH. I thank the gentleman. I'm listening to my colleague, Mr. Westmoreland, and I want to pick up on something that he said. You know we've got some of the Representatives here who act like you just didn't know, that it's almost like hearing the response "I don't know nuttin," no responsibility, no accountability, stuff just happens, it's the housing market, it's the economy, it's the poor people wanting homes. But, the facts show, gentlemen, that many of you at this table did know the risks and that you were warned not to take them, and that you ignored your internal adviser, your Chief Risk Officer.

Now, Mr. Mudd, the committee has been provided with an e-mail that your Chief Risk Officer sent to your CEO and copied you. You're dealing with hundreds of billions of dollars, and this memo from your Chief Risk Officer said the company has one of the weakest control processes I have ever witnessed in my career. He said the company really doesn't get it, it's scraping on controls.

Now, it appears from the record that as CEO, you were taking hundreds of billions of more risk, you were warned by your Chief Credit Officer not to do that, you're taking higher risks anyway, and then you cut the budget of your Chief Risk Officer by 16 percent, you took on more risk while cutting internal controls, and at the same time, you're telling your board you had all the research necessary to properly assess risk. Now, you received an e-mail from your Chief Credit Risk Officer, Enrico Delvecchio, that said, I'm very upset, I had to stand at a board meeting and hear we have the will and money to support taking more credit risk.

Now, Mr. Mudd, you testified that your investment strategy is to keep up with the market. Did you change, did you have a change in strategy that involved reducing the resources of your credit risk

office, which assessed the inherent dangers of your investment strategy while at the same time you're taking more external risk? Was that part of your strategy to reduce that credit risk office?

Mr. MUDD. No.

Mr. KUCINICH. Then why was there a budget cut occurring while you're involved in these great risks with billions of dollars?

Mr. MUDD. Congressman, I think the best response is to read my—

Mr. KUCINICH. The best response is the truth. Now, did someone tell you to cut credit risk, to cut the credit risk office budget, or did you make that decision?

Mr. MUDD. Let me read you what I wrote back to him.

Mr. KUCINICH. Can you answer the question? Who told you to cut the budget? Who told you to cut it? You're dealing with hundreds of billions of dollars. Can you answer the question? Who made the decision to cut the credit risk office's resources at the time that you're taking increased risk?

Mr. MUDD. The cuts in the budget that applied across the company were driven by the financial need to drive higher capital in the company and to maintain our regulatory capital standards. We started with the process—

Mr. KUCINICH. Holy smokes. Is anybody listening to this? He is cutting the one person that is telling him, hey, wait, you're going to go over a cliff cutting that, and he said we have to cut across the board.

Now, your Credit Risk Officer told you in a memo that far from—he said that you are operating far from current market practices. He said, "we are not even close to having proper control processes for credit, market, and operational risk." And then he went on to say, "I get a 16 percent budget cut," and he suggested that there was malice involved.

Now, what I want to find out, was this calculated? You know this is one of the concerns that we have. This isn't a case of a cop walking off a beat. This is a case of a cop being told don't go there by not giving him enough resources.

Why did you do that? Explain this to the American people. Why did you make a decision to cut your—

Mr. MUDD. I will explain it to you by reading to you a response to him, which was part of a conversation, Representative. It is not fair to take an e-mail that is in a train of e-mails that has a response right behind it that says if you feel the process is not working you know my door, telephone, and house are open to you. I'm not aware that you sought to do so on this topic. And if, of course, you may say that anything you believe to be true at any time to anyone on the board or anywhere else, this is my response to him, and I believe it is inaccurate for you to suggest anyone expressed a view there are enough resources for everyone to do everything necessary for the plan. Resources are tight. Everyone has cuts. Come and see me—

Mr. KUCINICH. Did you take responsibility for the risk—

Mr. MUDD. That is what we did. That was the process—

Mr. KUCINICH. Do you take responsibility for the risk—

Mr. MUDD. We sat down and did that—

Mr. KUCINICH. Your company took—when you ignored the advice of your Credit Risk Officer and when you cut the budget, do you take that responsibility?

Mr. MUDD. I followed the process to listen to all of my staff, not just the Chief Risk Officer.

Mr. KUCINICH. What did you do though? What did you do? Did you cut the budget of your Credit Risk Officer?

Mr. MUDD. Just like all budgets involving business, we negotiated the right number for the people we—

Mr. KUCINICH. Is the answer yes or no? Did you cut your Credit Risk Officer's budget?

Mr. MUDD. As you know, giving a yes or no answer to the question will not be accurate—

Mr. KUCINICH. Can you answer the question?

Mr. TOWNS. Gentleman's time has expired.

Mr. MUDD. I will give you an accurate response, and the answer is that budgets are determined as a result of a back and forth between executives that have purview on it. His budget was subsequently increased from where it had been placed. He could not hire everybody that he needed because there was huge demand for risk officers all around the financial markets. So, we appropriately adjusted it and gave him the opportunity to come back in should he be able to hire above that rate. Yes.

Mr. TOWNS. The gentleman's time has expired.

Mr. KUCINICH. You testified you increased his budget; is that what you're telling this Congress?

Mr. MUDD. We negotiated the budget the same as we did every year from time immemorial.

Mr. KUCINICH. Incredible.

Mr. TOWNS. Mr. Shays, it has been a pleasure serving with you over the last 20 years. It has been a delight. Of course, we had an opportunity to work on many issues together.

Mr. SHAYS. I was reluctant to step up because I thought I might get a little teary eyed because I love this committee, and I congratulate you as being the new chairman, and ranking member, Mr. Darrell Issa, and I know this committee will do well.

I'm also reluctant because this issue is very sore to me because we knew a long time ago, the train was going to crash. Everyone at this table knew the train was going to crash and the people who warned are the ones who took the hit, and you all just continued to make a lot of money and, ultimately, to the harm of the very people we wanted to help. It is kind of surreal, you had Richard Baker, who was pointing out that Fannie and Freddie had problems and they needed to have proper regulation. After the Financial Services Committee had a landmark hearing on Enron and we passed Sarbanes-Oxley, I said this is good, Fannie and Freddie are finally going to have to play by some rules, but then Richard said they are not under the 1933 and 1934 act so they're not going to be under Sarbanes-Oxley. So, I said, fine, let's deal with it, and Ed Markey, a Democrat, and I said, OK, let's regulate Fannie and Freddie like any other company. And in 2002 and 2003, well, I will tell you something hit the fan because every lobbyist that I have ever met was knocking down our door. Fannie and Freddie paid lobbyists to lobby for them, and they paid lobbyists on retainer so

they wouldn't lobby against them. And so we had \$175 million spent in 10 years on lobbying Congress, and this is a quasi-government organization that felt it had to manipulate Congress, and it did. It had a hugely weak regulator with OFHEO and, Mr. Raines, you didn't want a stronger regulator, you didn't want the 2002 act, you didn't want the 2003 act. What fascinates me is you even argued that just to set aside 3 percent made sense, when banks have to set aside 8 or 9 percent, and you're getting \$90 million for your good work.

It just is almost surreal to be at this hearing and to hear you. If I were critical of this administration, I would say that they cared so much about loyalty that loyalty trumped the truth. And they failed to hold people accountable. But, we're still in Congress failing to hold people accountable. Whether you're Republicans or Democrats, you're not being held accountable. I hope this new administration starts to hold people accountable.

Mr. Raines, do you still believe that setting aside less than 3 percent for potential losses was financially wise? You made that argument in the Financial Services Committee. Do you still believe that was a wise thing to do?

Mr. RAINES. I think we have some evidence on that with regard to Fannie Mae's portfolio, as I understand it. The requirement for capital was approximately 2½ percent for the mortgage portfolio, the on-balance sheet portfolio, and there have not been losses in that area that have exceeded that capital. The losses that Fannie Mae has reported, as I understand them, have come from the credit side, not from the portfolio side. So, based on this unique experience, it appears that is sufficient capital for a portfolio.

Mr. SHAYS. Mr. Raines, you're not just speaking to this committee. You're speaking to the whole financial sector. You are making the argument that setting aside only 3 percent was financially a wise thing to do. I'm not going to change your answer. I just want to make sure that you with a straight face are saying that was a wise thing to do.

Mr. RAINES. It is proven in the current circumstances that—

Mr. SHAYS. I would like a yes or no. Yes, it was, or no, it wasn't.

Mr. RAINES. It has worked. Congressman, it worked with regard to the portfolio. On the credit business, it's a different thing. And we were talking in the committee, in Financial Services Committee, about the portfolio because ironically the criticism of Fannie Mae in those days was its on-balance sheet portfolio, which in fact has not been the problem now. The problem has been the credit business that people were arguing that is all that Fannie Mae should do, was the credit business.

Mr. SHAYS. Mr. Raines, when we finally got Fannie and Freddie to agree to be under the 1934 act, we learned that both Fannie and Freddie had cooked their books, overstated income, and you ultimately had to leave. I'm just curious to know, do you still believe that Fannie shouldn't be under the 1933 and 1934 act and play by the rules that no one else has to play by?

Mr. RAINES. At this point, I don't think it matters. Fannie Mae is already registered with the SEC; so, including Fannie Mae as a registrant—

Mr. SHAYS. On the 1934 act.

Mr. RAINES. I understand. I was going to get to that. You mentioned both acts, I believe. With regard to the registration, I don't think it matters a lot. With regard to the overall registration of its securities, particularly mortgage-backed securities, I think that the damage that I foresaw at that time would be less now, given all the convulsions that have already gone on in the marketplace, I think that the market for mortgage-backed securities are going to have to be reconstructed anyway. So, I think it's just a matter of process at this point. But, I don't think it matters one way or the other.

Mr. ISSA. Mr. Chairman, I ask unanimous consent that Mr. Shays have just 1 additional minute. Thank you.

Mr. SHAYS. Just a bottom line question: In other words, the 1933 and 1934 act were designed to protect the public. Fannie and Freddie are not under the 1933 act. They voluntarily got under the 1934 act. Because they got under it is when we learned that they couldn't comply with basic accounting standards. That is when we learned it. Had we not put them under the 1934 act we never would have learned that. And your comment to me is it doesn't matter if they're under the 1933 or 1934 act?

Mr. RAINES. No. I said that because Fannie Mae is now a registrant, it would be redundant to include them. But, if you would like to include them under the act, I think that is fine. I don't think it would change anything about the registration.

Mr. SHAYS. How about the 1933 act?

Mr. RAINES. 1933 act. As I said, I am fearful it would disrupt the mortgage-backed securities market. Right now, the market is so disrupted, I don't know adding a registration requirement would do any more harm.

Mr. TOWNS. Thank you.

Mr. Clay.

Mr. CLAY. Thank you, Mr. Chairman. Fannie and Freddie lost a significant share of the secondary mortgage market by 2004, as private Wall Street companies bought increased numbers of subprime and Alt-A loans. Mr. Mudd, I want to ask about decisions Fannie made to regain some of this ground.

On June 26 and 27, 2006, Fannie Mae executives attended a retreat in Cambridge, MD, for a senior management group. The committee obtained a document that lists the highlights from that meeting. The document was circulated to you and other top executives on July 7, 2006. The document summarizes what we accomplished, the key take-away from our sessions, the open issues to address and corporate strategies, next steps. Under the section titled "New Business Modeling Growth Initiatives," the memo describes a new approach for Fannie Mae's Single Family Mortgage Division. It says this. "Single family strategy is to say yes to our customers by increasing purchases of subprime and Alt-A loans."

Mr. Mudd, based on this summary, there was detailed discussion at the retreat in 2006 about whether to enter the subprime and Alt-A market, and the decision was made to say yes to these types of loans. The memo says this initiative will generate attractive returns, but was there any discussion about the increased risk involved?

Mr. MUDD. Yes, sir, that was an intimate discussion in the process, and so, when we first entered the subprime market, and I would fast forward to the end of the story to say once we got there, we realized we didn't like it that much, so it didn't grow very much, but the analysis that you're asking about at the time was if we enter this market, what are the appropriate forms of risk mitigation and so forth. So, typically, what we did was we actually bought bonds in small numbers and we bought the highest rated AAA tranches of those bonds and in some cases actually bought supplemental insurance on top of these bonds. That then gave us some exposure to the marketplace that we could evaluate and assess whether it was a market we could be in. And by the way, we also set standards that said those bonds had to be, the loans, any subprime loans we were involved in had to be originated under a very specific set of conditions that gave us some assurance there would be no predatory features in them.

So, with those two pillars, we had some exposure to market. We saw it. We didn't like it that much, and that is why you see from the numbers it didn't grow very quickly.

Mr. CLAY. OK. Fannie acted quickly on this new business model. For example, Fannie purchased more than \$200 billion in Alt-A loans in 2006 and 2007, according to the data provided to this committee by the Federal Housing Finance Agency. In retrospect, it seems that the decision made at this retreat in 2006 to increase your company's purchases of subprime and Alt-A mortgages was a major mistake. Do you agree?

Mr. MUDD. Well, again, separating out the subprime and the Alt-A, now addressing the Alt-A, can you look back in retrospect and say that you wish you had less Alt-A business? Yes, absolutely.

Mr. CLAY. Well, the numbers speak for themselves. I think you know last month, Fannie reported almost \$4.3 billion in credit losses for 2008 so far. Almost half of these losses came from your investments in the risky Alt-A mortgages, especially those that originated in 2006 and 2007. Do you agree with that?

Mr. MUDD. Certainly a high proportion of losses has come out of, has come out of the Alt-A book, yes, and certainly if you look back in retrospect and say based on what you know now, would you have as much exposure in Alt-A, no, you wouldn't. But, based on the information that we had at the time, based on where we saw the market at the time, based on the evolution of our own standards and based on the prudential things that we did and got a lot of criticism for, increasing price, increasing standards, requiring more documentation was there was important. And by the way, the Alt-A loans on Fannie Mae books have performed a factor of 2 better than any of the Alt-A loans in the marketplace at large. So, I think some of those processes were helpful. Were they ultimately helpful enough? Goes to your question.

Mr. CLAY. Thank you very much for your response. The memo also said we discussed additional growth ideas that warrant further exploration, including a new acquisitions method to buy all loans. What does it mean to have a policy to buy all loans? That doesn't sound like risk is considered at all.

Mr. MUDD. No, it doesn't, and that wasn't in fact the policy, Congressman. The challenge that we were facing in the marketplace at

that time was because of the footprint or, what we called it, the box of loans that Fannie Mae would actually accept. Originators were originating product that was outside that box. It was difficult for them to segregate the loans that they could only sell to Fannie Mae from the "all other" category. So, we had a number of initiatives in place to say could we provide an upfront solution, so they would have kind of one-stop shopping, but that we would never take on those risks that were either risks that we didn't like or risks that we couldn't price for or loans that were perhaps jumbos or something like that. That was the subject of that study.

Mr. TOWNS. The gentleman's time has expired.

But, he can answer the question.

Mr. MUDD. I'm sorry, Mr. Chairman. I didn't hear the question.

Mr. CLAY. The question was you took bundles that were combined with good and bad mortgages, good and bad loans.

Mr. MUDD. No. The purpose of that project was specifically not to take the loans that we weren't comfortable with, but to continue to attract the business of our customers. That was the traditional business that we had done or the business that we could price and were comfortable with.

Mr. CLAY. Thank you, Mr. Chairman.

Mr. BRENDSEL. Mr. Chairman, I apologize. Could I take a brief break?

Mr. TOWNS. Sure.

Mr. SYRON. Mr. Chairman, while that is occurring, may I accompany?

Mr. TOWNS. I'm sorry?

Mr. SYRON. May I do the same thing while that is occurring?

Mr. TOWNS. Why don't we just take a 5-minute recess.

[Recess.]

Mr. TOWNS. The committee will reconvene.

We will now recognize the gentleman from Ohio, Mr. Turner, for 5 minutes.

Mr. TURNER. Thank you, Mr. Chairman.

Mr. Raines, I want to read you a portion of your written testimony. You make a statement that I think is very important in your written testimony that I agree with about the CRA. In your statement, you say a very common allegation that has been made is that the Committee Reinvestment Act forced mortgage originators to make loans that were too risky and burdened banks with assets that would later default. It's on page 11. This claim is incorrect. The most risky loans in the system tended to be originated by lenders not covered by CRA. The statement that you're making there. I hear from a lot of CRA-covered banks, lenders, who then go the next step though and say that they're not as at fault or at fault for the mortgage lending crisis because their loans, which they originated, were not those that many of us would identify as predatory or even in the subprime area.

My thoughts in that are that by their actually then buying the mortgage-backed securities of these subprime or these predatory loans, they're providing the fuel back for those types of loans that they claim that they weren't originating; in other words, from the back door, buy those things that they're not selling out the front door, and then provide gasoline or fuel to allow more of those loans

to occur, and so, their having participated in purchasing those and then using their capital to buy them helped fund what was the practice—what were the practices that in fact were the problem. Would you agree with that?

Mr. RAINES. Well, I think you have a very legitimate point as to at what stage are you providing necessary funds to the market and at what stage have you moved over into encouraging practices that aren't good market practices? Most subprime loans go to people, you know, like my father, who simply didn't have a lot of income and didn't have a great credit rating, and he had to go to the finance company to get financed. That is what an original subprime loan was, you went to HFC, and they gave you a loan, and it was backed by your house that you had some equity in. Over time, as I point out in my testimony, these loans morphed into other things. Instead of it being a loan on your house that you already own, that you have equity, subprime loans became loans to buy houses where you had no equity. Instead of being people who had a long track record of paying their bills but just simply every now and then fell behind, it became people who have just gotten out of bankruptcy. So, not all subprime loans are bad. A chunk of them have been very bad for consumers. And it's hard for your banker to know in the mortgage-backed security that he is buying, does this only include the good ones or does this also include predatory ones? That is why as early as 1999 we published standards on subprime lending as to what Fannie Mae would buy or wouldn't buy to try to establish some standards in the market.

Mr. TURNER. But, they did know. They did know both from the information that was being received on the default rates, the foreclosure rates, the sloppy underwriting processes, the lack of documentation, the loan-to-value ratios that had been changed, they did know that these were the more risky ones and that these were those that you would not want to encourage either for a borrower or really for the assets for the overall bank. And I don't want to go to the next step, Mr. Raines, because you said exactly what I thought you would say, which I agree with, that where do you cross the line of actually encouraging bad behavior versus just participating in the market? And that is what I believe that Freddie and Fannie did. It's not just the CRA-covered bank that had one originating loan standard in the front door and bought mortgage-backed securities out the back that had bad standards. It was Freddie and Fannie, also. You provided fuel, all of you gentlemen, by providing fuel for these loans. By buying them up, you encouraged an area of the market to both expand, recapitalizing them so that they can go out and do more of these, without providing the types of standards necessary to protect the borrowers, to protect the public or to protect your shareholders.

Mr. Syron, you stated that the market had migrated away from traditional loans. You're supposed to be an organization that has a knowledge that tradition is not just based on some archaic structure that we all knew when my parents first went to buy their first home. It's based upon sound business principles. Mr. Syron, you went on to say we were doing what we needed to to serve our shareholders. Your shareholders haven't been served. I can't imagine one of you today can sit here today and say the conditions of

your companies are such that you were following practices that were shareholder directed. They weren't borrower directed. They weren't, our Federal mortgage processes directed, and they certainly haven't served the taxpayer.

Mr. SYRON. Sir, a couple of points. First, I think you're absolutely correct that even though a lot of these changes provided other opportunities that, in retrospect, you would have been a lot better off if the market had stayed in its more traditional source. But neither Fannie—

Mr. TURNER. Didn't you have a role in that? Didn't you have an ability to raise your hand and say what needs to be done on the regulatory side to prevent the market from migrating there and have a role to not enter that market area by funding it and fueling it?

Mr. SYRON. Well, sir, we didn't have any capacity to constrain the growth of that market, is what I would say. And the second part of your question, I think that what we did, and I really firmly believe this, is I'm not saying we didn't make mistakes, we did what we thought was the right thing at the time, but you're absolutely right; it's hard to say that the shareholders or any of us, who were shareholders, have benefited from that.

Mr. TOWNS. The gentleman's time has expired.

Mr. TURNER. Thank you, Mr. Chairman.

Mr. TOWNS. The gentleman from Massachusetts, Mr. Lynch.

Mr. LYNCH. Thank you, Mr. Chairman, and briefly, I just want to congratulate Chairman Waxman, in his absence, for his great work on this committee as well. He will be sorely missed. I want to thank you, Mr. Chairman, for the time, and also to the ranking member.

Mr. Chairman, I would ask that the American Enterprise Institute article entitled "The Last Trillion Dollar Commitment: The Destruction of Fannie Mae and Freddie Mac," by Peter J. Wallison and Charles W. Calomiris, be entered into the record.

Mr. TOWNS. Without objection, so ordered.

[The information referred to follows:]

American Enterprise Institute for Public Policy Research



September 2008

## The Last Trillion-Dollar Commitment: The Destruction of Fannie Mae and Freddie Mac

By Peter J. Wallison and Charles W. Calomiris

*The government takeover of Fannie Mae and Freddie Mac was necessary because of their massive losses on more than \$1 trillion of subprime and Alt-A investments, almost all of which were added to their single-family book of business between 2005 and 2007. The most plausible explanation for the sudden adoption of this disastrous course—disastrous for them and for the U.S. financial markets—is their desire to continue to retain the support of Congress after their accounting scandals in 2003 and 2004 and the challenges to their business model that ensued. Although the strategy worked—Congress did not adopt strong government-sponsored enterprise (GSE) reform legislation until the Republicans demanded it as the price for Senate passage of a housing bill in July 2008—it led inevitably to the government takeover and the enormous junk loan losses still to come.*

Now that the federal government has been required to take effective control of Fannie and Freddie and to decide their fate, it is important to understand the reasons for their financial collapse—what went wrong and why. In his statement on September 7 announcing the appointment of a conservator for the two enterprises, Treasury Secretary Henry M. Paulson pointed to their failed business models as the reason for their collapse. This was certainly a contributing element, but not the direct cause. The central problem was their dependence on Congress for continued political support in the wake of their accounting scandals in 2003 and 2004. To curry favor with Congress, they sought substantial increases in their support of affordable housing, primarily by investing in risky and substandard mortgages between 2005 and 2007.

As GSEs, Fannie and Freddie were serving two masters in two different ways. The first was an inherent conflict between their government mission and their private ownership. The government mission required them to keep mortgage interest

rates low and to increase their support for affordable housing. Their shareholder ownership, however, required them to fight increases in their capital requirements and regulation that would raise their costs and reduce their risk-taking and profitability. But there were two other parties—Congress and the taxpayers—that also had a stake in the choices that Fannie and Freddie made. Congress got some benefits in the form of political support from the GSEs' ability to hold down mortgage rates, but it garnered even more political benefits from GSE support for affordable housing. The taxpayers got highly attenuated benefits from both affordable housing and lower mortgage rates but ultimately faced enormous liabilities associated with GSE risk-taking. This Outlook tells the disheartening story of how the GSEs sold out the taxpayers by taking huge risks on substandard mortgages, primarily to retain congressional support for the weak regulation and special benefits that fueled their high profits and profligate executive compensation. As if that were not enough, in the process, the GSEs' operations promoted a risky subprime mortgage binge in the United States that has caused a worldwide financial crisis.

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The peculiar structure of the GSEs—shareholder-owned companies with a public mission—reflected a serious confusion of purpose on the part of the Lyndon Johnson administration and the members of Congress who created this flawed structure in 1968. In seeking to reduce the budget deficits associated with the Vietnam War and Great Society programs, the administration hit upon the idea of “privatizing” Fannie Mae by allowing the company to sell shares to the public. This, according to the budget theories of the time, would take Fannie’s expenditures off-budget, while allowing it to continue its activities with funds borrowed in the public credit markets. But turning Fannie into a wholly private company was not acceptable either. Various special provisions were placed in Fannie’s congressional charter that intentionally blurred the line between a public instrumentality and a private corporation. Among these provisions: Fannie was given a line of credit at the Treasury; the president could appoint five members of its board of directors; and its debt could be used, like Treasury debt, to collateralize government deposits in private banks.

Fannie’s congressional charter and its unusual ties to the government ensured that the market would recognize its status as a government instrumentality: that despite its private ownership, the company was performing a government mission. Because it was highly unlikely that the U.S. government would allow one of its instrumentalities to default on its obligations, Fannie was perceived in the capital markets to have at least an implicit government backing and was thus able to borrow funds at rates that were only slightly higher than those paid by the U.S. Treasury on its own debt offerings. In 1970, the Federal Home Loan Bank Board created Freddie Mac to assist federal savings and loan associations in marketing their mortgages; Freddie was also allowed to sell shares to the public in 1989 and became a competitor of Fannie Mae under a congressional charter that established an identical special relationship with the government.

The special relationship, codified by these unique charters, required the GSEs to pursue another inherently conflicted mission that pitted their shareholders against the taxpayers. To the extent that their government backing allowed the GSEs to take excessive financial risks, it was the taxpayers and not the shareholders who would ultimately bear the costs. That result—the privatization of

profit and the socialization of risk—has now come to pass. U.S. taxpayers are now called upon to fill in the hole that reckless and improvident investment activity—fueled by inexpensive and easily accessible funds—has created in the GSEs’ balance sheets. The special relationship was also the GSEs’ undoing, because it allowed them to escape the market discipline—the wariness of lenders—that keeps corporate managements from taking unacceptable risks.

The special relationship with Congress was the GSEs’ undoing because it allowed them to escape the market discipline—the wariness of lenders—that keeps corporate managements from taking unacceptable risks.

Normally, when a privately held company is backed by the government (for example, in the case of commercial banks covered by the Federal Deposit Insurance Corporation), regulation is the way that the government protects the taxpayers against the loss of market discipline. When Fannie Mae was privatized in 1968, however, no special regulatory structure was created to limit the taxpayers’ exposure to loss. The Johnson administration officials who structured the privatization may not have realized that they were creating what we recognize today as a huge moral hazard, but when Fannie became insolvent (the first time) in the high-interest-rate environment of the early 1980s, policymakers recognized that the company represented a potential risk to taxpayers.

In 1991, as Congress finally began the process of developing a regulatory regime for the GSEs, congressional interest in supporting affordable housing was growing. At this point, Fannie Mae initiated its first foray into affordable housing—a relatively small \$10 billion program, probably intended to show Congress that the GSEs would support affordable housing without a statutory mandate. Nevertheless, Congress added an affordable housing “mission” to the GSE charters when it created their first full-time regulator, the Office of Federal Housing Enterprise Oversight (OFHEO). The new agency had only limited regulatory authority. It was also housed in the Department of Housing and Urban Development (HUD), which had no regulatory experience, and it was funded by congressional appropriations, allowing the GSEs to control their regulator through the key lawmakers who held OFHEO’s purse strings.

The new affordable housing mission further increased the congressional policy stake in the GSEs, but it also initiated a destructive mutual dependency: Congress began to rely on Fannie and Freddie for political and financial support, and the two GSEs relied on Congress to protect their profitable special privileges. In later years, attention to the political interests of Congress became known at the GSEs

as "management of political risk." In a speech to an investor conference in 1999, Franklin Raines, then Fannie's chairman, assured them that "[w]e manage our political risk with the same intensity that we manage our credit and interest rate risks."<sup>1</sup>

### Benefits to Congress

Managing their political risk required the GSEs to offer Congress a generous benefits package. Campaign contributions were certainly one element. Between the 2000 and 2008 election cycles, the GSEs and their employees contributed more than \$14.6 million to the campaign funds of dozens of senators and representatives, most of them on committees that were important to preserving the GSEs' privileges.<sup>2</sup> And Fannie knew how to "leverage" its giving, not just its assets; often it enlisted other groups that profited from the GSEs' activities—the securities industry, homebuilders, and realtors—to sponsor their own fundraising events for the GSEs' key congressional friends. In addition to campaign funds, the GSEs—Fannie Mae in particular—enhanced their power in Congress by setting up "partnership offices" in the districts and states of important lawmakers, often hiring the relatives of these lawmakers to staff the local offices. Their lobbying activities were legendary. Between 1998 and 2008, Fannie spent \$79.5 million and Freddie spent \$94.9 million on lobbying Congress, making them the twentieth and thirteenth biggest spenders, respectively, on lobbying fees during that period.<sup>3</sup> Not all of these expenditures were necessary to contact members of Congress; the GSEs routinely hired lobbyists simply to deprive their opponents of lobbying help. Since lobbyists are frequently part of lawmakers' networks—and are often former staffers for the same lawmakers—these lobbying expenditures also encouraged members of Congress to support Fannie and Freddie as a means of supplementing the income of their friends.

In the same vein, Fannie and Freddie hired dozens of Washington's movers and shakers—at spectacular levels of compensation—to sit on their boards, lobby Congress, and in general help them to manage their political risk. (An early account of this effort was an article entitled "Crony Capitalism: American Style" that appeared in *The International Economy* in 1999.<sup>4</sup> A later version of the same point was made in *Investor's Business Daily* nine years later.<sup>5</sup>) The

GSEs also paid for academic research to assure the public that the GSE mission was worthwhile and that the GSEs posed minimal risks to taxpayers. For example, Nobel laureate Joseph Stiglitz coauthored an article in

2002 purporting to show that the risk of GSE default producing taxpayer loss was "effectively zero."<sup>6</sup>

One of the most successful efforts to influence lawmakers came through community groups. Both Fannie and Freddie made "charitable" or other gifts to community groups, which could then be called upon to contact the GSEs' opponents in Congress and protest any proposed restrictions on the activities or privileges of the GSEs. GSE supporters in Congress could also count on these groups to back them in their reelection efforts.

But these activities, as important as they were in managing the GSEs' political risks, paled when compared to the billions of dollars the GSEs made available for spending on projects in the congressional districts and states of their supporters. Many of these projects involved affordable housing. In 1994, Fannie Mae replaced its initial \$10 billion program with a \$1 trillion affordable housing initiative, and both Fannie and Freddie announced new \$2 trillion initiatives in 2001.<sup>7</sup> It is not clear to what extent the investments made in support of these commitments were losers—the GSEs' profitability over many years could cover a multitude of sins—but it is now certain that the enormous losses associated with the risky housing investments appearing on Fannie and Freddie's balance sheet today reflect major and imprudent investments in support of affordable housing between 2005 and 2007—investments that ultimately brought about the collapse of Fannie and Freddie.

Even if the earlier affordable housing projects were not losers, however, they represented a new and extra-constitutional way for Congress to dispense funds that should otherwise have flowed through the appropriations process. In one sense, the expenditures were a new form of earmark, but this earmarking evaded the constitutional appropriations process entirely. An illustration is provided by a press release from the office of Senator Charles E. Schumer (D-N.Y.), one of the most ardent supporters of the GSEs in Congress. The headline on the release, dated November 20, 2006—right in the middle of the GSEs' affordable housing spending spree—was

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“Schumer Announces up to \$100 Million Freddie Mac Commitment to Address Fort Drum and Watertown Housing Crunch.” The subheading continued: “Schumer Unveils New Freddie Mac Plan with HSBC That Includes Low-Interest Low-Downpayment Loans. In June, Schumer Urged Freddie Mac and Fannie Mae Step Up to the Plate and Deliver Concrete Plans—Today Freddie Mac Is Following Through.”<sup>8</sup> If this project had been economically profitable for Fannie or Freddie, Schumer would not have had to “urge” them to “step up.” Instead, using his authority as a powerful member of the Senate Banking Committee—and a supporter of Fannie and Freddie—he appears to have induced Freddie Mac to make a financial commitment that was very much in his political interests but for which the taxpayers of the United States would ultimately be responsible.

Of course, Schumer was only one of many members of Congress who used his political leverage to further his own agenda at taxpayer expense and outside the appropriations process. The list of friends of Fannie and Freddie changed over time; while the GSEs enjoyed broad bipartisan support in the 1990s, over the past decade, they have become increasingly aligned with the Democrats. This shift in the political equilibrium was especially clear in the congressional reaction to the GSEs’ accounting scandals of 2003 and 2004.

### The Accounting Scandals

Fannie and Freddie reaped significant benefits from the careful management of their political risk. In June 2003, in the wake of the failures of Enron and WorldCom, Freddie’s board of directors suddenly dismissed its three top officers and announced that the company’s accountants had found serious problems in Freddie’s financial reports. In 2004, after a forensic audit by OFHEO, even more serious accounting manipulation was found at Fannie, and Raines, its chairman, and Timothy Howard, its chief financial officer, were compelled to resign.

It is eloquent testimony to the power of Fannie and Freddie in Congress that even after these extraordinary events there was no significant effort to improve or enhance the powers of their regulator. The House Financial Services Committee developed a bill that was so badly weakened by GSE lobbying that the Bush administration refused to support it. The Senate Banking Committee, then under Republican control, adopted much stronger

legislation in 2005, but unanimous Democratic opposition to the bill in the committee doomed it when it reached the floor. Without any significant Democratic support, debate could not be ended in the Senate, and the bill was never brought up for a vote. This was a crucial missed opportunity. The bill prohibited the GSEs from holding portfolios of mortgages and mortgage-backed securities (MBS); that measure alone would have prevented the disastrous investment activities of the GSEs in the years that followed. GSE immunity to accounting scandal is especially remarkable when it is recalled that after accounting fraud was

found at Enron (and later at WorldCom), Congress adopted the punitive Sarbanes-Oxley Act, which imposed substantial costs on every public company in the United States. The GSEs’ investment in controlling their political risk—at least among the Democrats—was apparently money well spent.

Nevertheless, the GSEs’ problems were mounting quickly. The accounting scandal, although contained well below the level of the Enron story, gave ammunition to GSE critics inside and outside of Congress. Alan Greenspan, who in his earlier years as Federal Reserve chairman had avoided direct criticism of the GSEs, began to cite the risks associated with their activities in his congressional testimony. In a hearing before the Senate Banking Committee in February 2004, Greenspan noted for the first time that they could have serious adverse consequences for the economy. Referring to the management of interest rate risk—a key risk associated with holding portfolios of mortgages or MBS—he said:

To manage this risk with little capital requires a conceptually sophisticated hedging framework. In essence, the current system depends on the risk managers at Fannie and Freddie to do everything just right, rather than depending on a market-based system supported by the risk assessments and management capabilities of many participants with different views and different strategies for hedging risks.<sup>9</sup>

Then, and again for the first time, Greenspan proposed placing some limit on the size of the GSEs’ portfolios. Greenspan’s initial idea, later followed by more explicit proposals for numerical limits, was to restrict the GSEs’ issuance of debt. Although he did not call for an outright reduction in the size of the portfolios, limiting the issuance

The failure to adopt meaningful GSE reform in 2005 was a crucial missed opportunity.

of debt amounts to the same thing. If the GSEs could not issue debt beyond a certain amount, they also could not accumulate portfolios. Greenspan noted:

Most of the concerns associated with systemic risks flow from the size of the balance sheets that these GSEs maintain. One way Congress could constrain the size of these balance sheets is to alter the composition of Fannie and Freddie's mortgage financing by limiting the dollar amount of their debt relative to the dollar amount of mortgages securitized and held by other investors. . . . [T]his approach would continue to expand the depth and liquidity of mortgage markets through mortgage securitization but would remove most of the potential systemic risks associated with these GSEs.<sup>10</sup>

This statement must have caused considerable concern to Fannie and Freddie. Most of their profits came from issuing debt at low rates of interest and holding portfolios of mortgages and MBS with high yields. This was a highly lucrative arrangement; limiting their debt issuance would have had a significant adverse effect on their profitability.

In addition, in January 2005, only a few months after the adverse OFHEO report on Fannie's accounting manipulation, three Federal Reserve economists published a study that cast doubt on whether the GSEs' activities had any significant effect on mortgage interest rates and concluded further that holding portfolios—a far riskier activity than issuing MBS—did not have any greater effect on interest rates than securitization: “We find that both portfolio purchases and MBS issuance have negligible effects on mortgage rate spreads and that purchases are not any more effective than securitization at reducing mortgage interest rate spreads.”<sup>11</sup> Thus, the taxpayer risks cited by Greenspan could not be justified by citing lower mortgage rates, and, worse, there was a strong case for limiting the GSEs to securitization activities alone—a much less profitable activity than issuing MBS.

The events in 2003 and 2004 had undermined the legitimacy of the GSEs. They could no longer claim to be competently—or even honestly—managed. An important and respected figure, Alan Greenspan, was raising questions about whether they might be creating excessive risk for taxpayers and systemic risk for the economy as a whole. Greenspan had suggested that their most profitable activity—holding portfolios of mortgages and MBS—was the activity that created the greatest risk, and three Federal Reserve economists had concluded that the

GSEs' activities did not actually reduce mortgage interest rates. It was easy to see at this point that their political risk was rising quickly. The case for continuing their privileged status had been severely weakened. The only element of their activities that had not come under criticism was their affordable housing mission, and it appears that the GSEs determined at this point to play that card as a way of shoring up their political support in Congress.

From the perspective of their 2008 collapse, this may seem to have been unwise, but in the context of the time, it was a shrewd decision. It provided the GSEs with the potential for continuing their growth and delivered enormous short-term profits. Those profits were transferred to stockholders in huge dividend payments over the past three years (Fannie and Freddie paid a combined \$4.1 billion in dividends last year alone) and to managers in lucrative salaries and bonuses. Indeed, if it had not been for the Democrats' desire to adopt a housing relief bill before leaving for the 2008 August recess, no new regulatory regime for the GSEs would have been adopted at all. Only the Senate Republicans' position—that there would be no housing bill without GSE reform—overcame the opposition of Senators Christopher Dodd (D-Conn.), the banking committee chairman, and Schumer.

The GSEs' confidence in the affordable housing idea was bolstered by what appears to be a tacit understanding. Occasionally, this understanding found direct expression. For example, in his opening statement at a hearing in 2003, Representative Barney Frank (D-Mass.), now the chairman of the House Financial Services Committee, referred to an “arrangement” between Congress and the GSEs that tracks rather explicitly what actually happened: “Fannie and Freddie have played a very useful role in helping to make housing more affordable, both in general through leveraging the mortgage market, and in particular, they have a mission that this Congress has given them in return for some of the arrangements which are of some benefit to them to focus on affordable housing.”<sup>12</sup> So here the arrangement is laid out: if the GSEs focus on affordable housing, their position is secure.

### Increased Support for Affordable Housing

Affordable housing loans and subprime loans are not synonymous. Affordable housing loans can be traditional prime loans with adequate down payments, fixed rates, and an established and adequate borrower credit history. In trying to increase their commitment to affordable housing, however, the GSEs abandoned these standards. In 1995,

HUD, the cabinet-level agency responsible for issuing regulations on the GSEs' affordable housing obligations, had ruled that the GSEs could get affordable housing credit for purchasing subprime loans. Unfortunately, the agency failed to require that these loans conform to good lending practices, and OFHEO did not have the staff or the authority to monitor their purchases. The assistant HUD secretary at the time, William Apgar, later told the *Washington Post* that "[i]t was a mistake. In hindsight, I would have done it differently." Allen Fishbein, his adviser, noted that Fannie and Freddie "chose not to put the brakes on this dangerous lending when they should have."<sup>13</sup> Far from it. In 1998, Fannie Mae announced a 97 percent loan-to-value mortgage, and, in 2001, it offered a program that involved mortgages with no down payment at all. As a result, in 2004, when Fannie and Freddie began to increase significantly their commitment to affordable housing loans, they found it easy to stimulate production in the private sector by letting it be known in the market that they would gladly accept loans that would otherwise be considered subprime.

Although Fannie and Freddie were building huge exposures to subprime mortgages from 2005 to 2007, they adopted accounting practices that made it difficult to detect the size of those exposures. Even an economist as seemingly sophisticated as Paul Krugman was misled. He wrote in his July 14, 2008, *New York Times* column that

Fannie and Freddie had nothing to do with the explosion of high-risk lending. . . . In fact, Fannie and Freddie, after growing rapidly in the 1990s, largely faded from the scene during the height of the housing bubble. . . . Partly that's because regulators, responding to accounting scandals at the companies, placed temporary restraints on both Fannie and Freddie that curtailed their lending just as housing prices were really taking off. Also, they didn't do any subprime lending, because they can't. . . . by law. . . . So whatever bad incentives the implicit federal guarantee creates have been offset by the fact that Fannie and Freddie were and are tightly regulated with regard to the risks they can take. You could say that the Fannie-Freddie experience shows that regulation works.<sup>14</sup>

Here Krugman demonstrates confusion about the law (which did not prohibit subprime lending by the GSEs), misunderstands the regulatory regime under which they

Although Fannie and Freddie were building huge exposures to subprime mortgages, they adopted accounting practices that made it difficult to detect the size of those exposures.

operated (which did not have the capacity to control their risk-taking), and mismeasures their actual subprime exposures (which he wrongly states were zero). There is probably more to this than lazy reporting by Krugman; the GSE propaganda machine purposefully misled people into believing that it was keeping risk low and operating under an adequate prudential regulatory regime.

One of the sources of Krugman's confusion may have been Fannie and Freddie's strange accounting conventions relating to subprime loans. There are many definitions of a subprime loan, but the definition used by U.S. bank regulators is any

loan to a borrower with damaged credit, including such objective criteria as a FICO credit score lower than 660.<sup>15</sup> In their public reports, the GSEs use their own definitions, which purposely and significantly understate their commitment to subprime loans—the mortgages with the most political freight. For example, they disclose the principal amount of loans with FICO scores of less than 620, leaving the reader to guess how many loans fall into the category of subprime because they have FICO scores of less than 660. In these reports, too, Alt-A loans—which include loans with little or no income or other documentation and other deficiencies—are differentiated from subprime loans, again reducing the size of the apparent GSE commitment to the subprime category. These distinctions, however, are not very important from the perspective of realized losses in the subprime and Alt-A categories; loss rates are quite similar for both, even though they are labeled differently. In its June 30, 2008, Investor Summary report, Fannie notes that credit losses on its Alt-A portfolio were 49.6 percent of all the credit losses on its \$2.7 trillion single-family loan book of business.<sup>16</sup> Fannie's disclosures indicate that when all subprime loans (including Alt-A) are aggregated, at least 85 percent of its losses are related to its holdings of both subprime and Alt-A loans. They are all properly characterized as "junk loans."

Beginning in 2004, after the GSEs' accounting scandals, the junk loan share of all mortgages in the United States began to rise, going from 8 percent in 2003 to about 18 percent in 2004 and peaking at about 22 percent in the

third quarter of 2006. It is likely that this huge increase in commitments to junk lending was largely the result of signals from Fannie and Freddie that they were ready to buy these loans in bulk. For example, in speeches to the Mortgage Bankers Association in 2004, both Raines and Richard Syron—the chairmen, respectively, of Fannie and Freddie—“made no bones about their interest in buying loans made to borrowers formerly considered the province of nonprime and other niche lenders.”<sup>17</sup> Raines is quoted as saying, “We have to push products and opportunities to people who have lesser credit quality.”

There are few data available publicly on the dollar amount of junk loans held by the GSEs in 2004, but according to their own reports, GSE purchases of these mortgages and MBS increased substantially between 2005 and 2007. Subprime and Alt-A purchases during this period were a higher share of total purchases than in previous years. For example, Fannie reported that mortgages and MBS of all types originated in 2005–2007 comprised 49.8 percent of its overall book of single-family mortgages, which includes both mortgages and MBS retained in their portfolio as well as mortgages they securitized and guaranteed. But the percentage of mortgages with *subprime characteristics* purchased during this period consistently exceeded 49.8 percent, demonstrating that Fannie was substantially increasing its reliance on junk loans between 2005 and 2007. For example, in its 10-Q Investor Summary report for the quarter ended June 30, 2008, Fannie reported that mortgages with subprime characteristics comprised substantial percentages of all 2005–2007 mortgages the company acquired, as shown in table 1. Based on these figures, it is likely that as much as 40 percent of the mortgages that Fannie Mae added to its single-family book of business during 2005–2007 were junk loans.

If we add up all these categories and eliminate double counting, it appears that on June 30, 2008, Fannie held or had guaranteed subprime and Alt-A loans with an unpaid principal balance of \$553 billion. In addition, according to the same Fannie report, the company also held \$29.5 billion of Alt-A loans and \$36.3 billion of subprime loans that it had purchased as private label securities (non-GSE or Ginnie Mae securities).<sup>18</sup> These figures amount to a grand total of \$619 billion—approximately 23 percent of Fannie’s book of single-family business on June 30, 2008—and reflect a huge commitment to the purchase of mortgages of questionable quality between 2005 and 2007.

Freddie Mac also published a report on its subprime and Alt-A mortgage exposures as of August 2008. Fred-

TABLE 1  
SUBPRIME CHARACTERISTICS OF MORTGAGES  
ACQUIRED BY FANNIE MAE, 2005–2007

| Subprime Characteristic               | Percentage |
|---------------------------------------|------------|
| Negative amortization (option ARMs):  | 62.2       |
| Interest-only:                        | 83.8       |
| FICO scores less than 620:            | 57.5       |
| Loan-to-value ratios greater than 90: | 62.0       |
| Alt-A:                                | 73.0       |

SOURCE: Fannie Mae, “2008 Q2 10-Q Investor Summary,” August 8, 2008, available at [www.fanniemae.com/media/pdf/newsreleases/2008\\_Q2\\_10Q\\_Investor\\_Summary.pdf](http://www.fanniemae.com/media/pdf/newsreleases/2008_Q2_10Q_Investor_Summary.pdf) (accessed September 29, 2008).

TABLE 2  
SUBPRIME CHARACTERISTICS OF MORTGAGES  
ACQUIRED BY FREDDIE MAC, 2005–2007

| Subprime Characteristic                  | Percentage |
|--|------------|
| Negative amortization (option ARMs):     | 72         |
| Interest-only:                           | 90         |
| FICO scores less than 620:               | 61         |
| Loan-to-value ratios of greater than 90: | 58         |
| Alt-A:                                   | 78         |

SOURCE: Freddie Mac, “Freddie Mac Update,” August 2008, 30, available at [www.freddiemac.com/investors/pdf/investor-presentation.pdf](http://www.freddiemac.com/investors/pdf/investor-presentation.pdf) (accessed September 29, 2008).

die’s numbers were not as detailed as Fannie’s, but the company reported that 52 percent of its entire single-family credit guarantee portfolio was from book years 2005–2007 (slightly more than Fannie) and that these mortgages had subprime characteristics, as shown in table 2. Based on these figures, it appears that as much as 40 percent of the loans that Freddie Mac added to its book of single-family mortgage business during 2005–2007 also consisted of junk loans.

Freddie’s disclosures did not contain enough detail to eliminate all of the double counting, so it is not possible to estimate the total amount of its subprime loans from the information it reported. Nevertheless, we can calculate the minimum amount of Freddie’s exposure. In the same report, Freddie disclosed that \$190 billion of its loans were categorized as Alt-A and \$68 billion had FICO credit scores of less than 620, so that they would clearly be categorized as subprime. Based on the limited information Freddie supplied, double counting of \$7.6 billion can be

eliminated, so that as of August 2008, Freddie held or had guaranteed at least \$258 billion of junk loans. To this must be added \$134 billion of subprime and Alt-A loans that Freddie purchased from private label issuers,<sup>19</sup> for a grand total of \$392 billion—20 percent of Freddie's single-family portfolio of \$1.8 trillion.

### A New Trillion-Dollar Commitment

Between 2005 and 2007, Fannie and Freddie acquired so many junk mortgages that, as of August 2008, they held or had guaranteed more than \$1.011 trillion in unpaid principal balance exposures on these loans. The losses already recognized on these exposures were responsible for the collapse of Fannie and Freddie and their takeover by the federal government, and there are undoubtedly many more losses to come. In congressional testimony on September 23, James Lockhart, the director of their new regulator, the Federal Housing Finance Agency, cited these loans as the source of the GSEs' ultimate collapse, as reported in the *Washington Post*:

Fannie Mae and Freddie Mac purchased and guaranteed "many more low-documentation, low-verification and non-standard" mortgages in 2006 and 2007 "than they had in the past." He said the companies increased their exposure to risks in 2006 and 2007 despite the regulator's warnings.

Roughly 33 percent of the companies' business involved buying or guaranteeing these risky mortgages, compared with 14 percent in 2005. Those bad debts on mortgages led to billions of dollars in losses at the firms. "The capacity to raise capital to absorb further losses without Treasury Department support vanished," Lockhart said.<sup>20</sup>

Although a large share of the subprime loans now causing a crisis in the international financial markets are so-called private label securities—issued by banks and securitizers other than Fannie Mae and Freddie Mac—the two GSEs became the biggest buyers of the Alt-A tranches of these subprime pools in 2005–07.<sup>21</sup> Without their commitment to purchase the AAA tranches of these securitizations, it is unlikely that the pools could have been formed and marketed around the world. Accordingly, not

only did the GSEs destroy their own financial condition with their excessive purchases of subprime loans in the three-year period from 2005 to 2007, but they also played a major role in weakening or destroying the solvency and stability of other financial institutions and investors in the United States and abroad.

### Why Did They Do It?

Why did the GSEs follow this disastrous course? One explanation—advanced by Lockhart—is that Fannie and Freddie were competing for market share with the private label securitizers and had to purchase substantial amounts of subprime mortgages in order to retain their position in a growing market. Fannie and Freddie's explanation is that they were the victims of excessively stringent HUD affordable housing goals. Neither of these explanations is plausible. For many years before 2004, Fannie and Freddie had followed relatively prudent investment strategies, even with respect to affordable housing, but they suddenly changed their approach in 2005.

Freddie Mac's report, for example, shows that the percentage of mortgages in its portfolio with subprime characteristics rose rapidly after 2004. In addition, Freddie Mac's disclosures indicate that of the loans added to its portfolio of single-family loans between 2005 and 2007, 97 percent were interest-only mortgages, 85 percent were Alt-A, 72 percent were negative amortization loans, 67 percent had FICO scores lower than 620, and 68 percent had original loan-to-value ratios greater than 90 percent. It seems unlikely that competing for market share or complying with HUD regulations—which contained no enforcement mechanism other than disclosure and delay in approving requests for mission expansions—could be the reason for such an obviously destructive course.

Instead, it seems likely that the event responsible for the GSEs' change in direction and culture was the accounting scandal that each of them encountered in 2003 and 2004. In both cases, they lost their reputation as well-managed companies and began to encounter questions about their contribution to reducing mortgage rates and their safety and soundness. Serious observers questioned whether they should be allowed to continue to hold mortgages and MBS in their portfolios—by far their most profitable activity—and Senate Republicans moved a bill out of committee that would have prohibited this activity.

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After the accounting scandals, the junk loan share of all mortgages in the United States began to rise, peaking at about 22 percent in 2006.

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Under these circumstances, the need to manage their political risk became paramount, and this required them to prove to their supporters in Congress that they still served a useful purpose. In 2003, as noted above, Frank had cited an arrangement in which the GSEs' congressional benefits were linked to their investments in affordable housing. In this context, substantially increasing their support for affordable housing—through the purchase of the subprime loans permitted by HUD—seems a logical and even necessary tactic.

Unfortunately, the sad saga of Fannie and Freddie is not over. Some of their supporters in Congress prefer to blame the Fannie and Freddie mess on deregulation or private market failure, perhaps hoping to use such false diagnoses to lay the groundwork for reviving the GSEs for extra constitutional expenditure and political benefit in the future. As the future of the GSEs is debated over the coming months and years, it will be important to remember how and why Fannie and Freddie failed. The primary policy objective should be to prevent a repeat of this disaster by preventing the restoration of the GSE model.

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(March 2002), available at [www.sbg.com/Papers/fmp-v1i2.pdf](http://www.sbg.com/Papers/fmp-v1i2.pdf) (accessed September 29, 2008). Interestingly, Stiglitz today is an outspoken critic of GSE risk-taking. According to Stiglitz, GSE risk-taking was a predictable consequence of the structure of the GSEs and their financial structure and compensation schedules. "We should not be worried about [GSE] shareholders losing their investments. In earlier years, they were amply rewarded. The management remuneration packages that they approved were designed to encourage excessive risk-taking. They got what they asked for. Nor should we be worried about creditors losing their money. Their lack of supervision fuelled the housing bubble and we are now all paying the price." (Joseph Stiglitz, "Fannie's and Freddie's Free Lunch," *Financial Times*, July 24, 2008.)

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Mr. LYNCH. Thank you, Mr. Chairman. Just as an initial matter of clarification, it was asked earlier by the ranking member, I believe, whether 660 was used as your dividing line for Alt-A mortgages, Mr. Mudd, and probably you as well, Mr. Syron. I'm looking at some Fannie Mae and Freddie Mac documents here, and it appears that you use the FICO score of 620 as the dividing line, is that right?

Mr. MUDD. In our case—

Mr. LYNCH. Please don't burn my time. This is just a simple matter. Is it 620 or 660?

Mr. MUDD. No.

Mr. LYNCH. No?

Mr. MUDD. No.

Mr. LYNCH. You use 660 then.

Mr. MUDD. No.

Mr. LYNCH. You don't use 660, you don't use 620. What do you use?

Mr. MUDD. The original definition of a subprime loan was based upon the originator. When the market developed other definitions, we disclosed based on the other definitions, that were used in the marketplace.

Mr. LYNCH. OK. This is consistent. You know what I can tell you right now? If you have accomplished anything here today, you have made conservatorship look very, very good. I was very worried about that decision to put these organizations in conservatorship. But what I have seen here today, with the total denial that is going on here today and the refusal to answer simple questions whether you put the budget up or you put the budget down, and you can't answer that, it just gives me great comfort, great reassurance that these two GSEs are now in the hands of the conservators because I can see what led us into this problem just by the way you have been failing to respond. Despite all the denials of what is going on here, I happen to have some of the documents that were submitted here. This is a 10Q investor summary for the quarter ended June 30, 2008, and, let's see, Fannie reported that, this is for Fannie Mae, that subprime characteristics, mortgages with subprime characteristics comprised substantial percentages of all 2005 through 2007 mortgages that the company acquired. And there's some tables here that are shown as well. If you add up, this is Fannie's report, if you add up the categories, and eliminate double counting, and this is also in the Wallison-Calomiris article, it appears that on June 30, 2008, the reporting date just after the time that you left, I believe, Mr. Mudd, around the time that you left, Fannie either held or had guaranteed subprime and Alt-A loans, however that is defined, with an unpaid principal balance of \$553 billion. In addition, according to the same Fannie Mae report, the company also held \$29.5 billion of Alt-A loans and \$36.3 billion of subprime loans that it had purchased as private label securities. And these figures amount to the grand total of \$619 billion and reflect a huge commitment to the purchase of mortgages of questionable quality between 2005–2007.

We also appointed, as I said before, we have a new regulator in town, a new sheriff, and I'm going to quote from him, this is Jim Lockhart, who now heads up the FHFA. Here is what he says. This

is in a report that he gave. Fannie Mae and Freddie Mac purchased and guaranteed many more low doc, low verification, and nonstandard mortgages in the 2006 and 2007 years than they had in the past, roughly 33 percent of the company's business involving buying or guaranteeing these risky mortgages compared with 14 percent in 2005. Those bad debts on mortgages led to billions of dollars in losses at these two firms and affected the capacity to raise capital to absorb further losses and forced them to go to the Treasury for support.

Now, let me ask you, the way we set up this whole organization where you have, as we've said before, you have an obligation to your shareholders, and we've talked about that, my colleague previously mentioned that, there is also the liquidity function here, and you're trying to shore up the markets. We're going to have to look further down the road at the possibility perhaps of going into a receivership, and Fannie and Freddie will go away.

Do you think, in looking back, that created a conflict, your obligation to the shareholder where you're going for return, and I know that is what you were going for with some of this stuff here. This was making a lot of money at one point. Is that a core problem with the way these organizations are structured now? And I will just take my answer and yield back my time. Thank you.

Mr. MUDD. Congressman, first, I would apologize. I was—you asked a question about the definitions, and I wanted to be as precise as I could, and if I can followup by writing individually I will. I don't mean not to answer your question in any way.

Mr. LYNCH. That would be great.

Mr. MUDD. On the second question, what I found personally was that due to the hybrid nature of the company, a private company with a public mission, that charter, that structure gives rise to a number of challenges that become conflicts that become this very difficult balancing act that you describe between shareholders, homeowners, taxpayers, capital, liquidity, stability, which market to be in. In a good market, in a rising market, it's possible to make the tradeoffs to keep that balance in a pretty effective place. In a crisis of these proportions, you can't manage the dial and, as you know from your work on the Financial Services Committee, you could see that some of the dials we had to sub-optimize, whether it was in terms of the affordable housing mission or the liquidity mission, at any given point in time.

So, yes, I think the current structure needs to be revisited, but my hope would be to revisit it in the context of what Congress wants the overall housing finance market and the government's involvement in that to look like, thence how Fannie and Freddie fit into it rather than having an answer provided for Fannie and Freddie, and then the rest of the market gets rebuilt around that without sufficient debate and examination.

Mr. LYNCH. Mr. Syron, would you like to have a crack at that just briefly?

Mr. SYRON. Yes, sir. I think, as I said, these organizations have provided a lot of value in the past. There has been a lot of change going on. I agree with Mr. Mudd completely that we have to look at how this fits into the whole system and with, very quickly with respect to the balancing of the three, I think in an up market it

was a lot easier, but essentially what you were trying to do in these companies, you could never make any one of the three completely happy. It was how you could sort of minimize the unhappiness and make it feasible.

Thank you.

Mr. LYNCH. Mr. Chairman, I appreciate your forbearance. Thank you, sir. I yield back.

Mr. TOWNS. Gentleman from California, Mr. Bilbray.

Mr. BILBRAY. Thank you, Mr. Chairman. Gentlemen, a colleague of mine used the reference "perfect storm." Can we agree that this was not an act of God, it wasn't just something that happened, that this was a situation that was created, nurtured, and triggered by human activity? Can we agree to that? Or do you agree with a perfect storm that just this happens, and there was nothing anybody could do about it?

Mr. RAINES. Congressman, if you're addressing the question to me, I agree with you; it's a result of human beings making decisions, and I laid out in my written testimony how not only in this storm, but in other storms, it's going to result in human beings making a variety of decisions in the financial markets.

Mr. BILBRAY. My concern is I feel like in 10, 15 years I'm going to have power plant owners come to us for all of these grants because their power plants are being washed out by major storm activity and say we had nothing to do with this; greenhouse gases, who would have thought? But, all I'm saying down the line, there were contributing factors here. OK, it wasn't an act of God. When you looked at the market, the residential housing market and the increase that we were seeing over a period of time, far beyond what we saw in the 1970's, the other climbs we've seen before, was anybody suspicious at all that as we say in the environmental community, that this bubble was not sustainable, that if you look at the population growth, both birth rate and immigration, it didn't justify the market expansion that we saw? Did it? When we saw the way this market was growing, where was the market coming from? Where was the demand coming from?

Now, Greenspan testified that there were two major factors: One, major portion of foreign investment coming in and buying paper and creating an artificial, basically the fact of sight unseen you get this paper out there, we will buy it, and the values kept going. A lot of that being our own petrodollars coming back from the Third World. But, the other part you have to admit was that the expanded market that you were creating by going out on this thin ice with this Alt-A, this really was going out on ice.

Can you at least admit that a contributing factor was the entire industry going out on this thin ice and broadening the market that created the bubble? Because you keep saying once the bubble popped, what could we do? But, the creation of the bubble itself, this artificial inflated market out there, was not an act of God. It was an act of foreign, massive foreign capital coming in far beyond what was reasonable, and the expansion of the market and not just to low income, but middle class. I have a constituent, five defaults, no, seven defaults she had on people buying and selling the market. Can you at least admit that the bubble was created partially by the institutions that were out there creating, giving loans to

people who never should have qualified, thus broadening the market and inflating the value?

Mr. MUDD. I would say that the expansion of credit that went all the way back to the 1990's and went through the consumer sector as well as the commercial sector, combined with the lack of affordable housing and the increase in housing prices, all built up that bubble, yes.

Mr. BILBRAY. But, Mr. Mudd, let's talk about self-creating the crisis. Didn't the availability and the expansion of the market through giving loans that weren't qualified was a major contributing factor to the acceleration, to the appreciation of residential housing? The cost was going up because you were responding to a tip.

Mr. MUDD. Congressman, I think you rightly describe it as a circular problem and the more one thing happened, the more it led to the other thing. And the more the homes were unaffordable, the more the products got stretched in order to create products that people who 5 years before might not have been qualified, could be qualified today, and that then led to—

Mr. BILBRAY. Just by the act, be it good intention or not, be it Congress or be it the private sector, providing the market to people who couldn't afford it was causing the price of affordability to move out beyond them some more because it did contribute to the inflationary, the appreciation of real estate because you had more people that were in the market that could buy than you have otherwise, right?

Mr. RAINES. You were describing a classic financial bubble. And I think you're right. And as I tried to set forth in testimony, in my written testimony, we have seen this again and again and again, that this is how we end up in financial crises by ordinary products being morphed into something different, and then, it keeps feeding on itself until a point in which time when the market can no longer support it.

Mr. BILBRAY. Mr. Raines, I was involved 18 years with affordable housing. Explain to me how you can provide affordable housing to people who can't afford it normally, and at a time that income and salaries are static, basically static over 20 years, while the price of housing is skyrocketing, the gap was growing. How do you maintain the ability for that population to stay in the market that is moving beyond them without somewhere down the road subsidizing them one way or the other, filling that gap? How does the public sector do that without somebody filling that gap with a subsidy?

Mr. TOWNS. Gentleman's time has expired, but he can answer.

Mr. RAINES. I think you and I have probably spent a similar period of time with affordable housing, and I think the answer is in that circumstance, there has to be a subsidy. We were lucky during much of the 1990's, that we had incomes rising faster and therefore, with some engineering, you could help people who were close to the edge to get into housing. But, at a time when home prices were rising as quickly as they were in the early part of this decade, it made it almost impossible for affordable housing to work.

Mr. BILBRAY. Mr. Chairman, let me point out that I think the bailout was the hidden subsidy, not just the low income but middle income, to go into markets that they shouldn't get into and this

bailout ought to be recognized as the end product of the fact that there was a subsidy, and that subsidy was the bailout and the taxpayers are paying right now to subsidize those decisions that were made over the last two decades.

Thank you very much, gentlemen. I appreciate it.

Mr. TOWNS. Thank you. The gentleman from Illinois, Mr. Davis.

Mr. DAVIS OF ILLINOIS. Thank you, Mr. Chairman. I too want to thank the gentlemen for being here. I have two basic questions for the panel. They are, what mistakes did you make that may have contributed to the current financial crisis? And what can we learn from these mistakes to guide us as we reform and reshape Freddie and Fannie?

Let me just begin with you, Mr. Mudd. You were quoted in the New York Times on August 5, 2008, as saying you have the worst housing crisis in U.S. recorded history, and we're the largest housing finance company in the country, so when one goes down, the other goes with it, end of the quotation.

Do you believe that your company's financial strategies played no role in its problems? Can you look back and identify any decisions you made that ultimately were harmful to your company and may have contributed to the crisis?

Mr. MUDD. I can, Congressman. And thank you for the question.

I think that the structure of the companies as monoline companies in the housing industry, in a housing market like this, presents a challenge and ought to be considered going forward because you don't have the ability, as another financial institution would, to diversify. So, when the housing market goes down, the commercial market goes up, and there is some balancing.

In that light, what do I wish I had done differently? I wish I had gone earlier in the process to the regulator, to the Treasury Department and said, you know, we are—we are struggling to maintain this balance between affordability, liquidity, and capital and funding and housing goals and cost. Which one do you want us to emphasize? Because the longer that we keep trying to balance these areas and be the sole source of support in a declining housing market, the more difficult challenge this becomes. So, that is one thing that I wish I had done differently.

I wish I had stayed longer and had been able to help more with the foreclosure problem which has now come to the fore. That, as you know, is really the place where the rubber meets the road on this. When I was there, we were able to modify, I think, about 200,000 loans in order to help people either refinance and save for loans or avoid a foreclosure. I think it is apparent now, in retrospect, that more sooner to avoid those foreclosures would have been better for the overall market.

Mr. DAVIS OF ILLINOIS. Thank you very much. Let me ask you, Mr. Raines. I would like to hear your view about what mistakes were made either during your tenure or after you left.

Mr. RAINES. Well, I would—I'm sorry. I would point to a couple of things during my tenure that I wish had been done differently.

I wish we could have gotten a regulatory bill relating to Fannie and Freddie enacted earlier because I think that the battle over Fannie and Freddie was a distraction to the companies, to our regulator, as well as to other parts of the financial system regulatory

process. So, I wish that we could have gotten that done at a much earlier stage in time, which I think would, in these times, have provided some real assurance to the market about the future of the companies.

I also wish that we had been able to complete, before I left the process, fully entrenching the risk management approach to credit that we had worked out over a couple-year period that I believe would have been helpful to my successors in managing the extraordinary credit issues that they had to face after I left.

With regard to my successors, I'm really not in a position to judge them. I don't have the facts. I wasn't there. It would be unfair for me to say, Well, sitting here today, here is what I would have done differently. I tried in my testimony simply to point out what I thought were the facts that the company has disclosed, but I don't truly feel in a position to critique what they are doing without knowing what they know.

Mr. DAVIS OF ILLINOIS. Thank you very much.

Let me just quickly ask Mr. Syron and Mr. Brendsel, answering the same questions, could you indicate any feeling of mistakes or errors or things that could have been done differently?

Mr. SYRON. Yes, sir. What I wish we had done—and we tried to do this—is insisted on more precision or some precision in how these tradeoffs should have been dealt with. For example, I had suggested that simple regulatory language that said that we should have—we needed to be fulsome on our mission, be safe and sound and provide a return to shareholders that was competitive.

I mean, I think something that would have helped in determining how this balance should be met over time.

Mr. BRENDSEL. Thank you. Yes, of course, I was the CEO of Freddie Mac for a long time, and over the course of those years, I made many mistakes in the process. And I learned from mistakes as well. And I think certainly what I learned is, strong controls over credit and credit policies are critical to the long-term survival not only of the organization but also of homeowners and the Nation.

Beyond that, though, I left in 2003, and at the time, I felt that our approach in the subprime market focusing, being very conservative and cautious, was the appropriate one. And I think that has proven to be true.

I can't say really what has happened since then, in terms of the decisions that were made. The appropriateness of the decisions is clear based on public statements that the subprime investments have proven to be a problem for Freddie Mac and Fannie Mae subsequently.

But, certainly with regard to regrets, I think the issue about a strong, professional regulator that is credible and has the confidence of the public, of Members of Congress, and of investors is of critical importance and continues to be. And I think that was at least a source of concern in the early 2000's that I would have—as Mr. Raines said, I think—I wish I had been more effective in working toward.

Finally, of course, as has been briefly mentioned, Freddie Mac did go through restatement in 2003. It is interesting, of course, that the statement resulted in Freddie Mac reporting more income

rather than less. But, nevertheless, that restatement happened under my watch as a CEO; and I wish that, No. 1, the restatement had not been necessary, and I still continue to kind of search through what I might have done differently in that regard.

Mr. TOWNS [presiding]. The gentleman's time has expired.

Mr. DAVIS OF ILLINOIS. Gentlemen, thank you very much.

Thank you, Mr. Chairman.

Mr. TOWNS. Congressman Sali of Idaho.

Mr. SALI. Thank you, Mr. Chairman.

Gentlemen, I have to tell you I'm a little surprised that I'm getting this impression that all of you feel that Fannie and Freddie and the difficulties that we find ourselves in now are just because you were victims of a market.

Mr. SYRON, I think you described the mission for your organization while you were there as liquidity, affordability, and stability. Did I get those three right?

Mr. SYRON. Yes, sir.

Mr. SALI. Well, I think that each of you would agree that—I don't know what the exact numbers are, but somewhere around close to half of the residential market was funded through Freddie and Fannie together. In fact, it has been described as two GSEs that were too big to fail.

You do all agree with that characterization, don't you? Does anybody disagree with that characterization?

OK, fine.

We heard a description earlier that there was this perfect storm, and I think, as Congressman Bilbray pointed out, the storm is an act of God and there is no control over that. You would all agree that as the biggest stakeholder in the residential mortgage market that you will have a significant impact on that market?

Does anybody disagree with that?

OK.

And you probably agree that it is not unreasonable to give the biggest stakeholder in the residential mortgage market the mission of bringing stability to that market.

Does anybody disagree with that?

And given that the Alt-A loans failed, I think at something like 10 times the rate of other loans and that at the time they were being made, they were mockingly referred to as "liar loans," none of you would disagree that both Fannie and Freddie really failed in their mission, their charge of adding stability to the market by trying to meet the market with those Alt-A loans.

Does anybody disagree with that?

Mr. MUDD. Yeah, Congressman, I would disagree respectfully in the sense that it is necessary to maintain a balance during that. I don't think that market share is a primary indicator of whether the company is being successful or not. It is a secondary indicator that says, are you remaining relevant to the market. People continuing—

Mr. SALI. But, we are not talking about success. We're talking about stability. And Alt-A loans failing at 10 times the rate of other loans, that is not going to add stability to the market, is it? You'd agree with that?

Mr. MUDD. Yes.

Mr. SALI. OK. Now, each of you would agree that during your time at Fannie and Freddie you received more in bonuses than you did in your salaries. That is a correct assessment, isn't it?

Does anybody disagree with that?

And that would be true, Mr. Raines, in spite of that claw back that took back part, you still received more in bonuses than you did your salary. And those bonuses increased at least in part on the pursuit and the resulting increased levels of Alt-A and/or subprime loans.

Do any of you disagree with that?

Mr. RAINES. I would disagree with that.

Mr. SALI. There was no part of your bonuses that was based on increased levels of Alt-A loans?

Mr. RAINES. That was not one of our goals in our compensation system to increase Alt-A loans, no.

Mr. SALI. Because of the number of Alt-A loans, your bonuses went up. Is that a fair statement? Because of the amount, the total amount of loans that were given?

Mr. RAINES. I don't believe so, no.

Mr. SALI. It didn't increase the amount of total loans that were given?

Mr. RAINES. Alt-A loans can increase the total volume of loans you have, but that doesn't—

Mr. SALI. Yes. And that increased your bonuses, didn't it?

Mr. RAINES. No. It was not based on volume. It was based on profitability and pricing. So, if you—

Mr. SALI. So, if you have more volume, you have more profit; is that correct?

Mr. RAINES. Not necessarily. As we can see, having a lot of volume can create a lot of losses. So, there was no necessary relationship between volume and profit. You hope you have both. But, you have to work hard to get the profit part. The volume part is not that hard.

Mr. SALI. OK. So, your bonuses—you're saying that your bonuses are based on volume and that the Alt-A loans had no bearing on—

Mr. RAINES. I said my bonuses were not based on volume.

Mr. SALI. Not based on volume, based on profitability; and that the Alt-A loans had nothing at all to do with the level of bonus that you got?

Mr. RAINES. I said that the profitability of Alt-A loans, just like any other loans, would have an impact on the bonus.

Mr. SALI. OK. Did the fact that there were more Alt-A loans that were funded by Fannie and Freddie, did it increase your bonuses at all?

Mr. RAINES. In my case, I don't believe so, but I would have to go back to 2004. Remember, I left in 2004; so, I would have to go back to 2004 to see what impact it had. Alt-A loans were a very small percentage of the book of business when I was there. So, I don't believe it had any impact on my bonus.

Mr. SALI. It had no impact at all on the bonuses that you received? Is that your testimony today?

Mr. RAINES. I don't believe it did. That's what—I believe it did not, because it was such a small part of our business in 2004.

Mr. SALI. It had no impact on your bonuses?

Mr. RAINES. I don't believe it did.

Mr. SALI. Is that true for the rest of you as well?

Mr. BRENDSEL. Yes. The last time I received a bonus was for the year 2001, and certainly it wasn't based on the amount of Alt-A mortgages that—

Mr. SALI. OK. I'm not asking—I'm not asking about the level. I'm asking about the fact that there were more Alt-A loans given, that you were trying to meet the market. Each of you agrees with me that is what you were trying to do, that increased your bonus.

Do you disagree with that?

Mr. RAINES. I think you have to—in the case of Mr. Brendsel and myself, I think you have to separate—the Alt-A market became dramatically larger later. It was growing during this time. But, as a percentage of the book of business through 2004, the company's numbers show it was a small part of the business. My last bonus was 2003; his was 2001.

Mr. SALI. Let me ask Mr. Mudd and Mr. Syron. Is that true for you, that the Alt-A loans increased your bonuses?

Mr. TOWNS. The gentleman's time has expired.

Mr. MUDD. No, Congressman, because the goals that I had for most of that period reflected a wide range of things that weren't simply financial and would have included restatement, regulatory settlements, and a number of other things. So, there weren't explicit goals tied to any given area, A.

And, B, the compensation was decided by an independent committee that I wasn't a member of. So, part of the answer I think, Mr. Raines and I, probably all of us would deal with is, we were not in the room at the time the discussion was being held. So, you have to factor that in mind, I believe.

Mr. SYRON. Sir, we also had a compensation committee comprised of the independent directors. We had a balance scorecard, the most important things on the balance scorecard were becoming SEC registered and getting financial statements for 6 years supplied.

Mr. TOWNS. Thank you very much.

The gentleman from Kentucky, Mr. Yarmuth.

Mr. YARMUTH. Thank you, Mr. Chairman. And I'd like to also add for the record my congratulations and thanks to Chairman Waxman for the great leadership that he has provided this committee over the last 2 years.

To Mr. Syron and Mr. Mudd, you both said, and I think in response to Mr. Lynch's question, that you didn't have a problem handling things when values were going up; you could keep all these accounts in balance and so forth. And one of the things that I think we have learned in this series of hearings we have had on the financial crisis is that there are a lot of smart people when things are going well, and then people are smart until they are not smart; and one of the things that has happened is when things turn bad, and through across the spectrum, people have not been able to handle it well. Or the institutions haven't.

The other thing we have learned is, in case after case, we found institutions that were extremely highly leveraged. I mean, the case of Lehman Brothers was basically a 30-to-1 leverage rate risk ver-

sus their capital. And that has been pretty consistent throughout—across the board. In May of this year, the New York Times reported that your companies had net capital of about \$83 billion and that was against \$5 trillion worth of debt, which is a leverage ratio of more than 50 to 1.

In retrospect, to both of you, do you think your companies were overly leveraged? Is that a problem that—was that one of the contributing factors to this crisis that you find yourself in or found yourselves in?

Mr. SYRON. Well, I think in retrospect, sir, we've learned that the entire financial system, and if I may say so, the household sector and the government sector in the United States was overleveraged.

I think our concern about leverage was that we would have the same capital ratios, if you will—or leverage ratios, for the same type of assets is the point we made all the time—that our competitors would. I think they could have been higher for everybody.

Mr. YARMUTH. Mr. Mudd.

Mr. MUDD. If, hypothetically, I were running the company on a going-forward basis, and I had the benefit of being able to factor in the real-world experience of 2007 and 2008 into the models and into the estimates, that data would introduce—there is a much wider degree of variability than was ever seen in the history of the U.S. housing market. So, some of the question you're asking is, I think, going to be self-solving not just for Fannie Mae and Freddie Mac, but for other financial institutions as well simply because the data of a crisis of these proportions didn't exist before, they say, 1938.

I learned the other day that the last time the Bank of England got rates this low was 1641. So, people have gone back quite a long ways to try to find this level of dislocation.

Mr. YARMUTH. And going back to the question of leverage, though, was there ever any discussion internally in your operations about whether your risk was in excess of your—

Mr. MUDD. We actually had raised capital and were carrying capital during this past year that was significantly higher than regulatory standards, so—and we recognize that and I had said publicly this is the type of market in which you want to be low in capital.

So, I think while—I don't know how you would debate the numbers, but the philosophy of wanting to go into a difficult market with strong capital is important; and also for folks to remember the reason that you have capital on the sunny days is so that you can weather the rainy days, and it shouldn't be a surprise that capital goes down as a crisis becomes more pointed.

Mr. YARMUTH. So, I take it—and I'm not trying to say—I'm not questioning or second-guessing with hindsight your judgment at the time. But you had more leverage than you should have had? You were overleveraged in light of the circumstances?

Mr. MUDD. We were carrying the—we were carrying capital that was not only met, but exceeded all of the regulatory standards.

Mr. YARMUTH. I understand the regulatory standards. But, doesn't leverage of this type, doesn't it rely on the bigger fool theory. When you're leveraged 50 to 1, doesn't that always assume there is somebody—there is a bigger fool that is going to continue to buy? Because if you have a normal default rate, if you have a

3 or 4 percent default rate and you're leveraged 50-to-1, you're going to dip into capital.

If you have a 10 percent leverage rate, you can experience a much higher default rate; isn't that right?

So, you're assuming that this is almost an endless acceleration of prices to be able to leverage at that rate; is that not true?

Mr. MUDD. Sir, I definitely think that you're onto the right issue, and the ability of the level of capital in either a company or a GSE to be responsive to the market conditions is important. That is now, as I understand, in the regulatory regime.

And back to my earlier point, the fact that we now have more robust data that shows what capital should look like in various stress scenarios will inform—what were, after all, models designed by—won Nobel Prizes. So, I think that will be helpful in that regard.

Mr. YARMUTH. Thank you.

Mr. TOWNS. Thank you very much.

The gentlewoman from North Carolina, Ms. Foxx.

Ms. FOXX. Thank you, Mr. Chairman. And I too want to congratulate you on your new position and tell you I look forward to working with you and our ranking member.

There is so much to talk about here and so little time to do it, as my colleagues have said. But Mr. Yarmuth has just injected an important issue into what we were talking about, as have some of my other colleagues.

I want to pose a question to you all that I'm not going to ask you to answer until after I make some more comments. But, I want to followup on what Mr. Yarmuth was saying about it seemed that, Mr. Mudd, you and others were always looking for things to get better because there is a quote here from the New York Times, "Almost no one expected what was coming. It is not fair to blame us for not predicting the unthinkable."

Well, the question I want to ask you is, how in the world can shareholders and even citizens of this country when they have so much at stake and entities such as Fannie Mae and Freddie Mac, how do we and—and back up. And you have all said that the main thing that you would have liked to have done was to have stronger regulatory control. And I will come back to that in a minute.

So, how do—how do boards of directors test people coming into their positions? Not just as CEOs, but CFOs and these other positions. But, you all have been CEOs, so, that's what we are talking about.

How do we test for backbone? How do we test for ethics? How do we test for a sense of vision? And how do we test for people who are going to look at the full spectrum of issues, not just always looking for the sunny side of the street?

But, we need people who understand how to deal with crisis. You're saying it is unfair to ask you to work in situations of crisis. What in the world were you getting paid millions of dollars to do, simply ride the gravy train and always be there when things were good? For heaven's sake, did you not have any sense that anything could ever go wrong under your watch and that you weren't responsible for that?

You have exhibited no sense of accountability for your actions here. None. And that is disturbing to me and the American people. They expect us to be held accountable. And I want to say I appreciate the bipartisan nature of this hearing today. It has been the most bipartisan, I think, that we have had because we all agree there are problems.

Administrations have created these problems too. This is not a Democrat/Republican issue. We have people—we have Members of Congress who are at fault too.

I wasn't here when these things were happening, but I want to come up to a point my colleague, Mr. Shays, brought up. And again I'm going to leave time for you to answer your question. He made a comment that really triggered my concern about this, We got them to agree to go under the 1933 and 1934 act. You know, I'm just appalled as a Member of Congress that Members of Congress felt they had to get the agencies they regulate to agree to those regulations.

What a situation we find ourselves in. Members of Congress don't have enough backbone themselves to do the kinds of regulations—and you're telling me, Mr. Raines, that the regulatory bill should have been enacted earlier and yet you fought it tooth and nail. But, now, in hindsight, you're willing to tell us it should have been regulated earlier, should have been more with risk management, but you fired the risk managers. So, you were afraid of being regulated because, again as Mr. Shays said, much of what has been found out that was wrong came about as the first real regulation.

And, you know, it is not just your shareholders, it is not just the people you helped, but it is every American that is being affected by this because, as a result of your actions, home prices all over this country have gone down. You really have been irresponsible in what you have done, and the people who worked for you.

And I have quote after quote after quote. And I think part of the problem boils down to the amount of PAC money that was coming in from you guys and how much you spent to make sure that Members of Congress would go easy on you in their regulations. And I hope that what has come out about that has raised the awareness of the American people about the connection between those moneys.

And I love this committee. I got on it because it has the ability to investigate these kinds of things, where the other committees have vested interests in what's happening and are often swayed by those very lobbyists that you hired to stop the kind of hearings going on today and the regulations.

But now with 20/20 hindsight, you want——

Mr. TOWNS. The gentlewoman's time has expired.

Ms. FOXX. We want the American public to know what your advice is on that.

Mr. TOWNS. Very quickly because time has expired.

Mr. RAINES. Congresswoman, first of all with regard to accountability, I have three full pages in my written testimony on the issue of my accountability. And therefore, I would hope that you would recognize that I have not been silent on that. We simply are not allowed to testify to everything we have in our written statements.

But, I went to great lengths to point out that from the beginning, when there was a question raised about Fannie Mae and its accounting, I said I hold myself accountable; if the SEC finds we have made errors, I will hold myself accountable and my board will.

I retired early. I've had compensation clawed back. So, it is unfair to say that I have not accepted accountability for what happened when I was the CEO of the company.

Mr. TOWNS. Mr. Brendsel.

Mr. BRENDSEL. Yeah. I certainly was accountable for what happened at Freddie Mac during my time—

Mr. TOWNS. Is your mic on? Is your mic on?

Mr. BRENDSEL. I'm sorry.

I am. And I was held accountable for what happened to Freddie Mac during my tenure at the company, which ended in June 2003.

I do believe that with regard to the subprime market and that—I think Freddie Mac behaved very responsibly under my tenure. My greatest accountability and ultimately why I left—I resigned from the company, of course—was a result of the financial restatement that we had to go through during 2003, which fortunately left the company with more capital than before, but nevertheless, it was still a restatement that the company should not have gone through.

Mr. TOWNS. Mr. Mudd.

Mr. MUDD. Do I expect sunny days? No. I went to Mexico when the peso was devalued. I went to Asia when the 1998 crisis hit. I went to Beirut when they were shooting there. People say that I like it too much when it is not a sunny day. So, I would disagree with that.

I would say that this time through, reality exceeded my imagination. And with respect to the 1933 and the 1934 act, we were agreeing to reverse a registration that a prior Congress had provided an exemption from.

Mr. TOWNS. Mr. Syron.

Mr. SYRON. Thank you, sir. With respect to foresight and seeing things going forward, I was not as pessimistic as things eventually turned out. What I expected to happen was that housing prices would go down to being about flat in nominal terms and decline in real terms, but not catastrophically.

Mr. TOWNS. Thanks very much.

Mr. Braley.

Mr. BRALEY. Mr. Chairman, Ranking Member Issa, thank you for holding this hearing. Mr. Chairman, there have been several references today during this hearing to a perfect storm. And I think it is important to remind everyone that in a perfect storm, the entire crew of the Andrea Gail perished. And the purpose of this hearing is because we've got paddles on the chest of two patients, and we're trying to determine how much voltage to apply to resuscitate them.

Mr. Mudd, I'm going to start with you because you're one of the rare people that can say, My name is Mudd with a straight face. I want to start by asking you about an e-mail exchange you had with your chief risk officer, Enrico Dallavecchia.

For 6 months beginning in March 2006, Fannie Mae implemented a new business initiative to buy subprime loans. And under

this program, Fannie concluded one deal to buy \$74 million in subprime loans from a company called New Century, and it also began negotiating new deals. On August 16, 2006, the corporate risk management committee approved a final plan to purchase up to \$5 billion in whole subprime loans in 2006.

Two months later, on October 28, 2006, which ironically is the same day the Great Depression really began in earnest, Mr. Dallavecchia, your chief risk officer, sent an e-mail to you raising concerns about this huge increase in subprime purchases; and I'm going to ask them to put that e-mail up so that we can all take a look at it, and I want to read to you the portions that are in these callout boxes: "Dan, I have a serious problem with the control process around subprime limits. Ramping up business much faster than we agreed upon less than 2 months ago is de facto preventing me to exercise my reserved authority to determine limits without damaging relationships with customers."

Mr. Mudd, Mr. Dallavecchia was saying you were ramping up too quickly on the subprime purchases and that this acceleration prevented him from determining appropriate risk limits. Isn't that true?

Mr. MUDD. I'm sorry, sir. Could you repeat the question—part of your question?

Mr. BRALEY. Yes. What he is saying here is that your company was ramping up too quickly on subprime purchases, and this acceleration was preventing him from determining appropriate risk limits; isn't that true?

Mr. MUDD. I believe that's what he was saying in his note, yes, sir.

Mr. BRALEY. And then, later in the e-mail, if we can go to the next slide, he says: "We approved twice, in March and in June, to buy subprime loans without having completed the new business initiative." And then, in bold, "This is a pattern emerging of inadequate regard for the control process."

It seems like in this portion of the memo, your risk officer believed that you were rushing into billions of dollars worth of subprime loan purchases without really knowing what you were doing. Isn't that what he is saying here?

Mr. MUDD. Yes. And there is a part of the memo that is my response to him that is covered up by the box.

Mr. BRALEY. We are going to get to that.

Mr. MUDD. That furthers the conversation on the top.

Mr. BRALEY. When he sent this e-mail to you, did you agree with this assessment?

Mr. MUDD. That is why I wrote above it, "It is a serious matter, and if the facts are supportive, you and I will come down hard." That's what it says above that.

So, he came and saw me. We went through the facts. We got the folks at the table, we had the discussion, and we went back to address those concerns. That was exactly the process, sir.

Mr. BRALEY. Right. So let's go to that portion of the memo that you replied, and your reply was dated on Sunday, October 29th, at 12:42 p.m. As you indicated, you said, "This is a serious matter;" so you agreed with his assessment that it was a serious matter, correct?

Mr. MUDD. Yes.

Mr. BRALEY. And then you said if the facts are supportive, we will come down hard. Were the facts supportive?

Mr. MUDD. As often happens in these types of situations, the facts were partially supportive. I would say in this case maybe even mostly supportive.

Mr. BRALEY. So, did you come down hard?

Mr. MUDD. Yes, we did.

Mr. BRALEY. What did you do?

Mr. MUDD. We called all of the people that were involved in the process into the room, had a discussion, had a meeting, laid out the—if I can just rewind for 1 second.

The role of an independent chief risk officer at Fannie Mae and most financial institutions was a relatively new role. So, the rules of the road were kind of being written in real time, and what I wanted to do was to make it very clear that the CRO not only reported to me but also reported to the board. I wanted to make it very clear in this process of coming down hard that person was my right hand on risk, that person needed to be part of the process, that person needed to be heard; and if that person needed to discuss a report independently to the board, he or she had the ability to do so.

Mr. BRALEY. Well, Mr. Mudd, I think the American taxpayers are the ultimate jury on whether you came down hard, and I think the record indicates you didn't come down hard. Instead, you continued the acceleration. And let me show you a presentation made to the credit risk committee less than 3 months later on January 17, 2007.

Can we have that, please?

Well, in that presentation, management proposed expanding the subprime business unit in 2007, purchasing \$11 billion more in subprime loans and eliminating restrictions on the volume of mortgages you could purchase with lower borrower scores and unverified incomes. So, in effect, you were increasing your levels of risk rather than moderating them as your chief risk officer had recommended; and it looks to me, and I think it looks to a lot of taxpayers, like you were going in exactly the opposite direction of your risk officer's recommendations.

I yield back the balance of my time.

Mr. MUDD. Sir, if I may. His memo—I have a serious problem with the control process around the subprime limit. So, he wasn't expressing a problem with subprime as a broad issue, as characterized. He was expressing a concern around the control processes—the sign-offs, the coding, the filing, and so forth. And that control process was the subject of this discussion and of the remediation. And that is a separate issue than an entire, broader debate that we had in the company and with the board and with the regulator and elsewhere about the subprime market in general.

So, I would just recommend it is important to keep the two issues somewhat separate.

Mr. BRALEY. I understand that. But, the whole purpose of having control processes in place in a company like yours is to make sure you're making rational business decisions based upon the best information available and that you are following a rational process

to make those decisions. So, if the control processes are not in proper working order, it prevents you from following a rational decision-making model, doesn't it?

Mr. MUDD. Yes. And that's why it was important to fix them.

Mr. TOWNS. The gentleman's time has expired.

Mr. McHenry from North Carolina.

Mr. MCHENRY. I like the new chairman, and congratulations to you. I look forward to working with you. We'll start with a simple yes-or-no question.

Ms. FOXX. Good luck.

Mr. MCHENRY. Good luck, I hear.

OK, in order to fulfill your affordable housing goal, instituted and given to you by Congress, did you feel in order to fulfill that affordable housing goal, did you feel pressure from Congress to do riskier mortgages, perhaps more borderline mortgages?

We will start with Mr. Raines, and we'll go right down the list. Yes or no?

Mr. RAINES. I did not feel pressure from Congress because—

Mr. MCHENRY. So no? I'm asking—I only have 5 minutes.

Mr. RAINES. No.

Mr. MCHENRY. You have had a long day, so I'm trying to—

Mr. RAINES. No.

Mr. MCHENRY. No. Interesting.

Mr. BRENDSEL. No.

Mr. MCHENRY. No.

Mr. Mudd.

Mr. MUDD. No, because if the goals went up, the goals came from HUD, and meeting those HUD goals created pressure.

Mr. MCHENRY. Mr. Syron.

Mr. SYRON. As the goals went up and the goals were specified by HUD, you inevitably, to make more progress, had to take more risk.

Mr. MCHENRY. So, in order to make more progress with your affordable housing goal, you had to make riskier mortgages?

Mr. SYRON. Buy riskier mortgages.

Mr. MCHENRY. Buy riskier mortgages. I think it is interesting Mr. Syron gave something more akin to what I was accustomed to as a member of the Financial Services Committee. I have seen some of you before, and I don't know if you just refuse to listen to what happened in those hearings, but there was massive pressure from Members of Congress on your institutions to provide more affordable housing and, therefore, riskier mortgages.

Now, I'm not calling them riskier. Your risk officers called them riskier. And in Freddie Mac's case, Mr. Andrukonis wrote a memo in 2004—we can call that up—to push for “more affordable business.” I guess that is your lingo for more affordable housing; and “increased share” means more borderline and unprofitable business will come in. “The best credit enhancement is a profit margin, and ours is likely to be squeezed in response to these market pressures.”

So, I think—it is interesting to me that in some respects and by your newspaper accounts, you acknowledge that there was pressure on you. And obviously pressure from Congress in terms of congres-

sional efforts on HUD to raise those standards, but also on you all directly.

And I think it is pretty bizarre—I mean, the chairman of my committee, “financial services,” Barney Frank, said, “I’m worried, quite frankly; there is tension here.” This is from 2003. “The more people in my judgment exaggerate a threat of safety and soundness, the more people conjure up the possibility of serious financial losses to the Treasury which I do not see. I think we see entities that are fundamentally sound financially and we are seeing some of the disastrous scenarios. Congresswoman Waters, who I serve with on Financial Services, said, ‘If it ain’t broke, don’t fix it.’”

We’re still paying the price for that. But, my point is, you did have pressure to meet your affordable housing goal. And that was done through Members of Congress; it was done through HUD; and that was conflicted with your delivery for your investors to produce profit. That’s what your risk officer said.

Do you all disagree? Mr. Raines.

Mr. RAINES. I disagree. In my time that I was there, I did not feel pressured from the Congress to do riskier loans to meet housing goals. Our housing goals were ratcheted up administratively by HUD. Congress gave guidelines that I thought were quite reasonable to HUD. HUD, by the time I had left, was proposing to push those guidelines to a level to force the companies to begin to entertain loans that they otherwise wouldn’t have entertained. So it really was more from a regulatory standpoint than Congress.

Mr. MCHENRY. And who funds HUD? Congress.

Let me just tell you—I hate to reference this, and Mr. Raines knows from his political background, but this is a political city. There was pressure from Congress.

Mr. RAINES. However, Congressman, at that time, just to be fair, Congress was in the hands of the Republicans. So I don’t think that the Republicans were intending to force HUD to ratchet up our goals to an unreasonable level.

Mr. MCHENRY. Reading from your quote in the Washington Post yesterday, you want to make this a partisan situation.

Mr. RAINES. Congressman, that is just not correct. I actually want it not to be a partisan situation.

Mr. MCHENRY. That’s generous of you.

So, I read in the Washington Post from yesterday, that same article I just referenced, what they say is, “People familiar with the matter said Freddie was being pushed by advocacy groups to come up with new loan products to offer to low-income and minority borrowers.” Is that true?

Mr. TOWNS. The gentleman’s time has expired.

Mr. SYRON. By advocacy groups, yes, sir.

Mr. MCHENRY. Yes. And those same advocacy groups are closely aligned with some Members of Congress as well, and they are voices for that advocacy groups as well.

Mr. SYRON. I would be speculating to get into——

Mr. MCHENRY. Well, I will tell you, yes, they are. Thank you.

Mr. TOWNS. Mr. Sarbanes from Maryland.

I’m sorry. The gentlewoman from Washington returned.

Ms. NORTON. Thank you very much, Mr. Chairman. You don’t want to start off making mistakes, do you?

Mr. TOWNS. That's exactly right. No doubt about it. I want to start this thing off right.

Ms. NORTON. Gentlemen, I have to confess my major concerns are going forward because the GSEs have been so important for low- and moderate-income housing in the United States for decades. Indeed, after we finally figure out how to get to the bottom of housing crisis, which is a subject of extreme frustration I must tell you here, I think the most important decision that we could make on housing has to do with the GSEs.

I'm very concerned about the ad hoc problem solving that is going on with respect to this crisis. Something pops up, somebody leaps on it; and I certainly hope somebody is working on this one right now.

You have a twin identity that absolutely fascinates me. On the one hand, you have a very important—indeed, the most important—public mission in housing, to assist low- and moderate-income families. On the other hand, you're like every corporation because you have shareholders.

Mr. Paulson, when Fannie Mae went into conservatorship, was very plain about what he thought; and I want to quote from him. He said there was a “consensus that the GSEs, hold a systemic risk.” And he went on to say, “Government support needs to be either explicit or nonexistent, and structured to resolve the conflict between public and private purposes.”

I would like to ask each of you whether you agree with Secretary Paulson. Do you think that the GSEs should be returned to the entities they were before? Do you think they should be part of government? Do you think they should be privatized?

And in giving your answer, I would like to know if you believe that they should be—GSEs, whether you would also make them exempt from local and State taxes, give them a line at the Treasury, exemption from at least certain kinds of regulations, which of course give them an advantage when competing in the private market.

Why don't I start with you, Mr. Raines, because I noticed in your testimony that you did not apparently see inherent problems, and you say you don't think we can find a better model. Could you explain your view or is that still your view?

Mr. RAINES. Well, I can explain it, I think, very quickly.

The systemic risk to the system comes from any very large financial institutions that are highly leveraged, whether they are called GSEs or they are called insurance companies or they are called banks. Indeed, we saw in the current crisis that the most troubled entities and the ones that had the most extensive impact on the financial system weren't GSEs. The biggest one is an insurance company that had never been identified as a systemic risk.

Second, with regard to making the government support either explicit or nonexistent, I can agree with that. I think it can be explicit and not—I don't think it would be possible to go back to the implicit support that was there before. And I think the market should be told what the support is; and that should be it, and the investors should take the risk.

On the last point on resolving the conflict between public and private purposes, I think that is laudable, but impossible. And an

example I would give you is a defense contractor. A defense contractor is only there to solve for a public purpose. They only sell to the government. They are there for national defense. That product is not really useful anywhere else in the economy.

But, they are also for-profit companies. They are there to advance the interest of their shareholders.

Ms. NORTON. Would people invest in such a company?

Mr. RAINES. I think people invest currently in utility; they invest currently in defense contractors, and they invest in banks that have the same conflict within themselves.

Ms. NORTON. So, you think perhaps we should treat Fannie Mae and Freddie Mac more like a utility then?

Mr. RAINES. I think treating them more like a utility may be politically much more comfortable than treating them in the current form.

Ms. NORTON. Let me go on to Mr. Mudd, who has indicated that Freddie and Fannie are in a “no-man’s land.” And you in your testimony, you advocate to make them either fully public or fully private. So, which should they be? And why?

Mr. MUDD. The advocacy, Congresswoman, is to make it clear for a long time throughout—

Ms. NORTON. You don’t care which it is, sir?

Mr. MUDD. I think at this point—I know a little bit more intimately the structure of the company, and there are different components of the company. One component, the mortgage portfolio is a liquidity provider fundamentally, the guaranty business is fundamentally a securitizer.

It seems clear to me now in the history of the past 6 or 8 months, that if there is a real crisis in the country, the liquidity provider is going to be the government. So, that would give rise to a question of whether you want a private company to be a liquidity provider or whether that becomes a function of the government.

The other side of the business, the guaranty business that does work with lenders, provide services, does so at a fee might have another—might have another treatment.

So, I don’t think the same answer needs to be true for all components of the company if you’re going to move it out of what you aptly described as “no-man’s land.”

Ms. NORTON. I would like to know if the other two gentlemen believe that an entirely private company could be trusted to provide the same protection to the consumer, particularly the consumers that the GSEs were specifically directed to help.

Mr. SYRON. Well, ma’am, Congresswoman, I don’t think that—excuse me, gentlemen—I don’t think a purely private company could generate long-term fixed-rate mortgages that are prepayable just because no other country, major country, has one.

I think, as some of my colleagues have said, the most important thing is getting a more precise definition, whether it is a defense company which operates on some sort of cost-plus, a utility with a specified rate of return, there needs to be less sort of swimming around and more definition of what the shareholders can expect.

Mr. TOWNS. Mr. Brendsel, and then—

Mr. BRENDSEL. I think one only has to look at the mortgage market of today and the mortgage market of the past two or three dec-

ades. And you can see where it is that part of the market is served by the purely private market. It doesn't work as well. It is more unstable, and you don't have the types of mortgage products that are consumer friendly.

I also happen to be of the—maybe the view in the minority. I don't see a fundamental conflict between the public purpose for which Freddie Mac is chartered, and was chartered, and its shareholder ownership. After all, we are chartered to bring stability and liquidity and availability of mortgage credit to low- and moderate- and middle-income families and to use private capital to do so. It is that one mission, unique mission.

Ms. NORTON. What about the shareholder mission?

Mr. BRENDSEL. Well, in order for—if the shareholders are served, they are only served by serving that mission of bringing mortgage credit to American homeowners at a profitable rate, but at a rate where it is the result in sound loans.

Ms. NORTON. Thank you very much, Mr. Chairman.

Mr. TOWNS. Thank you very much.

Mr. Garrett from New Jersey.

Mr. GARRETT. I thank the chairman, and I thank the ranking member for the opportunity. I normally serve on the Financial Services Committee; so I appreciate this chance to be here for a few minutes—actually, for several hours now—because this has been a topic of most importance to me ever since I have been here, for the last 6 years.

I appreciate your testimony and also some of the questions. One point is, I appreciate the fact also that the panel is made up of members who are here with both organizations during different years. And so, therefore, it is probably unfair to use a broad-brush approach on any of the questions or some of the allegations that were made because you were in different spots.

To the point of who is responsible, which is a lot of the questioning, and the committee is evidencing the fact that we don't feel we don't get that back from the panel, let me just also say the flip side of that on this issue just for 30 seconds. And that is this: Just as the panel had the opportunity to address a number of the questions or issues during their tenure in office and some of the questions I will raise as well, let it not be forgotten that Congress also had the opportunity for the 6 years that I served, and prior to that as well, to address some of these issues—the systemic risk issues, the operation issues, the issues as far as where you were investing, and the size of portfolio and what have you, and that was not done.

So, I would ask each Member, who was raising those questions as who was responsible to look in their mirror on this panel to see, how did they vote both in committee and on the floor when the opportunity came for the House and the Senate to rein in, create new regulations for the GSEs in the past. So, I think there is an adequate opportunity to see responsibility both in the panel and this committee as well.

Going to the GSEs, you make money in two different manners. One, of course, is by buying up securities, packaging mortgages, and then selling them. The second way, of course, is by taking these mortgages and putting them into your portfolio.

That second way, in my understanding, is eight times more lucrative or profitable than the selling of the securities. The number in here that I have seen is, you had reached a high in 2003 of \$1.5 trillion worth of securities in your held portfolio, and 2008 went down to \$1.4 trillion.

And interestingly enough on these numbers, in 2005 to 2007, this is what—the type of securities you were putting in there: 97 percent were interest-only securities; 85—or mortgages—85 percent were Alt-A; 72 percent were negative amortization mortgages; 61 or 62 percent were with FICAs under 620.

Obviously, these are, A, the more risky loans that were going on during that time; and in general, during the entire period of time for everyone when you were expanding your portfolio, that was more profitable on the one hand, but certainly riskier on the other hand.

The issues have already been raised as far as leveraged ratio on the capital levels, and this committee criticized Lehman for a 31 ratio, and here you're leveraged at a 75-to-1 ratio.

One of the members of the panel said to all of these points—in general, and not specifically on one—that “we were doing the same as our competitors.” So, one of my first questions will be—and I'll get to this—allow you to answer in a second. Is it appropriate for a GSE, which has the backing implicitly now, implied at the time of the government, to simply be mirroring what the private sector is doing; or were you—should have been to a higher standard in each of these areas—your risk model, your capital model, what you were putting in the securities as well? And that will be the first question I would throw out to you.

Second, to the regulation aspect, but Ms. Foxx and Mr. McHenry raised this point very well. Mr. Raines, you were saying that you were looking for additional regulation. And I think you made the comment in your testimony—you didn't go in full detail, but I read your full testimony—OFHEO was not restraining credit risks, but they were limited to balance sheet and interest rates risk.

That may be, but I can tell you that certain members of the Financial Services Committee were looking at all of those areas. And you had Secretary Snow come in before the committee and testify. You had Alan Greenspan come in and testify on these points. You had Richard Baker when he was here testifying—not testifying, but raising these points. There was a focus, at least for the 6 years when I was in Congress, to try to do these things.

While perhaps you did come before the committee and say that we needed regulation in the House, we know for a fact that the House regulations were a lot softer, a lot easier than the regulations that were being proposed in the Senate. And what the GSEs did effectively through the lobbying mechanisms and otherwise was to kill effectively during the time the Republicans were in charge of those efforts in the Senate; and what we have ended up with now is regulation, albeit late and obviously way too late, but much softer regulations than should have been done in the past.

And finally, I guess on that point—since my time is just about out—to the point, you may have made the suggestion, Mr. Raines, that the problem was not a credit problem per se in the portfolios and the mortgage-backed securities. But, really wasn't it a prob-

lem—and this is when the accounting irregularities came up and what have you—wasn't the problem underlined by the fact that because of the size of the portfolio and having to deal with interest-rate risks that you had to be getting involved with derivatives and other mechanisms in order to hedge against that; and that effectively led to some of the problems that we dealt with later on?

So, I guess there are three questions there, two for Mr. Raines and the rest for the panel.

Mr. TOWNS. Let me say to the gentleman, I know you waited 2 hours, but your time has expired.

Mr. GARRETT. Thank you again for the opportunity, though.

Mr. RAINES. I believe there were two questions that were directed to me, one of them about regulation and Fannie Mae's activities with regard to legislation and the other related to derivatives; is that correct?

Mr. GARRETT. Yes.

Mr. RAINES. With regard to Fannie Mae and legislation, it was always my desire—and I worked very hard, but unsuccessfully—to try to get legislation passed because I believe that as legislation was passed, then all of the political swirl around Fannie Mae would subside for at least some period of time. And I was an advocate, and I think if you talk to the chairman of the committee, the relevant committee, even Mr. Baker would indicate that I wanted legislation.

Did we agree on all of the provisions? No. But, the provisions we disagreed on did not relate to regulation; they related to our mission. There were efforts to try to try to constrain our mission. I opposed those. But, where it came to a world-class regulator as defined by Congressman Kanjorski and who pushed this over and over again, I was in favor of that.

I'm still in favor of it. And I'm still opposed to constraining the mission of the GSEs. So I think there has been a consistency across that time.

In terms of the derivatives, as you accurately point out, Fannie Mae used derivatives in order to enable to fund itself, including its own balance sheet portfolio. And the fact that Fannie Mae had to do a restatement is something that I have stated over and over again that I'm not only sorry for, but I hold myself accountable that we did not get it right, even though I was not involved in the accounting.

I would point out, however, this is not a problem that was unique to Fannie Mae. I think that upwards of 200 companies had to have restatements around derivatives in that time period. Some of them had to do it twice before they could do it properly, according to the SEC. So, this difficulty of applying the FAS 133 standard was not unique to Fannie Mae, but it was widespread amongst financial firms during that era.

Mr. BRENDSEL. With regard to derivatives, we used derivatives at Freddie Mac to reduce risk, to manage interest rate risk, and we didn't use it to manage credit risk or the risk of default on subprime mortgages, which I have already testified to reduce risk, to reduce interest rate risk. But, that doesn't have anything to do really with the losses that are being taken on credit risks associated with subprime mortgages.

Mr. MUDD. I guess for the purpose of time, I would just address the risk question and the standards question. And I think in the context of the Alt-A book, the ultimate measure there is the performance; and the performance of the Alt-A loans that Fannie Mae guaranteed has been a factor to—better than the market. The FICAs were higher, the credit scores were higher, the loan-to-values were higher. The question was, was it ultimately good enough that it matched or exceeded the performance of the other 85 percent of the book, which is the old standard fixed rate mortgage. No. That is a reflection of the change in the marketplace.

Was there a role for the companies in terms of standard setting? Yes, Congressman, I think that expressly defines what we were talking about earlier about relevance. You can't set any standards whatsoever if you're irrelevant to the market because you're offering products that nobody wants.

Mr. SYRON. Mr. Congressman, I will try to quickly answer two of the questions.

One, should we have the same capital standards—not “we” anymore—but should there be the same capital standards? And I think that depends on the degree of the guarantee. I have sympathy for your argument that if there is an explicit guarantee for the GSEs in not—for the competing financial institutions, then maybe there is an argument for higher capital to protect the public. I think the reverse situation may actually apply now.

And second is, in terms of the willingness to take risks in where things were. Actually, if you look at the latest Mortgage Bankers Association figures on delinquencies, they show for the country as a—excuse me, for the industry as a whole—4.9 percent and for Freddie Mac 0.8 percent. So, in terms of—far from perfect, but the level of delinquencies, about six times greater for the industry than for Freddie Mac.

Mr. TOWNS. Thank you very much. The gentleman from Maryland, Mr. Sarbanes.

Mr. SARBANES. Thank you, Mr. Chairman.

Thank you all. You have demonstrated extraordinary stamina here today. We have been here for 4 hours, one of the longest panels we have had over the past couple years, but I think it reflects the level of interest there is on the part of the committee.

I wanted to ask if you, and anyone can take a shot at this, talk about the distinction—I am going to put this into lay person's terms—the distinction between a good risky loan and a bad risky loan. Because you talked about how there was pressure from HUD, let's say, to make sure that affordable housing targets were being met and so forth. But, certainly that wasn't an instruction to go find or buy or become entangled with the kinds of loans where all manner of conventional underwriting standards have been abandoned.

So, I am curious to know how you would describe what was presented to you. Were you looking into a stew of good risky loans and bad risky loans? If we want to suggest that all of the ones that would take you into the more affordable housing arena would be characterized as risky, certainly your obligation to continue to differentiate between the ones that were extra risky or bad versus the

ones that were good, that obligation should never have been surrendered.

So, anybody can speak to that if they'd like.

We can start with you, Mr. Raines.

Mr. RAINES. Congressman, I like your division between good risky loans and bad risky loans because all loans are risky. They all have some level of risk to them, and it is important to be able to measure that risk and to manage it.

When seeking to push the envelope of those who have access to home ownership, and I think this is an important distinction, we tried very hard to come up with loan products that we thought helped to make housing affordable and available without layering in so many things that the risk was unacceptable.

So, for example, if someone had good credit and they had a good steady income, but they didn't have much in the way of savings, we would have a low down payment product. If someone had good credit but—had marginal credit, but had substantial savings, we might say we will take on that marginal credit because they have offset it by having substantial savings that they could put into a down payment. So, it is the layering of these factors.

When you put together negative amortization, interest-only, no documentation, low down payment, bad credit, that layering on gets you into bad risky loans. Those are loans that almost no one knows how they are going to perform, but you can assume it will be pretty bad.

So, trying to figure out what that line is, when do you cross a line between acceptable risk that is advancing affordable housing and unacceptable risk that is putting families at severe risk to their futures? That is the art. No one can tell you exactly where that line is. But, the policies that we tried to follow when I was leading the company was, keep experimenting. Do small experiments. None that could cause you a lot of harm if they go bad, but keep trying. Try this, try that. If it doesn't work, stop. If it does work, then double down, and do more. And—

Mr. SARBANES. Let me go to your tenure, because Fannie Mae was purchasing more of these loans that appear to have departed from the conventional underwriting standards. Is that because you couldn't distinguish between a less risky loan? Or what was happening?

Mr. MUDD. What happened was that the market migrated to a wide array of loans with a wide array of features that Mr. Raines pointed out was driven by a multiplicity of factors that we could go into. But, they certainly included the rising cost of a home. They certainly included the technology ability from lenders and servicers to offer more choices and more complicated products to individuals.

So, I agree with what he said, that a number of features would take a risky loan and turn it into a bad, risky loan. And those would go to features that could put an unwary borrower into a difficult situation. Negative amortization was mentioned, prepayment penalties could be mentioned, required insurance, those types of things. But, to me, just stepping back for 1 second from a policy perspective, one of the starting points might ought to be disclosure, where all of us, when we get a mortgage, see a front page that says here's your rate, here's the maximum rate you might ever pay,

here's your monthly payment, here's the maximum monthly payment you might ever pay, and that there be kind of a moment of truth between the originator and the borrower to make sure they understand.

Mr. SARBANES. This is really a question I have had in all these hearings because it is not the case—if I am listening as a member of the public, it has never been the case in these hearings that anyone has suggested that there weren't warnings, and that is why all this stuff happened. It's always been the case that we have plenty of testimony that there were warnings, but they were not heeded. And I am not going to ask you to comment on why you didn't heed warnings within your own companies, within your own organizations. I am going to ask you this:

What does one do as a corporation—in other words, because it was in your interest not to get in. I mean, we talk about the effect on the public. But, obviously you would have preferred that this didn't happen to Fannie Mae and Freddie Mac, and so would all these other companies that are going down the tank. What do you do inside an organization to make sure that the people that are raising the warnings can somehow impact the decisions that are being made? Because it seems, if I was a risk analyst from this period of time, I would be going through an existential crisis right now. Like what purpose are they serving? How do you protect their ability to sound the alarm and give it the kind of credence that might have changed the course of all of this? So, I will give it to anybody who wants to answer.

Mr. MUDD. My answer would be that you have to create a culture that enables those people to get their voice heard. In a corporation, it doesn't mean that somebody always gets their way, but just like I suppose, in Congress, a legislative assistant doesn't get to decide what the Member does. The chief risk officer doesn't always get to decide what the CEO does. But, you have to make sure that all those voices are a part of the debate and that people have a view, no matter what their level or their rank or their position or their tenure in the company, have the ability to get their voice heard, get it considered, be respected. And sometimes, they are right; sometimes, they are wrong. Sometimes, you are right; sometimes, you are wrong. But, you have to have that culture where you don't get a reinforcement of the wrong decisions.

That would be my experience, Congressman.

Mr. TOWNS. Thank you very much.

The gentlewoman from California, Ms. Speier.

Ms. SPEIER. Mr. Chairman, thank you.

And thank you to the members of our panel. Let me just ask a couple of really brief questions and then get to the core question I want to ask.

Are any of you now employed by the financial services industry?

Mr. SYRON. No.

Mr. MUDD. No.

Mr. BRENDSEL. No.

Mr. RAINES. No.

Ms. SPEIER. And in each of your cases, was your compensation in any way, whether it was bonus or stock options or salary, linked to the volume that was generated by the company?

Mr. SYRON. We had a balance scorecard, and I've been racking my mind going through here, whether share was any part of that. So, indirectly, there may have been, but I don't directly recall.

Ms. SPEIER. Mr. Mudd.

Mr. MUDD. We had a parallel process where there were a number of different objectives that needed to occur, and one of those was certainly revenues, which would tie to your question.

Ms. SPEIER. So, there was a linkage?

Mr. MUDD. Revenues were a component of the overall consideration for bonuses particularly. Yes.

Ms. SPEIER. Mr. Brendsel.

Mr. BRENDSEL. First of all, my compensation was set by the board of directors and evaluated annually in my bonuses, and so forth, and they considered many factors: certainly, the profitability of the company, but also the capitalization, the safety, soundness, the risk profile, whether or not there were too many mortgage delinquencies or defaults. And so I always felt that my compensation was not at all linked to volume generated.

Ms. SPEIER. Mr. Raines.

Mr. RAINES. As I testified before, I don't believe that volume has played a role in the formula when I was there, but profitability did. And sometimes market share vis-a-vis Freddie Mac did. But, volume by itself was not a factor, as I recall.

Ms. SPEIER. Thank you.

Mr. Mudd, I am referring now to an October 5, 2008, New York Times article that focused on an exchange between you and Mr. Mozilo, formerly the head of Countrywide. And the article quotes Mr. Mozilo as telling you, "you are becoming irrelevant. You need us more than we need you, and if you don't take these loans, you will find you can lose much more."

In fact, I think you flew to California to have that conversation with him.

Can you please describe for the record the exchange you had with Mr. Mozilo?

Mr. MUDD. I can't because I don't remember that exchange at all. I did look back through my records in preparation for the hearing. And I had a number of meetings with Countrywide. I had a number of meetings with Mozilo, as I did with all of our key customers. As it was described in the paper, that certainly would have been a memorable meeting, but it doesn't trigger my memory.

Certainly, with him as well as with other customers, there was a back and forth in terms of what was our eligibility, what was our pricing, what was our credit standard, what was the value of our guarantee, what was our pricing versus Freddie Mac, etc. But, particular conversation.

Ms. SPEIER. You don't recall him offering you a breath mint at the end?

Mr. MUDD. No.

Ms. SPEIER. There was a presentation from June 2005 titled, "Facing Strategic Crossroads." The presentation discusses how Fannie is losing market share to Wall Street. The slide is on page 27 and says, Primary market originations of products outside Fannie Mae's traditional risk appetite are on the rise.

Then, the slide on page 32 says, This trend is increasingly costing us with our largest customer.

Now, as the slide shows, your largest customer was Countrywide. Isn't that right?

Mr. MUDD. Yes.

Ms. SPEIER. Did you lower your standards to accommodate the riskier loans from Countrywide?

Mr. MUDD. No, we established a set of standards. We had a debate that I have described during the course of the hearing that said the core of Fannie Mae business with all of its very attributes was shrinking, and our market share on that note had gone I think from 40 percent to about 20 percent. Meanwhile, the market for alternative products had gone from about 10 percent up to 40 percent.

So, it was clear that there had been a change in the marketplace; that if our lenders, our seller servicers, and others wanted to go around us to some different form of securitization, which typically was a rating agency sizing, set up and distributed through Wall Street; they had that alternative. And the continuation of market share trend that goes 40/20 is obviously quite low. So, we made a prudent effort to figure out what we could do to recapture that business. And obviously, with Countrywide as one of the largest originators, they were part of that overall effort, as were other major financial institutions.

Ms. SPEIER. In the documents the committee has received, it appears that the Alt-A mortgages that Fannie Mae bought between 2005 and 2007 in large measure from Countrywide had riskier terms and higher delinquency rates, and they contributed to more than 40 percent of Fannie's credit losses last quarter.

So, my time is up, but I think it is interesting that, in the end, you did expand your portfolio of Countrywide loans, and it has in this last quarter created quite a bit of heartburn within Fannie Mae.

Mr. MUDD. I think the Alt-A loans—just to be clear, I think that is a representation of Alt-A losses as a total percentage of the book rather than Countrywide, although Countrywide would probably be a component of that total number.

Mr. TOWNS. Thank you very much.

Ms. FOXX. Mr. Chairman, I want to ask your indulgence on something. You were able to give Mr. Shays 1 extra minute; he is leaving the committee. Mr. Sali is about to leave us also, and he had one very, very important point he would like to make that has not been made today. It is not a repeat of anything. And I am wondering if you would indulge us with 1 more minute.

Mr. TOWNS. I would be delighted to do so, especially being he is leaving.

Mr. SALI. Thank you, Mr. Chairman.

It's the last time I will bother you. This would be for Mr. Syron, I guess. And I believe you should have a document that looks like this in front of you. And I assume you understand what that Credit Policy and Portfolio Department Report deals with for Freddie Mac.

I am looking on that second page there under priority No. 5, and if you go over to the right side of the page, there are four bullets there. And the third one talks about additional affordable type pro-

grams being considered. And in that third line, it talks about programs apparently for illegal immigrants. And I am wondering, if you could describe what that proposed program was about? Why would a government-sponsored enterprise, one, engage in something like that? Was it implemented in any way? So, how many loans were given? How many defaulted? Those kinds of things, can you give me an idea of what that program was about?

Mr. SYRON. You know, I am seeing this for the first time in some substantial period of time. And, unfortunately, I don't remember.

Mr. TOWNS. Without objection, so ordered.

Let me thank all the witnesses of course for your testimony. We appreciate the time that you've shared with us today. And of course, we look forward to continuing to work with you because, as you know, there are a lot of things here that need to be fixed and I think we all agree on that. So, thank you very much for coming, and thank you very much for your testimony.

We will take a 5-minute recess before going into our second panel. And then, of course, after that, we will swear them in and receive their testimony. So, a 5-minute recess.

[Recess.]

Mr. TOWNS. The hearing will come to order.

I want to point out that there is a longstanding tradition here in this committee that we swear all of our witnesses in. So, please rise, raise your right hands.

[Witnesses sworn.]

Mr. TOWNS. Please let the record reflect that all the witnesses answered in the affirmative.

We are delighted to have with us Mr. Charles Calomiris. Mr. Calomiris is the Henry Kaufman professor of financial institutions at Columbia Business School. And Professor Calomiris co-directs the project on financial deregulation at the American Enterprise Institute and is the Arthur Burns Scholar in international economics at AEI.

Mr. Arnold Kling is a former senior economist at Freddie Mac from 1986 to 1997. He also served as an economist at the Federal Reserve Board. He is currently an adjunct scholar at the Cato Institute.

Welcome.

Mr. Pinto served as the former chief credit officer of Fannie Mae from 1987 until 1989. He also was the head of marketing and product management at Fannie Mae for 3 years. Since leaving the company in 1989, he has worked as a real estate financial services consultant.

Welcome.

Mr. Thomas Stanton. Mr. Stanton is a fellow of the Center for the Study of American Government at Johns Hopkins University. He is also a fellow of the National Academy of Public Administration.

Welcome to the committee.

And we will begin with you, Mr.—why don't we just go right down the line.

Mr. Pinto, right down the line.

**STATEMENTS OF EDWARD PINTO, FORMER CHIEF CREDIT OFFICER, FANNIE MAE, AND REAL ESTATE FINANCIAL SERVICES CONSULTANT; CHARLES CALOMIRIS, ARTHUR BURNS SCHOLAR IN INTERNATIONAL ECONOMICS, AMERICAN ENTERPRISE INSTITUTE; ARNOLD KLING, ADJUNCT SCHOLAR, CATO INSTITUTE; AND THOMAS STANTON, FELLOW, CENTER FOR THE STUDY OF AMERICAN GOVERNMENT AT JOHNS HOPKINS UNIVERSITY**

**STATEMENT OF EDWARD PINTO**

Mr. PINTO. Mr. Chairman, thank you for the opportunity to speak today.

You have already noted my credentials; so, I won't repeat them. I will only add that, prior to my starting at Fannie Mae in 1984, I had 10 years experience in affordable housing. I left the company in 1989, and since then, I have provided financial service consulting services, and I followed GSEs closely.

What I found in my study that I have done privately is that there is surprisingly little consistent information available about the size of the subprime market and the contribution that Fannie Mae and Freddie Mac made to its growth. My testimony today will bring together all the available information that I found through my research and will contain information that has not, to my knowledge, been published elsewhere.

In my prepared testimony, I show that there are a total of 25 million subprime and Alt-A loans outstanding in the United States, with an unpaid principal balance of \$4.5 trillion. These 25 million default-prone loans constitute 44 percent of all mortgage loans by count in the United States. This is the largest percentage that has ever happened in our history. These loans are the source, although not the exclusive source, of the financial crisis that we face today, and they are currently defaulting at unprecedented rates.

Fannie Mae and Freddie Mac played multiple roles in what has come to be known as the subprime lending crisis. They loosened credit standards for mortgages, which encouraged and extended the housing bubble. They trapped millions of people into loans they knew were unsustainable. And they destroyed the equity savings of tens of millions of homeowners spread throughout every congressional district in the United States. They accomplished this while being permitted to operate at a 75:1 leverage ratio that makes Lehman Brothers look like they were operating conservatively.

Relative to some earlier testimony, I detailed the risks posed by Fannie Mae and Freddie Mac's portfolios in attachment No. 4 to my submitted testimony.

While Fannie Mae and Freddie Mac may deny it, there can be no doubt that they now own or guarantee \$1.6 trillion in subprime, Alt-A, and other default-prone loans and securities. These comprise over one-third of their risk portfolio, not the 15 percent that they kept referring to during earlier testimony. They were responsible for 34 percent of all the subprime loans made in the United States and 59 percent of all the Alt-A loans made in the United States. They were not bit players in this play.

These 10.5 million nonprime loans are experiencing a default rate that is eight times the level of their 20 million traditional

quality loans. These 10.5 million loans include 5.7 million subprime, 3.3 million Alt-A, and 1.5 million loans with other high-risk characteristics. This 10.5 million total does not include FHA's obligations, which add another 3 million to the total and bring it to 13.5 million out of the 25 million subprime and other default-prone loans. That is more than half.

According to U.S. bank regulators, subprime loans are generally those with FICO scores below 660. An Alt-A, or liar loan, was the favorite of the real estate speculator. I estimate that 1 million of the GSE's Alt-A loans had no down payment.

The purchase of Alt-A loans was justified because they helped meet affordable housing goals. And contrary, again, to some earlier testimony, I believe that the Alt-A loans were particularly goal rich, because about 20 percent of them were made to investors; namely, that meant that properties were rental properties. So, the fact that they were done as a no-income/no-asset was irrelevant. The location, based on zip code, would put them into affordable housing categories, and I believe they would get credit for that.

As a result, GSE's default rates are now skyrocketing. Although they are too new to predict default rates with any certainty, I would expect that those portions of Fannie Mae's and Freddie Mac's 2005 to 2007 books comprising of subprime and other default-prone loans experience default rates ranging from 8 percent for the 2005 originations to over 40 percent for the 2007 originations. I believe there is a chart that is available that shows the performance of their books, and you can see from the hockey sticks appearance of the 2007, 2006, and 2005 books what is happening.

One of the reasons that subprime, as it is traditionally called, has gotten more publicity is those loans are older. These loans are going bad at incredible percentages, but they are younger; so, they still have a longer ways to go.

The losses likely to be suffered by Fannie and Freddie will be a terrible burden to the U.S. taxpayers. If the default rates I predict actually occur, U.S. taxpayers will have to stand behind hundreds of billions of dollars of Fannie Mae and Freddie Mac losses.

This could have been averted. They could have exercised leadership, and they had done that twice before, once in the mid-1980's and once in the early 1990's. And they could have stopped the mortgage madness that was developing in the industry. Instead, their response was to open the flood gates. And in the years 2005 to 2007, they bought over \$1 trillion of these junk loans that are still on their books. Their purchases were a major factor in the development of the housing bubble and in the huge number of defaulted mortgages, which are now causing massive declines in house prices. Without Fannie's and Freddie's actions, we would not have this unprecedented housing crisis.

A few more observations about Fannie and Freddie turning the American dream of home ownership into the American nightmare of foreclosure. They followed an origination model initially established by FHA. It enabled thinly capitalized mortgage bankers and mortgage brokers to take over virtually the entire origination market. These mortgage brokers and mortgage bankers were able to compete for mortgage originations with thousands of well capital-

ized community banks, banks that are conspicuously absent from the epidemic of default-prone loan problems Nationwide.

In late 2004, Richard Syron and Frank Raines both went to the meetings of the originator community and made clear that they were going to wrest back the subprime and Alt-A mortgage market from Wall Street. Syron said, "Our success in the future depends on our ability to serve emerging markets, and they've become the surging markets." Raines also said, "We have to push products and opportunities to people who have lesser credit quality."

These statements alerted the originator community that, if they could make subprime and Alt-A loans, there was a ready market for them. And this stimulated an orgy of junk mortgage development.

Fannie and Freddie used their automated underwriting systems to divert subprime and Alt-A loans from private label securitizers, driving up the value of these loans and making mortgage brokers even more eager to find borrowers regardless of their credit standing.

Why did Fannie and Freddie do this? First, they were trying to meet HUD's affordable housing goals which, by 2005, required 55 percent of all their loans that they purchased be affordable housing loans, including 28 percent to low-income and very low-income borrowers. Second, after their accounting scandals of 2003–2004, they were afraid of new and stricter regulation. By ramping up their affordable housing lending, that trillion dollars I mentioned earlier, they showed their supporters in Congress that they could be a major source on a continuing basis of affordable housing financing.

Mr. Chairman, there is much more in my prepared testimony, including my recommendations on how to meet this challenge, but that is the end of my oral statement. I look forward to your questions.

[The prepared statement of Mr. Pinto follows:]

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**Statement of**

**Edward J Pinto**

**Before the Committee on Oversight and Government Reform**

**United States House of Representatives**

**December 9, 2008**

**Fannie Mae and Freddie Mac's Key Role in Subprime Lending**

**Hearing before US House of Representatives Oversight Committee - December 9, 2008**

**Submitted testimony by Edward Pinto, real estate financial services consultant and former chief credit officer of Fannie Mae (1987-1989)**

**Chairman Waxman, thank you for the opportunity to testify today. I was Fannie Mae's chief credit officer from 1987 to 1989 and head of marketing and product management for 3 years before that. I left the company in 1989 and since then I have specialized in providing mortgage finance related consulting services. Since leaving Fannie Mae, I have followed the GSEs closely.**

**The data problem with home mortgages:**

**Many market observers are not aware that there is surprisingly little consistent information available about the size of the subprime market and the contribution of Fannie and Freddie to its growth. My testimony today will bring together all the available information that I could find in my research, and will contain information that has not to my knowledge been published anywhere else.**

**There are a total of approximately 25 million subprime and Alt-A loans outstanding, with an unpaid principal amount of over \$4.5 trillion. The data and computations necessary to derive these numbers are included in Attachment 1. Because of customs developed years ago in the mortgage markets, subprime and Alt-A loans may show up in both subprime and prime databases.**

**The loans purchased or securitized by Fannie and Freddie, which were once solely prime loans, are still now included in databases of prime loans, even though 34 percent of Fannie and Freddie's loans should now properly be classified as subprime, Alt-A, or other non-prime loans. For this reason, using a common definition of subprime as those borrowers with weak credit histories as evidenced by a FICO score below 660<sup>1</sup>, there are many more subprime borrowers reported as prime (10 million) than reported as subprime (5 million)<sup>2</sup>. In addition, the Alt-A or "liar" loan is generally not classified as subprime, because the FICO score of the borrower was generally above 660, but this loan was the favorite of the real estate speculator, and are currently defaulting at rates approaching those of subprime loans. For example, I estimate that one million of the GSEs' Alt-A loans had no down payment, using the high risk 80/20 piggy back loan financing vehicle.**

For historical reasons, these loans are also carried in databases as prime loans when they were purchased by Fannie and Freddie, which conveniently allowed them to deny that they were active in the subprime market. This created tremendous disclosure problems for the industry, since a massive portion of subprime, Alt-A and other non-prime lending has long been hidden behind Fannie and Freddie's "prime" façade. Accordingly, there are many more subprime and Alt-A mortgages outstanding today than many people suppose, because half of all these loans are held or securitized by Fannie and Freddie and yet are carried in many databases as prime loans.

As I will discuss later, the purchase of large numbers of subprime loans and Alt-A loans was justified by the GSEs because they helped meet affordable housing goals.

As outlined in the attachments to this testimony, I estimate that there are 25 million subprime, Alt-A, and non-prime loans currently outstanding, about half of them held or guaranteed by Fannie and Freddie, and these loans are the source—although not the exclusive source—of the financial crisis we now confront. They are currently defaulting at unprecedented rates.

**Fannie and Freddie's roles in the current crisis:**

Fannie Mae and Freddie Mac played multiple roles in what has come to be known as the subprime lending crisis.

Fannie and Freddie went from being the watchdogs of credit standards and thoughtful innovators (see Attachment 2) to the leaders in default prone loans and poorly designed products<sup>3</sup>. They introduced mortgages which encouraged and extended the housing bubble, trapped millions of people in loans that they knew were unsustainable, and destroyed the equity savings of tens of millions of Americans. Freddie in 2004 acknowledged their flagship affordable housing program was "off to a poor start in terms of defaults"<sup>4</sup>. This "poor start" could not have been a surprise, since Freddie had published its estimated default rates by loan-to-value (LTV) in the late 1990s and found that its 95% LTV loans had about 6 times the default rate of 80% loans (see Attachment 3). They certainly had to know that this would not bode well for its "flagship" 97% and 100% programs.

While the American Dream of millions of homeowners hung in the balance, Freddie staffers then proceeded to discuss whether having more than 10 times the default level of their traditional loan programs was a problem. They decided to ignore the adverse impact on home buyers and just absorb the extra anticipated defaults and

noted that no one thought that "this was a showstopper"<sup>5</sup>.

At the same time Freddie knew that its automated underwriting system was having subprime loans thrown against it by originators to see what would stick and that was a purpose for which it was never intended:

"The reasons against [using] LP [to source subprime loans] were LP [Loan Prospector, Freddie's automated underwriting system] weaknesses, if you throw nothing but subprime loans against LP, it will miss some, maybe even a lot." Internal Freddie Mac email from David Andrunkonis, dated April 12, 2004 FMAC0013766

The same concern was expressed about using FICO's for unintended uses:

"[T]he reason FICO predicts as well as it does for mortgages might have something to do with all the other processes traditionally required in mortgages. Without these processes, the relationship between FICO and mortgage performance could change." Internal Freddie Mac email from Donald Bisenius, dated April 4, 2004 FMAC0013675

This concern was well founded. In 1992, a mortgage borrower with a FICO of 620-659 was 7 times more likely to experience a serious delinquency over the next two years than a borrower with a 720-759 FICO. By about 2004 the 620-659 borrower was now 12 times more likely and the default propensity of the 720-759 borrower was unchanged.

Ignoring these concerns was a major change. Up until the late 1980s Fannie, for example, had a determined but low risk approach to affordable housing. Given the inherent risks and pitfalls, originating lenders who were closer to the marketplace were expected to design sustainable loan programs suited to the community and to put up capital to absorb first losses, while Fannie's main goal would be to provide liquidity for these types of loans. This would assure Fannie that loans were originated by lenders with both a stake in loan performance and involvement at the community level in program design. This was important because many of the affordable housing efforts undertaken by HUD had been directed from afar and had created more problems than they solved and had led to extraordinary levels of defaults and fraud.

This cautious approach was encouraged by some key community groups that had experienced the problems left in the wake of HUD's earlier misguided efforts. One such group was National People's Action (NPA) of Chicago. The founder and head

of NPA was Gail Cincotta, known as the “Mother of the Community Reinvestment Act”. Ms. Cincotta had lived through the lending debacles caused by HUD’s Washington bureaucrats. She begged Fannie to work through local banks already undertaking Community Reinvestment Act lending and to keep the banks on the hook for a substantial portion of the risk. This would keep the decision making local and reduce the risk of lending debacles. She also wanted Fannie to monitor and evaluate underwriting requirements and risk factors so that default rates could be kept at a low level (contrary to HUD’s experience) and would support efforts to tighten underwriting where warranted.

In early 1989 Fannie abandoned this risk sharing approach because the requirement was slowing down the desired ramp up of Fannie’s affordable housing initiatives.

In the late-1980s, Fannie hired a high powered political operative and consultant from Lehman Brothers to advise it on how to embrace and protect its charter from political attack - Jim Johnson. The means Fannie would use to embrace and protect Fannie’s charter was to undertake a major expansion of its affordable housing initiatives. The goal would be to make Fannie indispensable to its supporters on Capital Hill. The ambitious nature of the plan would fully take shape once Johnson was tapped in early 1990 to become Fannie’s next CEO. Johnson was initially named Vice Chairman (a new position) and by 1991 was named Chairman and CEO.

The new team at Fannie either forgot and/or ignored its recent brush with disaster in the early 1980s when foreclosures ballooned out of control. It embarked on a massive affordable housing effort (mandated and encouraged by its mission regulator - HUD) that eventually promoted subprime, ultra- high LTV, and Alt-A loans (many were NINJA loans – no income, no job or assets).

Johnson decided Fannie needed to undertake a massive effort to protect Fannie’s remarkable charter advantages - at all costs and risks. This would be done by offering Congress ever larger promises of "reverse earmarks" done in the name of affordable housing. Reverse earmarks would take the form of affordable housing projects and funding commitments targeted geographically so as to garner and/or solidify support from its large group of Congressional supporters.

In 1993 HUD adopted its first set of affordable housing goals and Johnson reciprocated in 1994 when he announced a new goal of \$1 trillion for its “Opening the Doors to Affordable Housing” initiative.

This was quickly followed by Fannie's opening of its first local partnership office. Eventually 51 of these local out reach offices would blanket the country. The main goal was to seal the charter deal with Congress. These offices were overtly political and performed a grass roots lobbying function. This network helped implement an aggressive "reverse earmark" program for members of Congress who supported Fannie.

While this effort was initiated by Fannie, it would eventually result in Freddie Mac needing to comply with and respond to the new congressional affordable housing mandates because these mandates applied equally to Freddie. Freddie would eventually launch its own affordable housing juggernaut. The periodic year-end bidding wars between the two over the limited supply of qualifying loans are an unusual side note to this scandal and caused an under pricing of the risk of these loans.

Likewise Fannie's massive expansion of its portfolio investments in the early 1990s would pressure Freddie to follow suit.

Eventually Fannie and Freddie would announce over \$5 trillion in affordable housing initiatives.

This unprecedented abandonment of underwriting principles coupled with the fact that the GSEs were permitted to take on \$5.6 trillion in credit risk and maintain portfolios of \$1.5 trillion has put America's homeowners at risk (see Attachment 4 for an analysis of myriad risks faced by Fannie and Freddie). Their high risk activities were allowed to operate at a 75:1 leverage ratio<sup>6</sup>, much higher than that of the recently bankrupted Lehman Brothers.

The cumulative impact of governmental policies over the last 70 years has caused the risk of real estate lending to increase radically. In the 1950s and 1960s the average homebuyer put at least 20% down to get an 80% LTV loan from an S&L that held about 10% capital against the loan. Simply put, there was 30% equity capital protecting an 80% LTV loan, yielding a low risk 2.7:1 leverage ratio.

Contrast that with 2007 when about 25% of Fannie and Freddie's loan purchases were zero down to 3% down payment loans and they had capital not of 10% but 0.45% on a mortgage backed security (MBS). Add 1% capital from the mortgage insurance company and 1.6% from the bank holding the MBS and total capital is about 3%. That's 3% equity capital protecting a 100% LTV loan resulting in a very risky 30:1 leverage ratio. Said another way, Fannie and Freddie decreased equity and capital by 91% on a loan that they knew was 10 times as risky as an 80%

loan. This leverage level was and continues to be nothing short of reckless for high LTV lending.

**HUD's responsibility:**

The key role played by HUD in this debacle cannot be ignored. In 1997, HUD commissioned the Urban Institute to study Fannie and Freddie's credit guidelines. It found:

“Almost all the informants said their opinion of the GSEs has changed for the better since both Fannie Mae and Freddie Mac made substantive alterations to their guidelines and developed new affordable loan products with more flexible underwriting guidelines. ...

Informants did express concerns about some of the GSEs' practices. The GSEs' guidelines, designed to identify creditworthy applicants, are more likely to disqualify borrowers with low incomes, limited wealth, and poor credit histories; applicants with these characteristics are disproportionately minorities.”

With the encouragement of HUD, their mission regulator, a relentless assault was made upon the three underpinnings of underwriting: capacity, collateral and credit. Administrative fiat and wishful thinking made these “old fashioned” concepts fade away. Fannie and Freddie rolled out “innovative” program after innovative program that substituted new and untested rules on income or abandoned income qualification entirely, eliminated down payments, and catered to borrowers with damaged credit. The frequency of these innovations seems to coincide with the ever increasing affordable housing goals set by HUD. Fannie and Freddie's affordable housing goals reached 55% in 2007.

**Fannie and Freddie's subprime and Alt-A assets:**

While they may deny it, there can be no doubt that Fannie and Freddie now own or guarantee \$1.6 trillion in subprime, Alt-A, and other default prone loans and securities (see Attachment 5). This comprises over 1/3 of their risk portfolios and amounts to 34% of all the subprime loans and 60% of all Alt-A loans outstanding (see Attachment 6). These 10.5 million unsustainable, non-prime loans are experiencing a default rate 8 times the level of the GSEs' 20 million traditional quality loans. This total includes 5.7 million subprime, 3.3 million Alt-A, and 1.5 million with other high risk characteristics (see Attachment 7).

I estimate that one million of the GSEs' Alt-A loans had no down payment, using the high risk 80/20 piggy back loan financing vehicle and untold more were NINA loans (no income no assets). The purchase of Alt-A loans was justified in 2004 by Freddie because they helped it meet affordable housing goals, notwithstanding that Freddie had called these loans dangerous in 1990 and stopped buying them.

“The potential for the perception and reality of predatory lending with this product [NINA] is great.” Internal Freddie Mac email from David Andrunikonis to Dick Syron, dated September 7, 2004 FMAC0013766 and

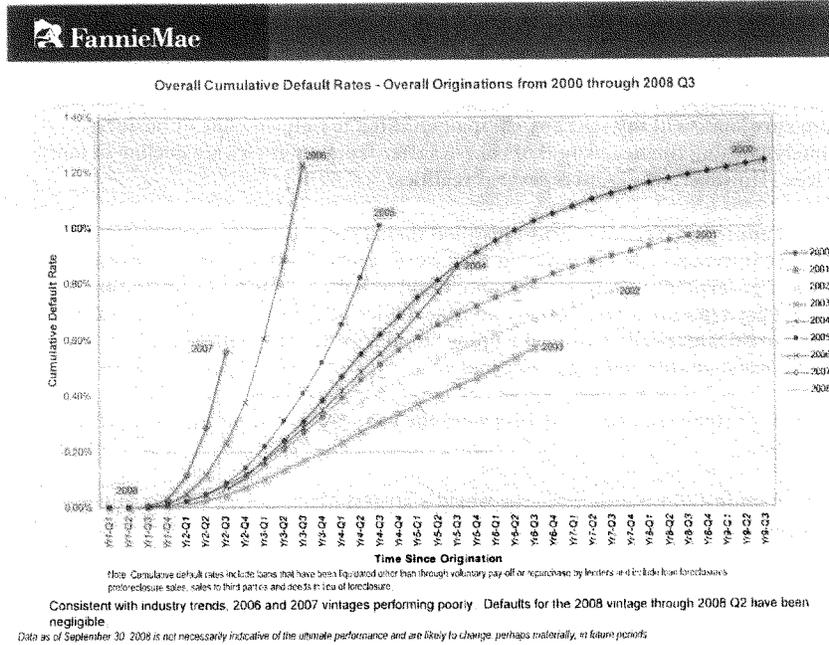
“The Alt-A business makes a contribution to our HUD goals.” Internal Freddie Mac email from Mike May to Dick Syron, dated October 6, 2004 FMAC0013694

Their \$1.6 trillion in unsustainable, default prone loans does not include FHA's obligations. Add in FHA's loans and the government is responsible for 54% or over 13.5 million of all 25 million subprime and other default-prone loans. These 25 million default prone loans constitute 44% of all the mortgage loans in the US, a result that is unprecedented in our history (see Attachment 6).

**Consequences of Fannie and Freddie's \$1.6 trillion in unsustainable, default prone loans:**

The GSEs' default rates are skyrocketing (see Exhibit 1 below). Although they are too new to predict default rates with any certainty, I would expect those portions of Fannie and Freddie's 2005-2007 books consisting of subprime and other default prone loans to experience default rates ranging from 8% for the 2005 originations to 40% for 2007 originations. The GSEs will be responsible for a large percentage of an estimated 8.8 million foreclosures expected over the next 4 years, accounting for the failure of about 1 in 6 home mortgages. Fannie and Freddie have subprimed America.

**Exhibit 1: Fannie's Overall Cumulative Default Rates By Origination Year:**



**The losses likely to be suffered by Fannie and Freddie will be a terrible burden to US taxpayers. If the default rates I predict actually occur, US taxpayers will have to stand behind hundreds of billions of dollars of Fannie and Freddie losses.**

**This did not have to happen:**

**This could have been averted. They could have exercised leadership, as they had done at least twice before, and stopped the mortgage madness that was enveloping the industry. In 1985 Fannie published new guidelines that tightened its underwriting standards<sup>7</sup>. In the early-1990s Fannie and Freddie publicly announced they were no longer buying low doc/no doc loans because they were too risky (see attachment 8). But in 2004, Fannie and Freddie announced initiatives**

that opened the floodgates. In the years 2005 through 2007, they bought over \$1 trillion of loans that they knew were default prone<sup>3</sup>. Their purchases were a major factor in the development of the housing bubble, and in the huge number of defaulted mortgages that are causing the massive decline in home prices. Without Fannie and Freddie's actions, we would not have this unprecedented housing crisis.

**Likely excuses offered by Fannie and Freddie:**

I am sure some will say that any company limited to only one line of business, namely housing finance, would of course suffer from a nationwide decline in home prices. However, this ignores several realities:

1. Fannie and Freddie always justified their extraordinarily low capital requirements on the fact that they were restricted to one line of business;
2. A government protected duopoly could and did create a housing bubble; and
3. They ignored common sense and the advice of their own credit risk experts and dramatically loosened lending standards, thereby unleashing a flood of unsustainable, default prone loans.

Or that mortgage backed securities were the root cause, but they ignore these realities:

1. Fannie and Freddie were the world's largest MBS issuers and certainly among the most "creative";
2. They fought mightily to keep the capital requirement on MBS issuances low at 0.45%. That's \$450 on a \$100,000 mortgage. The capital undergirding their \$4 trillion in the GSE's MBSs was a mere \$18 billion, and half of that was so called preferred stock;
3. They traded on their implicit government guarantee and as a result about 50% of their debt ended up overseas (see Attachment 9), as did a substantial portion of their MBS issuances. This helped create a doubly urgent situation for the Fed and Treasury as the GSEs rocketed towards conservatorship in late August.

Or that they were just following Congress' bidding, but they ignore these realities:

1. While there is certainly plenty of blame to place at Congress' feet, it is nothing short of astounding to hear this excuse. Fannie and Freddie created and nurtured a relationship with Congress that lead many to question who controlled whom;

2. Their lobbying tactics, foundations, cronyism and “reverse earmarks” were legendary

Or that they did not create the subprime or Alt-A market, but they ignore these realities:

1. Fannie and Freddie jealously and forcefully protected their Congressionally granted turf;
2. In their usual “take-no-prisoners” style, they beat back every challenge by the likes of Salomon Brothers, GE Capital, and many of the largest banks and thrifts in the late-80’s and early-90s;
3. Properly chastised, the private sector turned to what was left and developed subprime and Alt-A business lines;
4. By the early part of this decade, the GSEs realized that the private sector was beating them in terms of share and, default risk notwithstanding, these subprime and Alt-A loans were to affordable housing “goal rich” to ignore.
5. Internal Freddie emails express a worry that it is leading the market on no income/no asset loans. Internal Freddie Mac email from David Andrukonis, dated April 5, 2004 FMAC0013704-5

These excuses remind me of the twins who killed their parents and then threw themselves on the mercy of the court because they were orphans.

**How else Fannie and Freddie turned the American dream of homeownership into the American nightmare of foreclosure:**

Compounding the problems caused by their minimal capital was the fact that they followed an origination model initially established by FHA that enabled thinly capitalized mortgage brokers and bankers to take over virtually the entire origination market. Mortgage brokers alone accounted for 63% of all originations over the period 2001-2006, almost double the rate in 1990. And Freddie knew in 1999 that brokers presented a danger:

“Freddie Mac has found that 65% of its fraud cases involve loans produced by third-party originators [For 1999 OHFEO reported that third-party originators, ie. brokers, had a 26% market share with the GSEs]. ... Independent mortgage brokers account for 32% of the fraud cases, while banks are the remaining 3%. The majority of the fraud – 60% - comes from defective loans (see Attachment 10).”

Adding to this bias in favor of mortgage broker and mortgage banker sourced business was the fact that Fannie and Freddie offered its best pricing to its largest (and riskiest) customers, (ie. Countrywide, Indy Mac) while offering much worse pricing to customers, ie. community banks, with proven track records of delivering high quality loans done the traditional way.

Armed with these unfair advantages bestowed by Fannie and Freddie, these mortgage brokers and bankers set about to compete with thousands of well capitalized community banks – banks that are conspicuously absent from the epidemic of default prone loan problems nationwide.

In 2004, Fannie and Freddie decided to plunge into the subprime market:

As reported in the Mortgage Banker: “The top executives of Freddie Mac and Fannie Mae made no bones about their interest in buying loans made to borrowers formerly considered the province of nonprime and other niche lenders. ...Richard Syron, chairman and [CEO] of Freddie Mac, said, ‘Our success in the future depends on our ability to serve emerging markets; they will become the ‘surging markets.’...”

Meanwhile, Fannie Mae Chairman and [CEO] Franklin Raines told mortgage bankers [at the October 2004 annual Mortgage Bankers’ convention] in San Francisco that his company’s lender-customers ‘need to learn the best from the subprime market and bring the best from the prime market into [that market].’ He offered praise for nonprime lenders that, he said, ‘are some of the best marketers in financial services.’... We have to push products and opportunities to people who have lesser credit quality,” he said.” Mortgage Banking, December 2004, “Looking for new customers”

These statements alerted the originator community that if they could make subprime and Alt-A loans, there was ready market for them, and this stimulated an orgy of junk mortgage development.

Fannie and Freddie used their automated underwriting systems to divert subprime and Alt-A loans from the private label securitizers, driving up the value of these loans and making mortgage brokers even more eager to find borrowers, no matter what their credit standing.

**Why did Fannie and Freddie do this?**

First, they were trying to meet HUD's affordable housing goals, which by 2005 required 55% of the loans they purchase to be affordable housing loans, including 28 percent to low income and very low income borrowers.

Second, after their accounting scandals in 2003 and 2004, they were afraid of new and stricter regulation. By ramping up their affordable housing lending, they showed their supporters in Congress that they could be major sources of affordable housing financing.

This was not a failure of the free market. It is a failure of Congress and the ill-conceived regulatory regime it implemented.

**The Equity behind home mortgages:**

As a result of Fannie and Freddie's misguided and destructive efforts, we now face the greatest economic crisis of the last 80 years.

In 2006 there was an estimated \$22 trillion in home value. By October 31, 2008, it was down to \$18.5 trillion. There's currently \$12.1 trillion in mortgage debt, over 42% of which are default prone loans. Seventy percent of all mortgage debt is now held or guaranteed by the US government.

\$6+ trillion in home equity sounds like a lot, but at 66% loan-to-value, it is at the lowest level in our history. 30% of all homes are owned free and clear – there's no mortgage. Thus only \$13 trillion in home value backs \$12.1 trillion in debt. House prices are conservatively predicted to drop about another 15% by the end of 2009 - so the value of homes with mortgages goes down to \$11 trillion – well below the level of outstanding debt which will total 110% of value. At the depth of the Great Depression outstanding mortgages totaled 20% of all home values. The total price drop from peak to bottom during the Great Depression (1925-1933) was 30% - the same percentage drop projected for 2005-2009.

Lax and excessive lending by Fannie and Freddie have triggered a housing collapse that is generating foreclosure rates in excess of those experienced in the depths of the Great Depression. In 2008 there are expected to be over 25 foreclosures per 1000 loans, a rate about double the rate in 1932.

As this Committee continues with its oversight responsibilities, I'd like to remind you of the oft repeated warnings of the late-Gail Cincotta, whom I had mentioned earlier. Ms. Cincotta died in 2001. She spent 30 years:

**“[f]ighting abuse, fraud, and neglect of the FHA program that has destroyed too many neighborhoods and too many families’ dreams of home ownership....” Statement by Gail Cincotta before the Subcommittee on Housing and Community Opportunity, April 1, 1998**

I can speak with familiarity regarding Gail's views because she and I worked for 3 years from 1986-1989 to design and implement an affordable housing program at Fannie Mae that we both knew would finance needed affordable housing and keep foreclosures low. Unfortunately as noted earlier, the principles underlying that program were abandoned.

Gail repeatedly warned Congress that poor lending practices led the FHA program to have:

**“a national default rate 3 to four times the conventional market, and in many urban neighborhoods it routinely exceeds 10 times.” Id**

She attributed FHA's “American Nightmare of Foreclosure” to the fact that mortgage bankers and brokers:

**“take advantage of the fact that they share no risk on these loans to cut corners.” Id**

In 1998 Ms. Cincotta expressed a wish that FHA's default rate be on par with Fannie and Freddie's. Her wish was granted, but with a horrible twist. Fannie and Freddie's serious delinquency rate on their \$1.6 trillion in default prone lending is now on par with FHA's still unacceptably high rate. And it's getting worse by the month!

Rather than Congress straightening FHA out, it proceeded to create a new problem. The American taxpayers now find themselves saddled with 10.5 million subprime, Alt-A, and other default prone loans originated by Fannie and Freddie.

**Dealing with today's crisis:**

The mortgage industry was heavily regulated in almost all areas except the one that mattered most – having participants with real money at risk! As Gail warned: “firms take advantage of the fact that they share no risk on these loans to cut corners.”

It's time to end Fannie Mae and Freddie Mac's role as promoters of default prone and unsustainable loans that trap people in homes they cannot afford.

Towards this end I have two recommendations:

First the short term solution (adapted from an article by Peter Wallison and Edward Pinto originally published October 25, 2008 in the Wall Street Journal):

The current foreclosure problem can only be addressed with a standardized plan that must work both for whole mortgages held by banks, and mortgages that collateralize mortgage-backed securities (MBS). It must also address several obstacles and challenges: the refinancing agency must have the necessary legal authority now (there is no time to establish a new agency); funding for mortgage purchases must be immediately available; and the plan must be voluntary, so the rights of lenders and the holders of MBS are protected. The plan must also target the right group of homeowners--those already delinquent or in danger of default because of impending interest-rate resets or other factors, but who are otherwise willing and able to carry a fixed-rate, reasonably priced mortgage. This last point is critical. Fighting the current crisis of foreclosures is similar to fighting an out-of-control forest fire. You can't fight it at the fire – you must create a fire break away from the fire. The same applies to the current mortgage crisis – we must get ahead of and break the cycle of foreclosures enveloping the landscape.

The legal authority and the funding for such a standardized plan are already in place. Fannie Mae and Freddie Mac, as government sponsored enterprises (GSEs), have the authority to renegotiate any mortgage they own now or purchase in the future from others. They also have the necessary funding, either from the sums they can themselves raise in the market or through borrowing by the Treasury, which is authorized under the Housing and Economic Recovery Act of 2008 to lend virtually unlimited amounts to both GSEs.

The banks that own whole mortgages will want to keep those that they assess as performing now and likely to perform in the future. They also know that if they have to foreclose on a mortgage, they will incur substantial costs.

Accordingly, Fannie and Freddie should make a blanket offer to all banks or other mortgage lenders to buy any existing mortgage at a fixed discount--say, 20%--from the principal amount then due on the mortgage. This will induce the banks to sell their weaker mortgages (including those not now delinquent). This in itself will improve their financial condition. Fannie and Freddie would similarly identify the weaker loans in their own portfolios and be prepared to write them down 20%.

The GSEs should then offer to modify or refinance these weak and defaulted loans under the following terms: The unpaid principal amount of the mortgage will be reduced 20%. If the loan has a fixed rate, the rate will be reduced by 2% (but not below 5%), and if it is an adjustable, it will be recast at a 5% fixed rate, over 20 years. The purpose of a 20-year (rather than a 30-year) amortization is to build up equity in the home more quickly and help protect taxpayers against loss, and to help stabilize home values. Monthly payments will end up being reduced about 20%, ultra-high loan-to-value (LTV) ratios will be eliminated, and the downward slide in housing markets will be mitigated. This solution is crafted so as to increase the amount of equity present in the real estate market immediately and over time. It therefore has the potential to help all homeowners maintain the equity in their homes.

Loans that are in pools of mortgage-backed securities present a more complex, but manageable, problem. Fannie and Freddie are authorized to modify the terms of defaulted mortgage loans in MBS pools, and they could offer to refinance loans that servicers of MBS pools deemed likely to fail. Banks that hold these MBSs are likely to accept an offer for these securities by the GSEs for the same reasons that they will sell whole mortgages that are troubled or in default. For loans that are not in default, Fannie and Freddie could advise servicers that it is offering a targeted refinance program and borrowers who chose to participate would be offered the same terms.

There are two additional conditions that must be added to these new mortgages, to make them less of a windfall for borrowers. The house could not be further encumbered by a home-equity loan until the government mortgage is fully paid off; and the mortgage-holder would be fully liable for the loan, unlike almost all other mortgages, which are backed only by the house itself. Requiring the new mortgages to be "full recourse" loans will tend to screen

out of the plan those homeowners who can currently make their mortgage payments, and will attract those homeowners who are willing to assume personal liability in preference to foreclosure.

This plan requires banks that are holders of MBS to accept a 20% "haircut" on the weak mortgages they hold. It also requires greater responsibility and risk for the homeowners who choose a modified GSE mortgage. True, if many of these mortgages ultimately go into default, the taxpayers will suffer losses--but this is a risk that was always implicit in the TARP, and the risk will only be greater if we fail to act and losses further weaken the banks.

It is in our national interest to clean up the mortgage mess as promptly as possible, return the banks to financial health, and arrest the rise in mortgage defaults. This plan has a chance to accomplish these objectives.

**Avoiding future financial crises:**

It is imperative that you implement Gail Cincotta's vision whereby participants in the mortgage lending system have an adequate level of equity and capital at risk. Without adequate equity and capital our entire economy is put at risk.

The solution is a well designed risk absorption structure for both conventional and affordable housing:

First, borrowers must bring some equity to the transaction – the standard loan must return to one with a down payment of 20%. Some percentage of home buyers might use private mortgage insurance to qualify for a 10% down payment. FHA would be limited to perhaps 10% of homebuyers qualifying with minimum 5% down payment.

Second, require originating lenders be well-capitalized and retain a component of risk on any loan they hold, sell or securitize, thereby keeping them in a first loss position. The minimum capital requirement might be 6% on held loans and 1% on sold or securitized loans. This capital would be available to cover losses on any of the loans made by the lender. This places prudential lending responsibility squarely on the originating lender and will become the first line of defense (after adequate borrower equity) to absorb the inevitable mistakes and market price fluctuations. If a lender makes too many mistakes, it will fail its capital test and not be able to make any more loans.

**Third, provide liquidity for originating lenders and another layer of capital by encouraging the formation of a number of well-capitalized private mortgage guaranty companies. They would be prohibited from holding a portfolio. They would need not 0.45% capital but perhaps 2% capital on 80% and below loans. These companies would have no Congressional or HUD involvement. A separate group of private mortgage insurers insuring loans with a 10%-19% down payment would be required to have not 1% capital, but perhaps 4%. This then becomes the third line of defense in the event of default by borrowers and extremely serious mistakes by originators.**

**Under this structure, third party investors in mortgage backed securities would benefit from multiple layers of real capital protecting them from the vicissitudes of the marketplace. Initial average down payment would be about 20%, the originator would add 1% capital, the private mortgage guaranty company adds another 2%, and the privately insured loans with 10%-19% down payments would add another 4% on its loans. This results in a minimum equity/capital percentage of 23% or a 4.25:1 debt to equity leverage ratio on 80% lending and a minimum equity/capital percentage of 17% or 6:1 debt to equity leverage ratio on 81-90% lending.**

**The above isn't a cure all. By reducing leverage to 4.25:1 you'll go a long way towards stopping default prone lending where it starts – the borrower, originating lender and mortgage guarantor.**

**Finally, I would be remiss if I did not tell you that Fannie Mae, Freddie Mac, and FHA are continuing some of the same unacceptable practices. They continue to make unsustainable loans to unsuspecting borrowers, loans that will fall at unacceptably high rates. Many are being originated by the same brokers that have caused so many past problems. Fannie and Freddie will still be subject to the same unrealistically high affordable housing goals set by HUD (temporarily suspended) and now the responsibility of their safety and soundness regulator.**

**Thank you for the opportunity to testify.**

**Respectively submitted,**

**Edward J. Pinto, [epinto@lendersres.com](mailto:epinto@lendersres.com)**

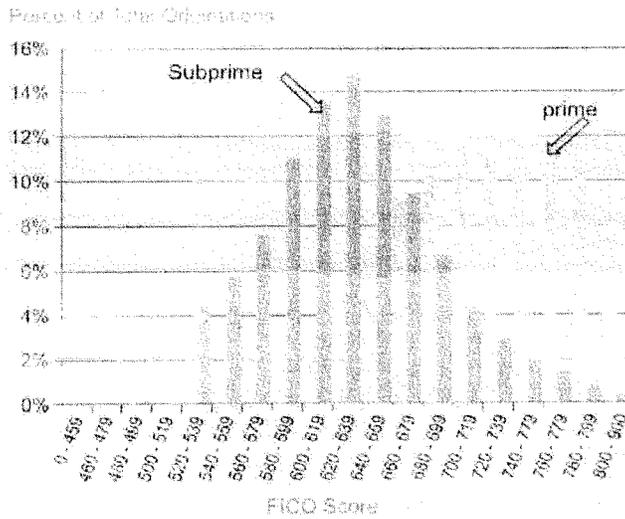
<sup>1</sup>Expanded Guidance for Subprime Lending Programs:  
(<http://www.federalreserve.gov/Boarddocs/SRletters/2001/sr0104a1.pdf>):

“The term “subprime” refers to the credit characteristics of individual borrowers. Subprime borrowers typically have weakened credit histories that include payment delinquencies, and possibly more severe problems such as charge-offs, judgments, and bankruptcies. ... Subprime loans are loans to borrowers displaying one or more of these characteristics at the time of origination or purchase. Such loans have a higher risk of default than loans to prime borrowers. Generally, subprime borrowers will display a range of credit risk characteristics that may include one or more of the following:

- Two or more 30-day delinquencies in the last 12 months, or one or more 60-day delinquencies in the last 24 months;
- Judgment, foreclosure, repossession, or charge-off in the prior 24 months;
- Bankruptcy in the last 5 years;
- Relatively high default probability as evidenced by, for example, a credit bureau risk score (FICO) of 660 or below (depending on the product/collateral), or other bureau or proprietary scores with an equivalent default probability likelihood (emphasis added); and/or
- Debt service-to-income ratio of 50% or greater, or otherwise limited ability to cover family living expenses after deducting total monthly debt-service requirements from monthly income.“

This list is illustrative rather than exhaustive and is not meant to define specific parameters for all subprime borrowers. Additionally, this definition may not match all market or institution specific subprime definitions, but should be viewed as a starting point from which the Agencies will expand examination efforts (emphasis added).”

<sup>2</sup>Distribution of self-denominated subprime and prime loans by FICO score. □



**“Surprise: Sub-Prime Mortgage Products are not the Problem!” James R. Barth, Tong Li, Triphon Phumiwasana, and Glenn Yago, Milken Institute**

The above chart is based on Loan Performance Corporation data. Loan Performance reports that its LP Prime Database has “[L]oan-level data on over 75% of the nation’s active first mortgages—more than 38 million—including all of the Fannie Mae and Freddie Mac portfolios.” Fannie and Freddie’s risk portfolios account for 29 million or 76% of these loans.

<sup>3</sup>Fannie & Freddie abandoned their credit underwriting principles – principles that Gail Cincotta (founder and president of National Peoples Action) and I had discussed at length in the late 1980s and knew were needed to protect homeowners from default prone loans. In Fannie’s 2007 report to HUD, it stated:

“In 2007, Flexible mortgages offered the potential for borrowers, based on down payment amount, to obtain up to 100 percent LTV funding while allowing flexible sources for closing costs. Flex products served many borrowers with incomes below area medians and many first-time homebuyers as well. Specifically, Fannie Mae purchased \$37.5 billion in Flexible loans made to 207,819 households in 2007. Of that total, 96,738 Flexible mortgages were made to first-time homebuyers.” Fannie Mae’s 2007 Report to HUD

Fannie also reported that:

“In mid-2007, due to changing market conditions, it ... implement[ed] pricing & eligibility changes that allow MCM to continue providing borrower funds while also remaining aligned with performance and underwriting criteria.” Id

Allow me to translate: these loans were default prone and necessitated higher delivery fees and tighter eligibility standards.

By September 30, 2008 these and other ultra-high LTV loans were experiencing a 4.68% serious delinquency rate, notwithstanding that half of these loans were made last year or later. This does not bode well for many of the over 3 million homeowners with one of these loans from Fannie and Freddie.

I suggest you read the entire 2007 report in light of Ms. Cincotta’s warnings. You will agree that Fannie and Freddie’s self-described efforts to purchase loans that have:

“[r]elatively higher risks attributed to such factors as a blemished credit history, limited savings, or low down payments.” Id

was just another in a long line of doomed FHA-like programs that Ms. Cincotta pointed out:

“...destroyed too many neighborhoods and too many families’ dreams of home ownership”.

<sup>4</sup> Internal Freddie Mac email to Dick Syron dated June 24, 2004 regarding “June Risk Committee Summary/No action required”, FMAC0013799

<sup>5</sup> Internal Freddie Mac email dated July 12, 2004 regarding “Mission Committee Meeting”, FMAC0013801-2

<sup>6</sup>They were required to hold capital of 0.45% on MBS and their portfolio holdings required 2.5%. Only about 50% of Fannie and Freddie’s capital was comprised of equity raised from the sale of common stock and retained earnings. The other half was gotten through the sale of preferred stock at below market rates sold to banks. Banks were “encouraged” by their regulators to invest \$36 billion of their core capital in these so called “ultra-safe” investments. This made raising new capital “easy” since Fannie and Freddie had ready buyers. The irony is that Fannie and Freddie used their high leverage to compete unfairly with better capitalized banks. Fannie and Freddie “invested” this capital in affordable housing tax credits created by Congress which were used as a tax shelter. In September 2008 all of Fannie and Freddie’s preferred stock was written off by the banks and in November 2008 all of the tax credits owned by Fannie and Freddie were written off. These credits accounted for about 50% of their capital as recently as June 30, 2008. This situation was compounded by the minimal equity that Fannie and Freddie were permitted to operate with and the high amounts of leverage in the housing finance system generally. See also “Who’s Letting Banks Invest in Fannie and Freddie Preferred Stock?” Thomas Kirchner, August 28, 2008 <http://seekingalpha.com/article/93039-who-s-letting-banks-invest-in-fannie-and-freddie-preferred-stock>

<sup>7</sup> A severe real estate recession occurred during the early 1980s. The default levels experienced in Texas, Alaska, and other energy dependent states became known as the "Texas depression scenario". I started working at Fannie Mae in September 1984. During the period September 1984 – August 1985 my staff and I were responsible for the development of underwriting guidelines that resulted in a major tightening of Fannie Mae's acceptable credit quality standards. Prior to this date, it had been accepting many categories of loans with unacceptable levels of risk. In August 1985, Fannie Mae issued Selling Guide Announcement 85-13 which publicly implemented wholesale changes which significantly tightened its acceptable underwriting guidelines so as to restrict characteristics leading to default prone loans. The changes eliminated or restricted specific loan products and also changed generally applicable loan guidelines and standards. The changes, based on a review of Fannie Mae's default experience and underwriting guidelines, were deemed necessary so as to eliminate or restrict underwriting criteria that had contributed to the high default levels experienced in the period 1980-1985. Various types of adjustable rate mortgages (ARMs) had proliferated during this period of high interest rates and had become one of the predominant forms of mortgage loans. ARMs had contributed disproportionately to Fannie Mae's defaults and were singled out for many of the changes. For example, wholesale changes were made that were designed to reduce payment shock and reduce the use of "teaser rates". The experience with graduated payment ARMs, which generally allowed for scheduled or potential negative amortization, was so poor that this category of loan was generally eliminated. Underwriting changes designed to reduce the default prone characteristics of high loan-to-value (90% and 95% LTV) lending were made. Likewise poor experience with investor loans, loans on 3 and 4-plexes, and cash out refinances led to substantially tightened requirements for these types of speculative loans. Valuation issues were addressed with new limitations on buy-downs/seller contributions for all types of loans, along with major revisions to appraisal requirements. Allowable debt-to-income ratios were reduced depending on the product and loan-to-value (LTV). The purchase of 1<sup>st</sup> mortgages with simultaneous seconds (piggy-back seconds) was restricted. Selling Guide Announcement 85-13 generally resulted in significant tightening of mortgage standards nationwide.

<sup>8</sup> The unacceptably high risk associated with ultra-high LTV loans has already been noted. The same was true for NINA (no income/no asset) loans.

"Freddie Mac should withdraw from the NINA market as soon as practical. [Performance is poor as evidenced by] first year delinquency rates on these mortgages, which range from 8 to 13%, depending on the lender." Internal Freddie Mac email dated September 4, 2004 regarding NINA mortgages, FMAC0013739

**Attachment 1 to Submitted testimony of Edward Pinto before US House of Representatives Oversight Committee - December 9, 2008**

**US Mortgage Market: Sizing Total Subprime, Alt-A & Other Junk Loan Exposure**

Research prepared by Edward Pinto, [epinto@lenderres.com](mailto:epinto@lenderres.com) Date: 12.1.08

**A. Subprime:**

Allowing each individual originator to define on its own what constitutes a subprime loan was found by banking regulators to be an unsatisfactory situation. In 2001 Federal banking regulators gave "Expanded Guidance for Subprime Lending Programs": (<http://www.federalreserve.gov/Boarddocs/SRletters/2001/sr0104a1.pdf>):

"The term "subprime" refers to the credit characteristics of individual borrowers. Subprime borrowers typically have weakened credit histories that include payment delinquencies, and possibly more severe problems such as charge-offs, judgments, and bankruptcies. They may also display reduced repayment capacity as measured by credit scores, debt-to-income ratios, or other criteria that may encompass borrowers with incomplete credit histories. Subprime loans are loans to borrowers displaying one or more of these characteristics at the time of origination or purchase. Such loans have a higher risk of default than loans to prime borrowers. Generally, subprime borrowers will display a range of credit risk characteristics that may include one or more of the following:

- Two or more 30-day delinquencies in the last 12 months, or one or more 60-day delinquencies in the last 24 months;
- Judgment, foreclosure, repossession, or charge-off in the prior 24 months;
- Bankruptcy in the last 5 years;
- **Relatively high default probability as evidenced by, for example, a credit bureau risk score (FICO) of 660 or below (depending on the product/collateral), or other bureau or proprietary scores with an equivalent default probability likelihood (emphasis added):** and/or
- Debt service-to-income ratio of 50% or greater, or otherwise limited ability to cover family living expenses after deducting total monthly debt-service requirements from monthly income."

This list is illustrative rather than exhaustive and is not meant to define specific parameters for all subprime borrowers. Additionally, this definition may not match all market or institution specific subprime definitions, **but should be viewed as a starting point from which the Agencies will expand examination efforts** (emphasis added)."

The use of a FICO score below 660 as a significant point of demarcation between prime and subprime loans goes back to 1995. As noted in January 1997 by Standard & Poor's, "...a FICO score of 660 [is] the investment-grade score as defined in Freddie Mac's industry letter of August 1995." (S&P Structured Finance Ratings, January 1997, p. 14).

Based on these sources, defining subprime as a loan with a FICO of less than 660 should guide any effort to determine the other subprime loans beyond those described as such by originators.

1. **Subprime loans denominated by the originator as such:** The Fed Reserve of NY maintains a data base on subprime and Alt-A found at:  
[http://www.newyorkfed.org/regional/techappendix\\_spreadsheets.html#sub\\_loans](http://www.newyorkfed.org/regional/techappendix_spreadsheets.html#sub_loans)

The Fed's database of subprime loans denominated as such by the originator is based on Loan Performance Corporation's subprime servicing/private securities databases which track loans that are self-denominated by originators as subprime (LP Subprime Database). While a FICO below 660 is a significant determinant (71% of such loans have such a FICO), there are other characteristics used in this self-determination. The NY Fed defines **Subprime** as:

“Compared with prime mortgages, subprime mortgages are typically made to borrowers with blemished credit history or who provide only limited documentation of their income or assets. Originations of subprime mortgages fell sharply in the second half of 2007 and have been extremely light so far in 2008. Of the 3.3 million active subprime loans in the data at the end of 2007, there were some 3 million loans for owner-occupied units with an average outstanding loan balance around \$180,000.”

It further adds:

“The underlying data do not represent every subprime mortgage, whether in portfolio or in a security, or mortgage securitized in an alt-A pool. We estimate that as of **year-end 2007**, there were about a total of 7 million subprime loans. The underlying data contained 3.3 million active subprime loans, suggesting a coverage ratio of 47 percent.”

These 7 million loans almost certainly meet one of more of the Federal bank regulators' definition of subprime. Based on an average balance of \$180K (see above), this translates into **\$1.260 trillion**. This compares favorably to MBA delinquency data reporting 5.541 million subprime loans (excludes FHA) at 6.30.08, however the MBA believes its database captures 85% of all loans, resulting in an MBA estimate of 6.52 million subprime loans. Using the same \$180k per loan, this suggests **\$1.173 trillion**. Since the MBA is from 6.30.08 while the NY Fed data is from 12.31.07, the two sources appear to be very close.

2. **Subprime loans denominated as prime loans but with FICOs below 660:** Loan Performance Corporation also maintains a prime loan database (LP Prime Database) that predates the establishment of its LP Subprime Database. The LP Subprime Database and LP Prime Database are mutually exclusive (confirmed by Loan Performance). All Fannie and Freddie loans (regardless of FICO) are reported into the LP Prime Database only (confirmed by Loan Performance). The LP Prime Database was setup in 1989 before the use of FICOs, which were only developed in 1989 and did not come into general use in the mortgage industry until 1995. It was populated by prime loan servicers and investors (originally just Freddie, with Fannie added in 1991). The LP Prime Database is a mix of Fannie and Freddie loans, other conforming loans, prime jumbo loans, FHA and VA loans. As Fannie and Freddie started doing large

volumes of loans with FICOs below 660, these were reported into the LP Prime Database along with their traditional prime loans.

As noted earlier a FICO below 660 is the most clear cut determinant set out by the Federal banking regulators as a characteristic of a subprime borrower.

- About 71% or 5 million loans out of the NY Fed’s 7 million subprime loan total have a FICO below 660.<sup>1</sup>
- About 20% or 10 million loans out of Loan Performance’s grossed up prime loan total of 50 million loans have a FICO below 660.<sup>1,2</sup>

<sup>1</sup>“Surprise: Sub-Prime Mortgage Products are not the Problem!” Percentages obtained from Figure 1.

<sup>2</sup>Loan Performance reports that the LP Prime Database has “[L]oan-level data on over 75% of the nation’s active first mortgages—more than 38-million—including all of the Fannie Mae and Freddie Mac portfolios.”

To convert the 10 million subprime loans contained in the LP Prime Database to dollars, an average loan amount of \$150,000 seems appropriate. Fannie and Freddie account for 49% or 4.9 million<sup>3</sup> of the 10 million loans and have an average loan amount of about \$132,000, the other 51% are a mixture of many loan types including FHA (the original subprime “lender”, whose loans have somewhat lower balances) and jumbo loans (much higher balances). \$150,000 x 10 million = **\$1.5 trillion**. Note: There are more subprime “prime” borrowers with a FICO below 660 (10 million) than all subprime borrowers denominated by the NY Fed (7 million).

<sup>3</sup>Fannie and Freddie are estimated to have \$646 billion in loans with FICOs below 660. At an average loan amount of \$130,200

**Table #1: Total Subprime exposure:**

| Type:                                   | #                | % of subprime/<br>% of all loans | Serious delinquency<br>rate |
|---|------------------|----------------------------------|-----------------------------|
| Loan Performance<br>subprime grossed up | 7 million        | 41%/12%                          | 17.85% <sup>4</sup>         |
| Loan Performance<br>Prime grossed up    | 10 million       | 59%/17.5%                        | 5% <sup>5</sup>             |
| <b>Total</b>                            | <b>17million</b> | <b>100%/29.5%</b>                |                             |

<sup>4</sup>MBA National Delinquency Survey, Q2:08, Data as of 6.30.08

<sup>5</sup>Estimate based on Fannie’s loans with FICOs <620 having a serious delinquency rate of 6.74% at 9.30.08. This estimate of 5% is likely low, as Fannie’s subprime portfolio is relatively unseasoned and its delinquency level is increasing rapidly (for Q2:08 the comparable rate was 5.48%).

**Table #2: Fannie/Freddie conventional subprime exposure:**

|                    |   | Fannie              | Freddie             | Total #/% of subprime  |
|--------------------|---|---------------------|---------------------|------------------------|
| Conventional loans | Subprime Private Label Mortgage Backed Securities | 0.24 million        | 0.56 million        | 0.8 million/5%         |
|                    | "Prime" loans <660 FICO                           | 3.05 million        | 1.85 million        | 4.9 million/29%        |
| <b>Total</b>       |   | <b>3.29 million</b> | <b>2.41 million</b> | <b>5.7 million/34%</b> |

**B. Alt-A:**

The NY Fed defines **Alt-A** as:

**"Alt-A Mortgages defined:** Loans marketed in alt-A securities are typically higher-balance loans made to borrowers who might have past credit problems—but not severe enough to drop them into subprime territory—or who, for some reason (such as a desire not to document income) chose not to obtain a prime mortgage. In addition, many loans with nontraditional amortization schedules such as interest only or option adjustable rate mortgages are sold into securities marked as alt-A."

It further adds:

"Our best guess is that 2.4 million loans in this portion of the data cover more than 90 percent of the pools marketed as alt-A. The loan data are drawn from reports by the Board of Governors of the Federal Reserve System based on data from FirstAmerican CoreLogic, LoanPerformance Data. Data on the number of housing units are drawn from the U.S. Census 2000." and

"Although the term "alt-A" applies technically only to securities, not mortgages, it has become common practice to refer to near-prime or non-traditional mortgages as "alt-A" loans. The 2.4 million alt-A loans in the data contained approximately 1.7 million loans for owner-occupied units with an average outstanding loan balance around \$300,000 at the end of 2007."

The above translates into **2.67 million** Alt-A. Based on an average balance of \$300K (see below), this translates into **\$0.800 trillion** Alt-A held in securities. The MBA does not have a separate category for Alt-A. This definition does not include Fannie and Freddie's Alt-A loans.

Fannie and Freddie Alt-A loans total **\$0.497 billion** comprising **2.9 million** loans not covered by the NY Fed and \$77 billion in private MBS tranches (450,000 loans) already included in the NY Fed estimate.

This brings the total for Alt-A to **\$1.3 trillion and 5.6 million loans**. Fannie and Freddie's share of **3.35 million** is **60%** based on loan count.

**C. Total for all junk loans: 25.1 million loans out of 57 million 1<sup>st</sup> mortgages (44%) or \$4.63 trillion:**

**Fannie/Freddie's portion of conventional junk loans: 10.1 million loans out of 25.1 million junk 1<sup>st</sup> mortgages (40%).**

The Loan Performance and the MBA both estimate that there are about 57 million 1<sup>st</sup> mortgages.<sup>6</sup> The 25.1 million junk loans are distributed as follows:

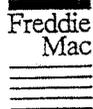
- **Subprime: 17 million of which Fannie and Freddie are responsible for 5.7 million or 34% of all subprime loans.**
- **Alt-A: 5.6 million of which Fannie and Freddie are responsible for 3.35 million or 60% of all Alt-A loans.**
- **Other junk: 2.5 million loans consisting of many negatively amortizing ARMs (Option ARMs), Interest Only ARMs, Original LTV >90%, and piggy back seconds not included in the above. Fannie and Freddie responsible for 60% of all other junk.**
  - \$262 billion (1.5 million loans) - \$198 billion for Fannie and \$64 billion for Freddie.
  - \$350 billion estimate (1 million loans) Wachovia has \$122 billion of pay-option/potential negatively amortizing ARMs (Wachovia calls them pick-a-pay). These are not subprime, not securitized, and not held by Fannie or Freddie. They are certainly junk loans. Other uncounted junk loans can be found at B of A (from their Countrywide purchase) and WaMu (\$53 billion, these assets are now owned by Chase), and IndyMac (specialized in Alt-A, now owned by the FDIC). A rough guess is that this adds at least another \$350 billion in junk loans.

<sup>6</sup>Fannie and Freddie have a total of 30.6 million loans, plus 1.25 million in PLMBS tranches; for a total of 31.85 million loans. 10.55 million or 33% are high risk.

ATTACHMENT 2

# Industry Letter

July 11, 1995



**SUBJECT:** The Predictive Power of Selected Credit Scores

**TO:** CEOs and Credit Officers of all Freddie Mac Sellers and Servicers

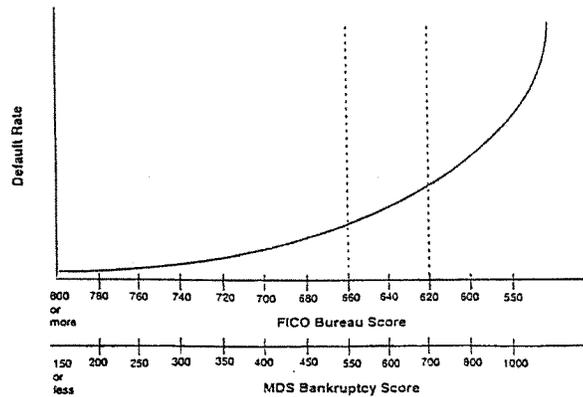
Having bought over 16 million loans during our 25-year history, Freddie Mac is in a unique position to conduct research and spot industry-wide trends. Sharing observations about industry trends and offering tools to help you manage the mortgage lending process are key ways we fulfill our mission of making decent, accessible housing a reality.

We recognize the challenges of today's market environment. To assist you in meeting these challenges, we want to provide you tools to underwrite credit risk and meet the needs of every creditworthy borrower. One such tool is the use of certain credit scores to help you focus your underwriting efforts.

**Research Findings**

Freddie Mac studied how hundreds of thousands of loans performed over several years to determine which attributes of the loan file were most predictive of default. We identified a strong correlation between mortgage performance and two types of credit scores, created by national credit scoring companies and frequently used in consumer lending. The types of credit scores we reviewed were "bureau scores," as prepared by Fair, Isaac and Co., Inc. ("FICO") and "bankruptcy scores," as prepared by CCN-MDS ("MDS"). The chart below illustrates the predictive power of these credit scores.

Predictive Power of Credit Scores



Although the chart illustrates the correlation between credit scores and default rates, we have documented the same correlation with delinquency rates.

**Credit Scores and Freddie Mac's Quality Control**

We are including credit scores as one of the selection factors in our quality control sampling procedures. You can expect a higher percentage of loans made to borrowers with scores indicating a higher probability of default to be selected for review by our underwriters. Once the file is selected, a Freddie Mac underwriter will review the entire file using the standards set forth in the Purchase Documents. It is important that the file thoroughly document, and that Form 1077A, *Uniform Underwriting and Transmittal Summary*, adequately summarize, both the positive and negative factors that your underwriter considered in making the investment-quality decision.

**Credit Scores and Underwriting**

After reviewing a number of alternatives, we determined that, within the manual underwriting process, one of the easiest and most readily available tools to assist you in managing the challenging credit-risk environment is the use of either FICO bureau or MDS bankruptcy scores. Using these scores can help you better assess and manage the quality of your loan originations, reduce servicing costs and sustain profitability.

For 1-unit single-family dwellings, we suggest that you apply the information in the following chart before underwriting borrower creditworthiness as required in Chapter 37 of the *Single-Family Seller/Service Guide* (the Guide).

| If the FICO bureau score is | or the MDS bankruptcy score is | then the recommended approach to reviewing credit is  |
|-----------------------------|--------------------------------|---|
| over 660                    | less than 550                  | <b>BASIC:</b> Underwrite the file as required to confirm the borrower's willingness to repay as agreed.   |
| 660 to 620                  | 550 to 700                     | <b>COMPREHENSIVE:</b> Underwrite all aspects of the borrower's credit history to establish the borrower's willingness to repay as agreed.   |
| less than 620               | over 700                       | <b>CAUTIOUS:</b> Perform a particularly detailed review of all aspects of the borrower's credit history to ensure that you have satisfactorily established the borrower's willingness to repay as agreed. Unless there are extenuating circumstances, a credit score in this range should be viewed as a strong indication that the borrower does not show sufficient willingness to repay as agreed. |

The attached Exhibit A provides examples and an additional description of each recommended approach.

Loans secured by 2- to 4-unit properties carry additional risk. Therefore, we recommend stronger guidelines for FICO bureau and MDS bankruptcy scores for these loan types. Please refer to the attached questions and answers (Exhibit B) for our 2- to 4-unit recommendations.

We want to emphasize that there is no single FICO bureau or MDS bankruptcy score that means an individual borrower will default. However, these scores can help you identify loans that may require a closer look by your underwriter. If your underwriter is able to establish the borrower's willingness to repay as agreed, then we encourage you to consider this in your investment-quality decision, regardless of what the credit score alone might suggest. Remember that you are still responsible for underwriting the credit reputation, as well as the file as a whole, to make your investment-quality decision.

### **Layering of Risk**

Traditional underwriting has long relied upon the "three Cs"-- collateral, capacity and credit reputation. The underwriting guidelines in Freddie Mac's Guide are based on this fundamental approach to determining investment quality.

Collateral is measured by the loan-to-value ratio and confirmed by the appraisal. Capacity is measured by the overall income and expense profiles and confirmed, in part, by the debt-to-income ratios. Credit reputation, or the determination of the borrower's willingness to repay as agreed, is more difficult to assess. However, FICO bureau or MDS bankruptcy scores provide an indication of the relative likelihood of credit risk and can direct the underwriter to an appropriate level of credit review.

We urge you to maintain underwriting standards that guard against layering multiple risk factors within a single loan file, particularly when either a credit score indicates, or your underwriter identifies, that increased credit risk is present.

### **Conclusion**

We encourage you to obtain FICO bureau or MDS bankruptcy scores for your mortgage applicants and use them as a tool to help you focus your underwriting and quality control processes. The attached exhibits provide practical information and examples to help you incorporate credit scores into your processes today.

We are committed to helping you expand your markets with confidence, reduce your costs and sustain your long-term profitability. We will continue to conduct research, identify solutions to industry challenges and share with you tools that will help improve mortgage finance practices.

If you have any questions about our suggestions regarding the use of credit scores or layering of risk factors, please call your account manager, quality control underwriter or (800) FREDDIE, option 2.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Stamper', with a long horizontal flourish extending to the left.

Michael K. Stamper  
Executive Vice President  
Risk Management

## Exhibit A

**SUBJECT:** Case Studies to Help You Apply Freddie Mac's Recommendations on Using Credit Scores

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A credit score is a snapshot that objectively assesses a borrower's credit history at a given point in time. Each score is a reflection of the unique set of facts currently on file for a specific borrower at a particular credit repository. Although two borrowers with identical credit scores may have received that score for very different reasons, our research indicates that those two borrowers have the same probability of default based on credit. Therefore, both borrowers should be underwritten with the same recommended approach.

Freddie Mac has studied two types of credit scores and found that they are strong predictors of mortgage default for all borrowers. FICO bureau and MDS bankruptcy scores can help you focus your underwriting of the borrower's credit reputation. Using credit scores this way makes you more efficient when manually reviewing the borrower's credit report and any other information needed to establish the borrower's willingness to repay as agreed. You can then combine your findings on credit reputation with data on the borrower's capacity in order to determine creditworthiness.

We developed the following case studies to illustrate our suggested approaches to reviewing the borrower's credit reputation. These examples cover borrowers who fall into each of the three risk ranges developed through Freddie Mac's research. We hope they will help you incorporate credit scores into your underwriting process. Once you have used credit scores as a tool to focus your efforts, we believe you will clearly see the value that they add.

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### FICO BUREAU SCORE OVER 660 OR MDS BANKRUPTCY SCORE LESS THAN 550

**BASIC REVIEW:** Underwrite the file as required to confirm the borrower's willingness to repay as agreed.

When you conduct a basic review, you

- Focus on establishing whether the credit documentation indicates additional risks
- Evaluate all available and pertinent credit information to verify consistency with the loan application
- Identify any issues related to misrepresentation or data integrity

**OUTCOME:** When you have completely reviewed the credit documentation and not found any additional credit risks, the borrower's willingness to repay as agreed is confirmed. If you have noted additional risks, they must be documented and factored into your decision on the borrower's creditworthiness. Additional risks could include a debt

listed on the application that was not included in the credit report (such as a mortgage or a newly opened installment or revolving charge) that when verified indicates a significant derogatory payment history.

**CASE STUDY:** Kim's credit report shows a FICO bureau score of 730. The details of the report show that Kim has excellent credit and confirms her willingness to repay as agreed. She has six open tradelines that include four revolving accounts and an installment debt. Her previous mortgage has no late payments and her complete credit profile is reported on the credit report. Kim is applying for a 90 percent loan to purchase a new home. Her housing expense-to-income ratio will be 29 percent, her total debt-to-income ratio will be 41 percent, and she will have two months' reserve after closing.

In this case, Kim's demonstrated ability to maintain an excellent credit history (fully documented in the file) confirms a strong willingness to repay debt as agreed, which compensates for the higher than recommended debt-to-income ratios. Unless other factors in the loan file related to capacity and collateral value indicate otherwise, Kim's loan would be considered investment quality.

*In contrast*, if Kim's previous mortgage and auto loan, which she listed on her application, were not contained in her credit report but were reported on a verification from her credit union, then her credit report would not reflect her complete credit profile. You would then need to review the additional credit information. If the direct verification indicated two 60-day late payments on her mortgage and an auto repossession in the last 12 months, Kim's willingness to repay as agreed would not be confirmed even though her credit score was 730. Then, Kim's loan would not meet the definition of investment quality.

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#### FICO BUREAU SCORE OF 660 TO 620, OR MDS BANKRUPTCY SCORE OF 550 TO 700

**COMPREHENSIVE REVIEW:** Underwrite all aspects of the borrower's credit history to establish the borrower's willingness to repay as agreed.

A comprehensive review focuses on all the features of the basic review, plus an in-depth review of the borrower's credit history. This review includes evaluating the number and use of credit lines, the number of derogatory accounts, and the age and disposition of such accounts.

**OUTCOME:** When your review of the credit documentation is complete, you will have considered the explanations for derogatory accounts and inquiries (if any), whether the explanations are consistent with other documentation in the file, and the effect of the derogatory information on the borrower's overall creditworthiness. You must document your rationale for finding sufficient willingness to repay as agreed and note any

compensating factors identified in your review that establish the borrower's willingness to repay as agreed.

**CASE STUDY:** Spencer's credit report shows a MDS bankruptcy score of 650. The report reveals six revolving accounts, four of which were 30 days late one to three times in the past. All accounts are current and have been for six months. The file includes documentation of credit not reported on the credit report in the form of direct verifications for his mortgage, auto and credit union loans. All verifications confirm excellent payment histories for 36 months. Spencer is applying for an 80 percent loan to purchase a new home. His housing expense-to-income ratio will be 21 percent, his total debt-to-income ratio will be 36 percent, and he will have two months' reserve after closing.

This case illustrates that information not included on the credit report may play an important role in establishing the borrower's willingness to repay as agreed. Though Spencer's credit score is in the middle default-risk range, the significant obligations that were not included on his credit report establish a willingness to repay as agreed. Unless other risk factors are present, Spencer's loan would be considered investment quality.

*In contrast*, if Spencer's verification of mortgage indicates a 1x30 one year ago and a 1x30 four months ago, the additional documentation would not support his willingness to repay as agreed. Then, Spencer's loan would not meet Freddie Mac's definition of investment quality.

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#### **FICO BUREAU SCORE LESS THAN 620 OR MDS BANKRUPTCY SCORE OVER 700**

**CAUTIOUS REVIEW:** Perform a particularly detailed review of all aspects of the borrower's credit history to ensure that you have satisfactorily established the borrower's willingness to repay as agreed. Unless there are extenuating circumstances, a credit score in this range should be viewed as a strong indication that the borrower does not show sufficient willingness to repay as agreed.

A cautious review focuses on all the features of both the basic and comprehensive reviews, plus an intensive analysis of the borrower's credit reputation (willingness to repay as agreed) to determine whether extenuating circumstances can be used to determine sufficient willingness to repay as agreed.

**OUTCOME:** When your review of the credit documentation is complete, you will have considered the explanations and supporting documentation for derogatory accounts and inquiries (if any), whether the explanations are consistent with other file documentation, and what effect this information has on establishing the borrower's credit reputation. In addition, you will have considered the amount and use of credit, the age of the credit, the number of outstanding accounts, and the credit profile of the borrower. You must identify

and document extenuating circumstances to satisfactorily establish the borrower's willingness to repay as agreed.

**CASE STUDY:** Bob's credit report shows a FICO bureau score of 602. The details of his report reveal six open accounts (four revolving and two installment debts) that have no late payments reported in the past 18 months. His credit during the previous three-year period, however, reveals a significant pattern of 30- and 60-day late payments and one paid collection on a revolving account. Bob is applying for a 90 percent loan to purchase his first home. His housing expense-to-income ratio will be 28 percent, his total debt-to-income ratio will be 36 percent, and he will have two months' reserve after closing.

Bob explained that until 18 months ago he was employed as a commissioned salesman and his income was not stable. When his company closed, Bob was unemployed and looking for work for three months. He is now in a full-time salaried position, has paid the collection account and has maintained excellent credit for 18 months. The facts of this case clearly show that Bob has not only achieved income stability but has re-established his credit reputation. In this scenario, a thorough review of Bob's credit profile helped to ensure that he demonstrates sufficient willingness to repay as agreed. Unless other risk factors are present, Bob's loan would be considered investment quality.

*In contrast*, if Bob's explanation for his delinquent credit was that he incurred significant expenses due to unforeseen circumstances for which he had no documentation, or the documentation he provided was not consistent with his credit history, it would be impossible to establish that extenuating circumstances caused Bob's problems. His willingness to repay as agreed would not be satisfactorily established. Under these circumstances, Bob's loan would not meet Freddie Mac's definition of investment quality.

## Exhibit B

**SUBJECT:** Questions and Answers on Using FICO Bureau and MDS Bankruptcy Credit Scores

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Credit scores are available for most borrowers. They are easy and inexpensive to obtain. The following Q&A provides background on FICO bureau and MDS bankruptcy credit scores, tells you how to obtain them and offers guidelines on using them. We have included this information to help you incorporate credit scores into your business processes and maximize the benefits of using them. Please note that Freddie Mac has no direct role in preparing credit scores. Also, the information in this Q&A about credit reporting companies, credit repositories and the scores they provide may change without our knowledge.

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**Q1** What are credit scores?

**A1** Credit scores are objective assessments of a borrower's credit reputation, based on information documented in a credit report. Lenders have used them in various forms for many years to assess the credit reputation of an individual. The assessment results in a numeric calculation, or score, for each individual. Credit scores rank individuals by risk and are calculated from information that has proven to be indicative of loan performance.

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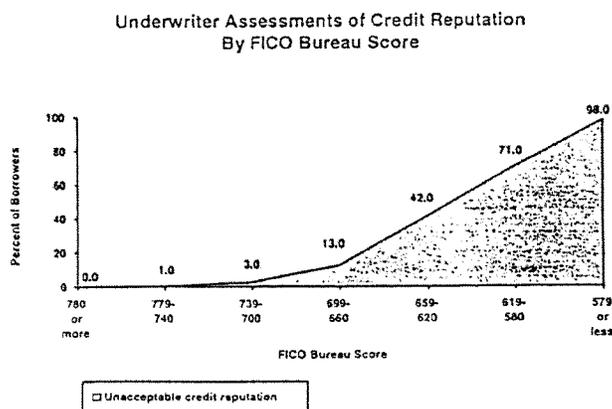
**Q2** How did Freddie Mac determine that certain credit scores are predictive of mortgage performance?

**A2** To determine the usefulness of credit scores as predictors of mortgage performance, we obtained FICO bureau and MDS bankruptcy scores available at or near the time of origination on hundreds of thousands of Freddie Mac loans. The loans were originated over several years and selected from a wide distribution of lenders, product and loan types, and geographic areas. We conducted extensive statistical analysis on the performance of these loans, which documented a strong correlation between credit scores and mortgage performance as illustrated by the chart in the industry letter. This analysis convinced us that credit scores are a valid, quantifiable and objective mortgage underwriting tool.

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**Q3** How does an underwriter's assessment of a borrower's credit reputation compare with the borrower's credit score?

**A3** Freddie Mac's Quality Control underwriters reviewed thousands of loans to compare their assessments of the borrowers' credit reputations with the borrowers' FICO bureau scores. As the chart below illustrates, there was a strong correlation between the underwriters' judgments and the actual scores. It's important to note that the chart also confirms that some borrowers with scores indicating high risk were found to have acceptable credit reputations. More than one-half of the borrowers with FICO bureau scores in the 659-620 range were found acceptable. Other borrowers with scores indicating lower risk were found to not have acceptable credit reputations. Credit scores are indicators, not absolutes.



**Q4** Has Freddie Mac studied the effectiveness of FICO bureau and MDS bankruptcy scores as predictors of default for mortgages secured by 2- to 4-unit properties?

**A4** Yes. There is also a strong correlation between scores and the performance of mortgages secured by 2- to 4-unit properties.

**Q5** Does Freddie Mac recommend different score ranges for 2- to 4-unit properties?

**A5** Yes. Because of the higher risk of this product type, we recommend the following ranges for 2-unit and 3- to 4-unit properties, respectively:

| Property Type | If the FICO bureau score is | or the MDS bankruptcy score is | then the recommended approach to reviewing credit is   |
|---------------|-----------------------------|--------------------------------|--|
| 2-unit        | over 680                    | less than 450                  | BASIC: Underwrite the file as required to confirm the borrower's willingness to repay as agreed.   |
| 3-4 unit      | over 700                    | less than 400                  |  |
| 2-unit        | 680-640                     | 450-600                        | COMPREHENSIVE: Underwrite all aspects of the borrower's credit history to establish the borrower's willingness to repay as agreed.   |
| 3-4 unit      | 700-660                     | 400-550                        |  |
| 2-unit        | less than 640               | over 600                       | CAUTIOUS: Perform a particularly detailed review of all aspects of the borrower's credit history to ensure that you have satisfactorily established the borrower's willingness to repay as agreed. Unless there are extenuating circumstances, a credit score in this range should be viewed as a strong indication that the borrower does not show sufficient willingness to repay as agreed. |
| 3-4 unit      | less than 660               | over 550                       |  |

**Q6** Does Loan Prospector<sup>SM</sup>, Freddie Mac's automated underwriting service, use credit scores?

**A6** Yes, but they are only one of many factors that are weighed in the Loan Prospector assessment of credit quality.

**Q7** How does using Loan Prospector differ from using credit scores in manual underwriting?

**A7** Loan Prospector refines the predictive value of credit scores by assessing other data specific to each mortgage. Loan Prospector incorporates credit scores and a

rules-based assessment into a comprehensive analysis that weighs a variety of factors, including layered risk, to provide a Freddie Mac purchase decision.

Also, Loan Prospector enables lenders to streamline many origination functions through automation because Freddie Mac is re-engineering credit policy to match credit risk. Loan Prospector provides a comprehensive and automated risk evaluation that includes information from the loan application, credit file and property data to determine the likelihood of mortgage repayment.

Finally, for loans receiving an accept purchase decision from Loan Prospector, the lender is relieved of responsibility for certain representations and warranties.

**Q8** How can these credit scores enhance my manual underwriting process?

**A8** Credit scores enhance, but do not replace or take away from, the flexible underwriting guidelines in Chapter 37 of the *Single-Family Seller/Servicer Guide* (the Guide). Your underwriter will continue to review each file on a case-by-case basis to evaluate the borrower's creditworthiness and apply all relevant underwriting criteria in a manner that considers the borrower's individual situation.

Using these credit scores as an additional tool will help you

- Identify loans with a higher likelihood of default
- Distribute underwriter workload effectively
- Improve overall loan quality
- Achieve consistency and objectivity in your underwriting decisions
- Focus quality control reviews
- Assess origination channels
- Manage servicing value and costs

Remember that you are still responsible for underwriting the credit reputation, as well as the file as a whole, to make your investment-quality decision.

**Q9** How do credit scores relate to assessing the overall investment quality of the loan?

**A9** Underwriters must assess the combined effect of all "three Cs" of mortgage underwriting—capacity, collateral value and credit reputation. Each of the "three C" components is a key element in establishing investment quality. FICO bureau and MDS bankruptcy scores help to quantify the credit reputation component.

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Once the components are documented, the underwriter can review credit reputation, capacity and collateral value, and assess risks that may be present in one or more elements to determine the overall investment quality of the loan.

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**Q10** How should an underwriter respond to a score that may indicate a high likelihood of default?

**A10** While Freddie Mac is convinced of the predictive power of these scores, we also believe that an experienced underwriter can recognize factors within a credit profile that may more accurately reflect the borrower's credit reputation. After assessing the entire credit history, the underwriter should make a decision about the borrower's credit reputation and then use that *in conjunction with other "three C" components* to make the overall investment-quality decision. If the underwriter determines that a borrower's credit reputation is marginally acceptable, a low loan-to-value (LTV) ratio would be a compensating factor. However, the borrower (or borrowers as a unit if there are multiple borrowers) must be found creditworthy by the underwriter.

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**Q11** Can I use scores that imply a very low credit risk as a compensating factor for higher debt-to-income ratios?

**A11** Yes. For example, a FICO bureau score of 720 or higher (or an MDS bankruptcy score of 350 or less)\* will generally imply a good-to-excellent credit reputation. If your underwriter confirms that the borrower's credit reputation is indeed excellent, then it could be used as a compensating factor for debt-to-income ratios that are somewhat higher than our traditional guidelines as defined in Guide section 37.6.

\*For 2-unit properties: FICO bureau of 740 or higher (MDS bankruptcy 300 or lower)

\*For 3- to 4-unit properties: FICO bureau of 760 or higher (MDS bankruptcy 250 or lower)

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**Q12** What is "layering of risk?"

**A12** "Layering of risk" occurs when multiple high-risk factors are present in a single loan file. For example, minimally acceptable willingness to repay (credit reputation risk) in a file that also reflects less than the standard two months' reserve requirement (capacity risk) would be an example of risk layering. Underwriters should exercise extra care when multiple high-risk factors are present within a single loan application to ensure that investment quality has not been compromised.

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**Q13** How can using credit scores benefit borrowers?

**A13** Borrowers benefit when credit decisions are based on consistent, objective criteria that accurately assess default risk. Tools that, in an unbiased manner, help separate loans that are likely to perform well from loans that are less likely to perform well ensure the continued availability of mortgage money to all creditworthy borrowers. Credit scores are an effective tool to help you promote this goal.

**Q14** What types of credit scores do you recommend I obtain?

**A14** Freddie Mac analyzed two types of credit scores and determined that they are predictive of mortgage performance. These two types, FICO bureau and MDS bankruptcy scores, are marketed under the following product names:

|                               |   |
|-------------------------------|---|
| <u>FICO bureau scores:</u>    | Equifax BEACON <sup>SM</sup><br>Trans Union EMPERICA <sup>®</sup><br>TRW/FICO                 |
| <u>MDS bankruptcy scores:</u> | Equifax Delinquency Alert System <sup>SM</sup><br>Trans Union DELPHI <sup>SM</sup><br>TRW/MDS |

**Q15** What is the difference between these two types of scores?

**A15** The two scores are generated by two different companies in partnership with the three major credit repositories. FICO bureau scores are produced by San Rafael, CA-based Fair, Isaac and Co., Inc. (FICO) and MDS bankruptcy scores are produced by Atlanta-based CCN-MDS (MDS). Either type of score may be used.

FICO bureau and MDS bankruptcy scores have different scales. MDS bankruptcy scores range from 0 to 1300, but under some circumstances can occasionally go outside these bounds. FICO bureau scores range from about 400 to about 900. When interpreting scores, the *lower* the FICO bureau score or the *higher* the MDS bankruptcy score, the greater the risk of default.

**Q16** Are there other types of credit scores?

**A16** Yes, other types of scores (such as mortgage credit scores) are commercially available. Freddie Mac has not validated the predictive nature of scores other than FICO bureau and MDS bankruptcy.

**Q17** How can I obtain FICO bureau or MDS bankruptcy credit scores?

**A17** You can get both scores from most credit reporting companies or any of the three major credit repositories. You can obtain these credit scores using either of the following options, depending on your needs:

**Option 1: Obtaining Credit Scores Through Credit Reporting Companies**

You can contact your credit reporting company and ask to add the credit scores from the three main repositories to the credit reports you currently receive. Most credit reporting companies have the capability to do this at a minimal cost per score and are able to begin providing repository credit scores within days of changing your contract.

**Option 2: Obtaining Credit Scores Through Credit Repositories**

To obtain credit scores from a credit repository, contact a representative from the repository of your choice. If you are already receiving services from the repository, call your repository service representative directly. If you do not have a current agreement with the repository, you can call the toll-free numbers listed below for more information.

|             |                |
|-------------|----------------|
| Equifax     | (800) 685-5000 |
| Trans Union | (800) 899-7132 |
| TRW         | (800) 831-5614 |

**Q18** How much does it cost to obtain credit scores?

**A18** Costs vary by credit reporting company or credit repository (and the options you choose), but in general credit scores are not expensive to obtain.

**Q19** What information should I specifically request?

**A19** You may find it most effective to request either FICO bureau or MDS bankruptcy scores for all borrowers, including nonoccupant coborrowers. It is not necessary to

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order both types of scores. Whether you choose FICO bureau or MDS bankruptcy scores for a borrower, obtaining the borrower's scores from each of the three major repositories will provide more accurate information than one or two, because different repositories may maintain a somewhat different credit history for the same individual. For multiple borrowers, we suggest requesting these scores for each borrower, including a husband and wife individually.

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**Q20** Are FICO bureau and MDS bankruptcy scores based solely on a borrower's delinquency history?

**A20** No. A borrower's delinquency history is only one of many factors considered in the calculation of a FICO bureau or MDS bankruptcy score. Numerous other items of credit information are also key factors.

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**Q21** If I get more than one score, which one should I use?

**A21** Scores for a given borrower often differ among repositories, but as a general rule scores will be similar enough to provide guidance on your approach to underwriting the credit reputation of a borrower. If you obtain three scores for a borrower, we suggest using the middle score. If you obtain two scores, we suggest using the lower FICO bureau score or the higher MDS bankruptcy score.

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**Q22** What if no scores were generated for a specific borrower?

**A22** First check the borrower's name, social security number and address for accuracy. Even if you requested a score correctly, one may not be available. However, another repository may successfully generate a score for your borrower. A loan file can be considered complete without any credit scores.

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**Q23** Where can I get more information about using credit scores?

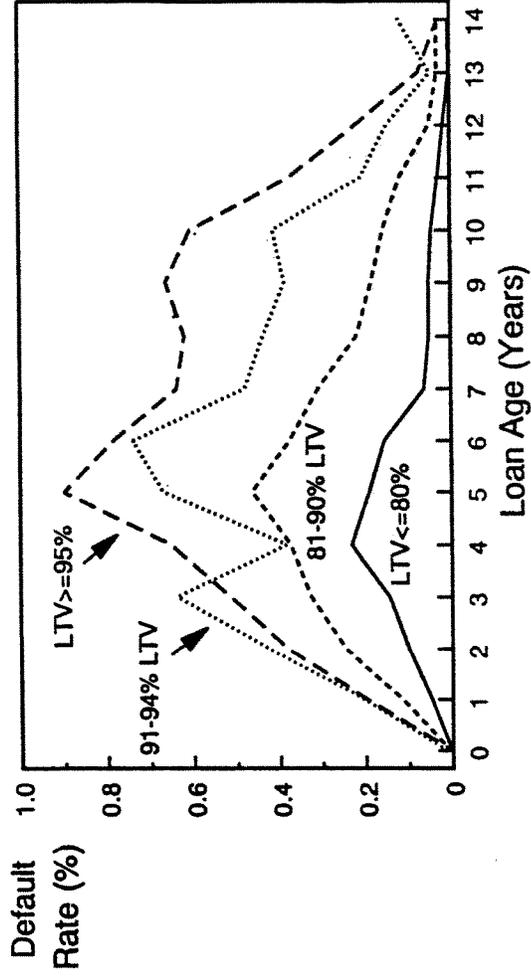
**A23** Your credit reporting company or credit repository can provide training and other materials.

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ATTACHMENT 3

Goldman, Sachs & Co.

### Estimated Default Rates by Loan-to-Value Ratio



Source: Robert Van Order, Freddie Mac

DATE: LATE 1990s

**Attachment 4 to Submitted testimony of Edward Pinto before US House of Representatives Oversight Committee - December 9, 2008**

**Background paper on selected events leading up to the conservatorships of Fannie Mae and Freddie Mac**

**Unpublished research by EDWARD J. PINTO, epinto@lendersres.com**

*November 25, 2008*

**The problems with Fannie and Freddie are systemic:**

- a. **The inherent conflict of serving two masters: safety and soundness enforced by its HUD regulator vs. low and moderate income housing mandates imposed by Congress and enforced by its HUD regulator**
- b. **The irresistible lure of outsized profits offered by portfolio mortgage investments made possible by the implied federal guarantee and low capital requirements.**

**The delay to real and effective reform was due to the opposition of the GSEs themselves and their continued effectiveness in lobbying their allies and silencing their enemies in Congress. Key to this effort was their continued use of low and moderate income housing efforts as a “reverse earmark” targeted at Congress. This was crony capitalism at its worst. The mere fact that Congress continued to remain opposed to real reform after both Fannie and Freddie experienced massive accounting scandals in the early part of this decade is proof positive. Fannie and Freddie had gotten so powerful that they felt that they should be able to dictate the terms of their own reform to Congress or block the reforms if they did not like them.**

**Many unsuccessful efforts were undertaken to convince Congress to require the GSEs to have more capital, be subject to an independent and stronger regulator, and to reduce the exposure to the financial system created by the immense size and risks contained in the GSEs portfolios.**

**The Bush administration, in its FY2005 Budget released in February 2004,**

**“expresse[d] concern about the systemic risk posed by the GSEs. Noting that ‘even a small mistake by a GSE could have consequences throughout the economy,’ the budget proposal call[ed] for strong market discipline, effective supervision and adequate capital requirements. The budget also call[ed] for a new regulator for all three housing GSEs to be housed within Treasury and given responsibility for both safety and soundness and approval of new activities.” Mortgage Banking, April 1, 2004.**

**These two Government Sponsored Enterprises (“GSEs”) each operate 2 related but inherently different businesses with very different risk profiles:**

1. **Mortgage guaranty business:** each GSE creates mortgage backed securities (“MBS”) backed by the full faith and credit of the GSE. This guaranty, along with extremely favorable risk based capital rules, makes MBS both liquid and profitable for investors (including US banks). Traditionally these MBS were sold to investors in the US and, starting in the 1980’s, in large quantities to investors around the world. While the income stream and profit potential is relatively steady, it is small compared to the income stream and profit potential from placing the same mortgage in Fannie or Freddie’s mortgage portfolio. The MBS guarantee fee plus float averages 15-18 basis points per year. The main risk from the mortgage guaranty business is credit risk.
2. **Portfolio investment business:** both GSEs now operate huge mortgage portfolios (a high of \$1.58 trillion in 2003 and a combined \$1.4 trillion at mid-2008). This was not always the case. In 1990 their combined portfolios were \$136 billion, mostly in the hands of Fannie. While Fannie had historically relied heavily on its portfolio, Freddie Mac relied primarily on its MBS business until the 1990s. During the 1980s Freddie kept a relatively small mortgage portfolio as a perfect hedge against its MBS business. The lure of the portfolio is its opportunity for high revenues - the spread earned on a mortgage held in portfolio can average 120-130 basis points (excluding hedge gains). This is about 8 times the revenue available from the guaranty business. Given the GSEs’ low capital requirements, the highly leveraged portfolios allowed for robust returns on equity in good times.

Having a huge portfolio business has other advantages:

1. **Tax exempt bond safe harbor:** IRS rules allow a firm to invest up to 2% of its assets in tax exempt bonds and deduct the interest used to finance them from federal income tax. This adds perhaps another 4 basis points to the spread earned on the entire mortgage portfolio. No portfolio – no 2% safe harbor.
2. **Liquidity portfolio:** back in the mid-1980s, pre-payments on Fannie’s mortgage portfolio were coming in faster than the money could be redeployed into mortgage assets. Yet, Fannie wanted to keep selling its “AAA” rated debt so as to maintain the predictability of its debenture issuances in the marketplace. The liquidity portfolio was born. Cash raised in excess of immediate needs was invested in lower rated assets so as to create an arbitrage spread. Over time and even as the original need faded, the liquidity portfolio grew to a huge size. Early in 2008 it was again ballooning. The arbitrage profit it earns adds perhaps another 3 basis points to the spread earned on the entire mortgage portfolio. However soured investments such as Freddie’s \$1+ billion loan to Lehman Brothers create their own havoc and losses. No portfolio – no need for a liquidity portfolio.

This incremental extra 7 basis points earned from tax exempt bonds and the liquidity portfolio roughly equals the pre-tax profit opportunity on the MBS business.

3. Both Fannie and Freddie developed sophisticated hedging operations which ostensibly reduced the mismatch between 30 year fixed rate mortgage investments (and unpredictable pre-payment speeds) and the shorter debt used to fund the mortgages. Over time this added perhaps another 20-30 basis points in spread earned on the entire mortgage portfolio.

These three additional advantages made it harder and harder for other entities holding mortgage portfolios (mainly banks and thrifts) to compete with the two GSEs.

4. Given the attractiveness of mortgage portfolio returns, Fannie and Freddie's appetite for mortgage portfolio investments became insatiable. Fannie and Freddie started buying their own MBS for their portfolios. Then each started buying each other's MBS. Eventually, they started buying "AAA" rated tranches of private label sub-prime and Alt-A securities as investments. The GSEs' total purchases in 2006 and 2007 of these private label securities backed by risky loans are estimated at over \$225 billion. At one point during this period their combined purchases were estimated to total 30% to 50% of mortgage-securities issued by Wall Street.
5. Portfolio investing had yet one more advantage: the opportunity for "managing" income. While accounting rules were such that this opportunity was much greater in the early to mid-1980s, it was still a factor in the late 1980s and early 1990s. If one had a choice as to whether to add \$5 billion to its guaranty business or its portfolio business in July of a given year, part of the decision process would be the financial impact on the current year. Due to the relatively small revenue impact for the current year (perhaps 5-6 basis points) largely offset by reserving requirements, adding say \$5 billion in guaranty business would have little or no impact on current year income. However, put the same \$5 billion into the portfolio and the result is quite different. Revenue for the 5 months might total 60 basis points (somewhat offset by reserving requirements). The incremental impact on current year pre-tax income might be \$20-\$25 million.

As a result of all these advantages, the GSEs almost always out bid other financial institutions for the mortgages they wanted to buy. Further, their appetites were so huge their purchases had a distorting effect on the markets.

Current losses and past accounting scandals are just two manifestations of the problems caused by the GSEs maintaining portfolios.

Fannie and Freddie have had outsized losses from its share of subprime and alternative mortgages. In point of fact 50% of Fannie's and ■% of Freddie's recent mortgage write offs are a result of portfolio investments in Alt-A loans. For example, as of June 30, 2008, Fannie had \$307 billion in Alt-A mortgages on its books, comprising 11.5% of its mortgage exposure. These loans accounted for 50% of Fannie's credit costs booked during the 2<sup>nd</sup> quarter 2008. In fact both GSEs should have known better, as both had vast experience with the pitfalls of investing in Alt-A loans in the late 1980s and early 1990s (back then they were known simply

as no doc/low doc loans). The *Wall Street Journal* in 1991 had a Page 1 story entitled “*Haste Makes... Quick Home Loans Have Become Another Banking Mess*”. Mozilo was quoted as follows: “At one time, I was a prophet of low-doc. The problem is that it went much too far. Human beings are basically rotten. If you give them an opportunity to screw up, they will.” The WSJ went on to report that Fannie stopped buying no-doc and low-doc loans in October 1990 and Freddie did the same in April 1991. Clearly Fannie and Freddie did not learn from this earlier brush with Alt-A/liar loans and the lending mess it created. Countrywide, still headed up by Mr. Mozilo, was Fannie’s largest customer, accounting for an amazing 29% of its business in 2007. It was also one of Freddie’s largest customers. Mr. Mazilo proved his own observation that if you give people an opportunity to screw up, they will.

But it gets worse. All told the GSEs invested about \$1.6 trillion in subprime, Alt-A, other default prone loans and private mortgage backed securities backed by subprime and Alt-A loans. The GSEs even invested heavily in the “AAA” tranches of subprime mortgage securities. The GSEs hold about \$122 billion in mostly “AAA” tranches of subprime mortgage securities (about 12% of all sub-prime securities). Add to this the GSE’s investments of approximately \$77 billion in “AAA” tranches of Alt-A mortgages. All told the GSEs are responsible for 34% of outstanding subprime and 59% of outstanding Alt-A loans. These loans and securities are causing outsized losses.

The lure of the portfolio’s opportunity for outsized profits noted above come with even bigger opportunities for outsized risks:

1. Credit risk – while generally the same as for the mortgage guaranty business, investments in affordable housing loans tended to be concentrated in the portfolio. In addition, all of the investments in “AAA” rated tranches of sub-prime and Alt-A securities were held on the balance sheet. These investments would prove toxic.

The rest of the risks listed below are applicable to the mortgage portfolio and do not apply to the mortgage guaranty business.

2. Interest rate risk: long-term fixed rate mortgages have the inherent risk of pre-payment depending on the interest environment over the course of the loan. The challenge for a portfolio investor is to initially fund for long enough, but not too long. Fannie was almost brought down by the interest mismatch in its portfolio in the early 1980s (see below for more on this brush with insolvency).
3. Hedging risk: given the inherent interest rate risk of fixed rate mortgages, the GSEs took to mounting ever larger and more sophisticated hedging operations. However, hedging profits and losses can be quite volatile on a quarterly and annual basis. Applying hedge accounting rules can easily double or triple a quarterly profit or wipe it out. The GSEs solution was to “manage” hedge profits and losses. In Fannie’s case it “managed” losses of \$11 billion and in Freddie’s case it “managed” gains of \$5 billion – as both attempted to manage earnings.

4. **Control risk:** as their hedging operations became ever larger, more sophisticated and more complex, fewer and fewer people understood the hedging operation and the operations complexities outstripped accounting systems and controls. This led to both GSEs being involved in accounting scandals and paying large fines (Freddie paid \$125 million in 2003 and Fannie paid \$400 million in 2006).
5. **Basis risk:** any portfolio investor in mortgages (both fixed rate and ARMs) must anticipate not only the impact of future interest rate changes on its sale of new debt to replace expiring debt, but it must factor in the potential for changes in its basis risk (the spread between a benchmark security such as a US treasury bond and the price paid by the portfolio investor). This risk was recently demonstrated on August 19, 2008 when Freddie sold 5 year notes at 113 basis points over a similar length US treasury bond. This was 44 basis points higher than Freddie paid as recently as May 2008.
6. **Market access risk:** if basis risk increases to an unmanageable level, a portfolio lender is then faced with market access risk. On a combined basis Fannie and Freddie have over \$220 billion in bonds due by September 30, 2008. These refundings will be a major test of the GSEs continued market access.
7. **Liquidity risk:** if market access becomes closed off or limited to the GSEs, they then face liquidity risk as their immediate cash needs cannot be covered by illiquid or impaired assets.
8. **Counter-party risk:** the GSEs have a variety of counter-party risks relative to mortgage insurance companies, defaulting or defunct lenders, and hedge counter parties.
9. **Risk from lack of investment diversity:** unlike most financial guaranty companies which invest their excess capital in highly rated and diversified investments, the GSEs have invested most of their surplus capital in mortgages. They have, in effect, doubled down.
10. **Profitability risk:** both GSEs invested heavily in tax exempt bonds and tax credits. These assets are valuable to entities that have federal tax liabilities. Since the 3<sup>rd</sup> quarter of 2007, the GSEs have lost a combined \$15+ billion. Their tax advantaged investments have now become another problem to be addressed.

The shareholders of the GSEs benefited mightily for 20 years from the GSEs legendary take-no-prisoners lobbying efforts mounted to protect the GSEs' charters and their mixed public/private structure. For example Fannie's stock increased over 70 times between 1984 and December 2000, when Fannie reached its all-time high. The shareholders were attracted by the irresistible lure of outsized profits offered by portfolio mortgage investments made possible by the implied federal guarantee and low capital requirements. The GSEs core goal was to protect the immense financial benefits and leverage their shareholders derived from the implicit federal GSE guarantee by offering up ever greater low and moderate housing assistance to the powers on Capital Hill. Unfortunately the GSEs found that once they started down this road; Congress had an insatiable appetite for this "off balance sheet" housing aid. There was no turning back, the housing goals set by Congress and the GSEs' regulator had to be met, even if it meant taking on ever

greater levels of credit risk. Eventually the GSEs mission included buying subprime securities. Their charters had to be protected at all costs. The additional material credit risks this entailed are noteworthy given that the companies were always accused of being thinly capitalized and highly leveraged. The GSEs were faced, whether they recognized it or not, with an incredibly difficult (and most would say impossible) task of serving two masters: safety and soundness concerns as enforced by its HUD regulator vs. low and moderate income housing mandates imposed by Congress and enforced by its HUD regulator. Needless to say they failed the test. (Elaborate on losses related to mandates and prior HUD interference.)

One has to ask whether it was the flawed nature of Fannie and Freddie and their easy money lending practices that helped feed both the run-up in home prices and the eventual decline that we are experiencing today. It is absolutely critical that the real reasons for the failure of the GSEs be analyzed. Otherwise we run the danger of crafting a solution that takes us down the same road that led us to where we are today. The bailout/rescue of the GSEs will be incredibly expensive. We need to get it right the first time.

It has long been the GSEs desire to protect their remarkable charter advantages at all costs and risks that led them to offer Congress ever larger promises of reverse earmarks. Fannie's history is representative. In the mid- to late -1980s Fannie's affordable housing efforts were substantial but low risk. Starting in the later part of the 1980s Fannie decided to protect its charter privileges at all costs. This led to the following series of public pronouncements:

1. 1991 - CEO Jim Johnson announces Fannie's \$10 billion "Opening the Doors to Affordable Housing" initiative.
2. 1992 - Congress decides it likes the "reverse earmark program", but seizes the initiative from the GSEs. The deceptively named "Federal Housing Enterprises Financial Safety and Soundness Act of 1992" is passed which, for the first time, mandates formal affordable housing goals and authorizes HUD to set, monitor and enforce them. Congress sets three goals: low- and moderate-income housing, special affordable housing, and underserved areas. Congress has a new piggy bank and best of all it was off budget (or so they thought). Act also establishes a weak Fannie/Freddie regulator which is housed in HUD.
3. 1993 - HUD sets its first set of affordable housing goals.
4. 1994 - CEO Jim Johnson announces a new goal of \$1 trillion (yes trillion) for its "Opening the Doors to Affordable Housing" initiative. A pattern of one-ups man ship develops.
5. 1994 - Fannie opens the first local partnership offices. Eventually these local out reach offices will blanket the country. The main goal was to seal the charter deal with Congress. This becomes an aggressive "reverse earmark" program for members of Congress who support Fannie.
6. 1995 - HUD issues new regulations raising the GSEs' goals.
7. 1996 - Fannie opens a major new front in the "reverse earmarks" war when it contributes \$350 million in stock to the Fannie Foundation.

8. 1997 and following - Fannie and Freddie have new competition as a number of the Federal Home Loan Banks (FHLBs) establish their own mortgage purchase programs. The FHLBs are themselves GSEs. Their new programs are designed to compete with Fannie and Freddie for the highest credit quality loan originations. Over the next 10 years, hundreds of billions in low risk loans are diverted from Fannie and Freddie.
9. 1998 - Fannie announces national roll out of its high risk, ultra low down payment 97% LTV loan.
10. 2000 - HUD issues new regulations raising the GSEs' goals for the second time. No matter how hard Fannie tries, HUD keeps raising the GSEs' affordable housing goals.
11. 2001 - CEO Frank Raines announces Fannie's "American Dream Commitment", a ten-year, \$2 trillion pledge.
12. 2004 - HUD once again issues new regulations raising the GSEs' goals for the third time. The new goals impose significantly higher percentages and increased goals kick in for 2005 and for the first time mandates further annual increases for each of the next 3 years (through 2008).
13. 2006-2007 - In what would prove to be a self-administered death blow, Fannie takes one more swing at meeting its affordable housing goals by making over \$350 billion in high risk subprime and Alt-A investments.

The financial meltdown that led to the nationalization of Fannie and Freddie is directly attributable to the trillions of dollars in loans using loose lending standards promoted by Fannie and Freddie to protect their charters as aided and abetted by Fannie and Freddie's supporters in Congress and its erstwhile regulator - HUD. One can say that this is a case of Congress and HUD making a more than willing Fannie and Freddie drive the two companies into the ground - all in the name of affordable housing.

Mr. Pinto is the former Executive Vice President and Chief Credit Officer of Fannie Mae. He held this and other positions at Fannie Mae from 1984 - 1989. From 1974-1982 he worked on affordable housing efforts at the Michigan State Housing Development Authority

Attachment E: to Sublimated testimony of Edward Pinto before US House of Representatives Oversight Committee - December 9, 2008  
Prepared by Edward Pinto, 11/28/08

| All data as of 6/30/08, and except as otherwise noted is from Fannie's August 2008 Investor Summary or Freddie's Update dated August 2008 \$ in billions | Combined Fannie and Freddie Credit Books Showing Composition of Their \$1.8 trillion Subprime, Alt-A, and Other Default Prone Loan Exposure |   | Risk ratings to whole loans                                   |           |              |              |  |                                    |                               |                        |          |                | Grand total | % of total single-family mortgage exposure (PLMBS) |          |
|--|---|---|---|-----------|--------------|--------------|--|------------------------------------|-------------------------------|------------------------|----------|----------------|-------------|--|----------|
|  | Total single-family mortgage exposure (PLMBS)   | Subprime (as defined by Fannie/Freddie) | Additional subprime (as generally defined by bank regulators) | FICO <620 | FICO 620-649 | FICO 650-674 | Original LTV >90% (per means tested) (as of 6/30/08) | Alt-A (a high % have second liens) | Interest rate (as of 6/30/08) | Option Arm (estimated) | Subtotal | Subprime Alt-A |             |  | Subtotal |
| Fannie (declared)  | \$2,760.0   | \$8.0                                   | \$127.4   | \$270.0   | \$183.0      | \$87.3       | \$124.4  | \$44.4                             | \$10.0                        | \$84.5                 | \$28.3   | \$28.4         | \$65.7      | \$900.2  | 35%      |
| Freddie (declared)   | \$1,870.0   | \$0.0                                   | \$75.3  | \$165.0   | \$50.0       | \$76.8       | \$17.8   | \$81.7                             | \$88.0                        | \$49.0                 | \$48.0   | \$134.0        | \$528.5     | \$28.5   | 32%      |
| Combined (declared)  | \$4,630.0   | \$8.0                                   | \$202.7   | \$435.0   | \$233.0      | \$164.1      | \$142.2  | \$126.1                            | \$188.0                       | \$98.0                 | \$76.3   | \$177.4        | \$1,185.8   | \$199.7  | 34%      |
| Combined % (from 2005-2007)  |   |   | 4.4%  | 9.4%      | 5.0%         | 3.6%         | 3.1%   | 2.7%                               | 4.1%                          | 2.1%                   | 1.6%     | 3.9%           | 6.7%        | 4.3%   |          |

1. Fannie definition. Subprime Loans: A subprime mortgage loan generally refers to a mortgage loan made to a borrower with a weaker credit profile than that of a prime borrower. As a result of the weaker credit profile, subprime borrowers have a higher likelihood of default than prime borrowers. Subprime mortgage loans are typically originated by lenders specializing in these loans or by subprime divisions of a large lender. In reporting our subprime exposure, we have classified mortgage loans as subprime if the mortgage loans are originated by one of these specialty lenders or a subprime division of a large lender. 2007 10-Q, p. 129

2. Freddie regulators - 2001. Expanded Guidance for Subprime - <http://www.freddiemac.com/regulators/2001/10/04/1.pdf>

3. Freddie regulators - 2001. Expanded Guidance for Subprime - <http://www.freddiemac.com/regulators/2001/10/04/1.pdf>

4. Freddie regulators - 2001. Expanded Guidance for Subprime - <http://www.freddiemac.com/regulators/2001/10/04/1.pdf>

5. CLTV >90% - Fannie declared 10.5% for <620 FICO overlap (same % as CLTV >90%) and declared an estimated 25% for 620-649 FICO (used 2x incidence in overall portfolio, same incidence as found for <620 FICO). Freddie: declared 10% for <620 FICO overlap (same incidence as found for <620 FICO). Fannie: declared 10% for <620 FICO overlap, declared an estimated 25% for 620-649 FICO (used 2x incidence in overall portfolio, same incidence as found for <620 FICO).

6. CLTV >90% - Fannie declared 10.5% for <620 FICO overlap (same % as CLTV >90%) and declared an estimated 25% for 620-649 FICO (used 2x incidence in overall portfolio, same incidence as found for <620 FICO). Freddie: declared 10% for <620 FICO overlap (same incidence as found for <620 FICO). Fannie: declared 10% for <620 FICO overlap, declared an estimated 25% for 620-649 FICO (used 2x incidence in overall portfolio, same incidence as found for <620 FICO).

7. Freddie: declared 4% for <620 FICO overlap, declared 2% for 620-649 FICO overlap (average FICO of 620). Fannie: declared 10% for <620 FICO overlap, declared 25% for 620-649 FICO overlap (average FICO of 620).

8. Freddie: declared 1.3% for <620 FICO overlap, declared 2% for 620-649 FICO overlap (average FICO of 620). Fannie: declared 10% for <620 FICO overlap, declared 25% for 620-649 FICO overlap (average FICO of 620).

9. Freddie: declared 1.3% for <620 FICO overlap, declared 2% for 620-649 FICO overlap (average FICO of 620). Fannie: declared 10% for <620 FICO overlap, declared 25% for 620-649 FICO overlap (average FICO of 620).

**Attachment 6 to Submitted testimony of Edward Pinto before US House of Representatives Oversight Committee - December 9, 2008**

**US Mortgage Market: Sizing Total Subprime, Alt-A & Other Junk Loan Exposure**

Research prepared by Edward Pinto, [epinto@lenderres.com](mailto:epinto@lenderres.com) Date: 12.1.08

**A. Subprime:**

Allowing each individual originator to define on its own what constitutes a subprime loan was found by banking regulators to be an unsatisfactory situation. In 2001 Federal banking regulators gave "Expanded Guidance for Subprime Lending Programs": (<http://www.federalreserve.gov/Boarddocs/SRletters/2001/sr0104a1.pdf>):

"The term "subprime" refers to the credit characteristics of individual borrowers. Subprime borrowers typically have weakened credit histories that include payment delinquencies, and possibly more severe problems such as charge-offs, judgments, and bankruptcies. They may also display reduced repayment capacity as measured by credit scores, debt-to-income ratios, or other criteria that may encompass borrowers with incomplete credit histories. Subprime loans are loans to borrowers displaying one or more of these characteristics at the time of origination or purchase. Such loans have a higher risk of default than loans to prime borrowers. Generally, subprime borrowers will display a range of credit risk characteristics that may include one or more of the following:

- Two or more 30-day delinquencies in the last 12 months, or one or more 60-day delinquencies in the last 24 months;
- Judgment, foreclosure, repossession, or charge-off in the prior 24 months;
- Bankruptcy in the last 5 years;
- **Relatively high default probability as evidenced by, for example, a credit bureau risk score (FICO) of 660 or below (depending on the product/collateral), or other bureau or proprietary scores with an equivalent default probability likelihood (emphasis added); and/or**
- Debt service-to-income ratio of 50% or greater, or otherwise limited ability to cover family living expenses after deducting total monthly debt-service requirements from monthly income."

This list is illustrative rather than exhaustive and is not meant to define specific parameters for all subprime borrowers. Additionally, this definition may not match all market or institution specific subprime definitions, **but should be viewed as a starting point from which the Agencies will expand examination efforts** (emphasis added)."

The use of a FICO score below 660 as a significant point of demarcation between prime and subprime loans goes back to 1995. As noted in January 1997 by Standard & Poor's, "...a FICO

score of 660 [is] the investment-grade score as defined in Freddie Mac's industry letter of August 1995." (S&P Structured Finance Ratings, January 1997, p. 14).

Based on these sources, defining subprime as a loan with a FICO of less than 660 should guide any effort to determine the other subprime loans beyond those described as such by originators.

1. **Subprime loans denominated by the originator as such:** The Fed Reserve of NY maintains a data base on subprime and Alt-A found at:  
[http://www.newyorkfed.org/regional/techappendix\\_spreadsheets.html#sub\\_loans](http://www.newyorkfed.org/regional/techappendix_spreadsheets.html#sub_loans)

The Fed's database of subprime loans denominated as such by the originator is based on Loan Performance Corporation's subprime servicing/private securities databases which track loans that are self-denominated by originators as subprime (LP Subprime Database). While a FICO below 660 is a significant determinant (71% of such loans have such a FICO), there are other characteristics used in this self-determination. The NY Fed defines **Subprime** as:

"Compared with prime mortgages, subprime mortgages are typically made to borrowers with blemished credit history or who provide only limited documentation of their income or assets. Originations of subprime mortgages fell sharply in the second half of 2007 and have been extremely light so far in 2008. Of the 3.3 million active subprime loans in the data at the end of 2007, there were some 3 million loans for owner-occupied units with an average outstanding loan balance around \$180,000."

It further adds:

"The underlying data do not represent every subprime mortgage, whether in portfolio or in a security, or mortgage securitized in an alt-A pool. We estimate that as of **year-end 2007**, there were about a total of 7 million subprime loans. The underlying data contained 3.3 million active subprime loans, suggesting a coverage ratio of 47 percent."

These 7 million loans almost certainly meet one of more of the Federal bank regulators' definition of subprime. Based on an average balance of \$180K (see above), this translates into **\$1.260 trillion**. This compares favorably to MBA delinquency data reporting 5.541 million subprime loans (excludes FHA) at 6.30.08, however the MBA believes its database captures 85% of all loans, resulting in an MBA estimate of 6.52 million subprime loans. Using the same \$180k per loan, this suggests **\$1.173 trillion**. Since the MBA is from 6.30.08 while the NY Fed data is from 12.31.07, the two sources appear to be very close.

2. **Subprime loans denominated as prime loans but with FICOs below 660:** Loan Performance Corporation also maintains a prime loan database (LP Prime Database) that predates the establishment of its LP Subprime Database. The LP Subprime Database and LP Prime Database are mutually exclusive (confirmed by Loan Performance). All Fannie

and Freddie loans (regardless of FICO) are reported into the LP Prime Database only (confirmed by Loan Performance). The LP Prime Database was setup in 1989 before the use of FICOs, which were only developed in 1989 and did not come into general use in the mortgage industry until 1995. It was populated by prime loan servicers and investors (originally just Freddie, with Fannie added in 1991). The LP Prime Database is a mix of Fannie and Freddie loans, other conforming loans, prime jumbo loans, FHA and VA loans. As Fannie and Freddie started doing large volumes of loans with FICOs below 660, these were reported into the LP Prime Database along with their traditional prime loans.

As noted earlier a FICO below 660 is the most clear cut determinant set out by the Federal banking regulators as a characteristic of a subprime borrower.

- About 71% or 5 million loans out of the NY Fed’s 7 million subprime loan total have a FICO below 660.<sup>1</sup>
- About 20% or 10 million loans out of Loan Performance’s grossed up prime loan total of 50 million loans have a FICO below 660.<sup>1,2</sup>

<sup>1</sup>“Surprise: Sub-Prime Mortgage Products are not the Problem!” Percentages obtained from Figure 1.

<sup>2</sup>Loan Performance reports that the LP Prime Database has “[L]oan-level data on over 75% of the nation’s active first mortgages—more than 38-million—including all of the Fannie Mae and Freddie Mac portfolios.”

To convert the 10 million subprime loans contained in the LP Prime Database to dollars, an average loan amount of \$150,000 seems appropriate. Fannie and Freddie account for 49% or 4.9 million<sup>3</sup> of the 10 million loans and have an average loan amount of about \$132,000, the other 51% are a mixture of many loan types including FHA (the original subprime “lender”, whose loans have somewhat lower balances) and jumbo loans (much higher balances). \$150,000 x 10 million = **\$1.5 trillion**. Note: There are more subprime “prime” borrowers with a FICO below 660 (10 million) than all subprime borrowers denominated by the NY Fed (7 million).

<sup>3</sup>Fannie and Freddie are estimated to have \$646 billion in loans with FICOs below 660. At an average loan amount of \$130,200

**Table #1: Total Subprime exposure:**

| Type:                                   | #                | % of subprime/<br>% of all loans | Serious delinquency<br>rate |
|---|------------------|----------------------------------|-----------------------------|
| Loan Performance<br>subprime grossed up | 7 million        | 41%/12%                          | 17.85% <sup>4</sup>         |
| Loan Performance<br>Prime grossed up    | 10 million       | 59%/17.5%                        | 5% <sup>5</sup>             |
| <b>Total</b>                            | <b>17million</b> | <b>100%/29.5%</b>                |                             |

<sup>4</sup>MBA

<sup>5</sup>Estimate based on Fannie’s loans with FICOs <620 having a serious delinquency rate of 6.74% at 9.30.08. This estimate of 5% is likely low, as Fannie’s subprime portfolio is relatively

unseasoned and its delinquency level is increasing rapidly (for Q2:08 the comparable rate was 5.48%).

**Table #2: Fannie/Freddie conventional subprime exposure:**

|                    |   | Fannie       | Freddie      | Total #/% of subprime |
|--------------------|---|--------------|--------------|-----------------------|
| Conventional loans | Subprime Private Label Mortgage Backed Securities | 0.24 million | 0.56 million | 0.8 million/5%        |
|                    | "Prime" loans <660 FICO                           | 3.05 million | 1.85 million | 4.9 million/29%       |
| Total              |   | 3.29 million | 2.41 million | 5.7 million/34%       |

### **B. Alt-A:**

The NY Fed defines **Alt-A** as:

**"Alt-A Mortgages defined:** Loans marketed in alt-A securities are typically higher-balance loans made to borrowers who might have past credit problems—but not severe enough to drop them into subprime territory—or who, for some reason (such as a desire not to document income) chose not to obtain a prime mortgage. In addition, many loans with nontraditional amortization schedules such as interest only or option adjustable rate mortgages are sold into securities marked as alt-A."

It further adds:

"Our best guess is that 2.4 million loans in this portion of the data cover more than 90 percent of the pools marketed as alt-A. The loan data are drawn from reports by the Board of Governors of the Federal Reserve System based on data from FirstAmerican CoreLogic, LoanPerformance Data. Data on the number of housing units are drawn from the U.S. Census 2000." and

"Although the term "alt-A" applies technically only to securities, not mortgages, it has become common practice to refer to near-prime or non-traditional mortgages as "alt-A" loans. The 2.4 million alt-A loans in the data contained approximately 1.7 million loans for owner-occupied units with an average outstanding loan balance around \$300,000 at the end of 2007."

The above translates into **2.67 million** Alt-A. Based on an average balance of \$300K (see below), this translates into **\$0.800 trillion** Alt-A held in securities. The MBA does not have a separate category for Alt-A. This definition does not include Fannie and Freddie's Alt-A loans.

Fannie and Freddie Alt-A loans total **\$0.497 billion** comprising **2.9 million** loans not covered by the NY Fed and \$77 billion in private MBS tranches (450,000 loans) already included in the NY Fed estimate.

This brings the total for Alt-A to **\$1.3 trillion and 5.6 million loans**. Fannie and Freddie's share of **3.35 million** is **60%** based on loan count.

**C. Total for all junk loans: 25.1 million loans out of 57 million 1<sup>st</sup> mortgages (44%) or \$4.63 trillion:**

**Fannie/Freddie's portion of conventional junk loans: 10.1 million loans out of 25.1 million junk 1<sup>st</sup> mortgages (40%).**

The Loan Performance and the MBA both estimate that there are about 57 million 1<sup>st</sup> mortgages.<sup>6</sup> The 25.1 million junk loans are distributed as follows:

- **Subprime: 17 million of which Fannie and Freddie are responsible for 5.7 million or 34% of all subprime loans.**
- **Alt-A: 5.6 million of which Fannie and Freddie are responsible for 3.35 million or 60% of all Alt-A loans.**
- **Other junk: 2.5 million loans consisting of many negatively amortizing ARMs (Option ARMs), Interest Only ARMs, Original LTV >90%, and piggy back seconds not included in the above. Fannie and Freddie responsible for 60% of all other junk.**
  - \$262 billion (1.5 million loans) - \$198 billion for Fannie and \$64 billion for Freddie.
  - \$350 billion estimate (1 million loans) Wachovia has \$122 billion of pay-option/potential negatively amortizing ARMs (Wachovia calls them pick-a-pay). These are not subprime, not securitized, and not held by Fannie or Freddie. They are certainly junk loans. Other uncounted junk loans can be found at B of A (from their Countrywide purchase) and WaMu (\$53 billion, these assets are now owned by Chase), and IndyMac (specialized in Alt-A, now owned by the FDIC). A rough guess is that this adds at least another \$350 billion in junk loans.

<sup>6</sup>Fannie and Freddie have a total of 30.6 million loans, plus 1.25 million in PLMBS tranches; for a total of 31.85 million loans. 10.55 million or 33% are high risk.

## Attachment 7 to Submitted testimony of Edward Pinto before US House of Representatives Oversight Committee - December 9, 2008

Fannie/Freddie conventional subprime, Alt-A, and other default prone loan exposure by loan count:  
 Prepared by Edward Pinto, December 1, 2008

| <i>Default prone conventional loans:</i>         |   | Fannie        | Freddie       | Total # of loans                                |
|--|---|---------------|---------------|---|
| <i>A. Subprime:</i>                              | Subprime Private Label Mortgage Backed Securities:                      | 0.24 million  | 0.56 million  | 0.8 million                                     |
|  | "Prime" loans <660 FICO:  | 3.05 million  | 1.85 million  | 4.9 million                                     |
| <i>Total: Subprime</i>                           |   | 3.29 million  | 2.41 million  | 5.7 million/34% of all subprime                 |
| <i>B. Alt-A:</i>                                 | Alt-A Private Label Mortgage Backed Securities:                         | 0.172 million | 0.273 million | 0.445 million                                   |
|  | Alt-A loans   | 1.79 million  | 1.08 million  | 2.87 million                                    |
| <i>Total: Alt-A</i>                              |   | 1.96 million  | 1.35 million  | 3.32 million/59% of all Alt-A                   |
| <i>C. Other default prone loans:</i>             | Option ARMs, original LTV>90%, piggy back seconds with combined LTV>90% | 1.11 million  | 0.37 million  | 1.48 million                                    |
| <i>Total: Other default prone loans</i>          |   | 1.11 million  | 0.37 million  | 1.48 million                                    |
| <i>D. Total (all above deduped for overlaps)</i> |   | 6.36 million  | 4.08 million  | 10.5 million loans/18% of all outstanding loans |

THE

VOL. CCXVIII NO. 4 ★ ★ ★

**Haste Makes . . .  
Quick Home Loans  
Have Quickly Become  
Another Banking Mess**

**Lenders That Didn't Require  
Usual Data on Borrowers  
Find Delinquencies Rising**

**Inflating the Income Figures**

By MITCHELL FACHLE  
Staff Reporter of THE WALL STREET JOURNAL

To would-be residents of Brightside Place, a complex of 46 duplex homes scattered across a treeless ledge in Derry, N.H., the Dime Savings Bank seemed a godsend. By the summer of 1988, New England home prices had soared into the stratosphere. But instead of tightening its scrutiny of potential borrowers, the New York thrift institution's officials seemed willing to approve a mortgage for just about anyone who walked in.

"They were so easy about everything," recalls one Brightside buyer. "I thought, I haven't looked at a house in years. Maybe times have changed."

Indeed they had. The Dime was spearheading a movement to slash the time and trouble needed to get a mortgage. Lending officers did little to verify borrower claims about income or savings; paper work once used to weed out potential defaulters was eliminated. Borrowers who at one time would have waited two months or more for a loan got informal commitments on the spot and typically had their money as soon as the property was appraised.

**Can't Lose**

The theory behind these no-documentation and low-documentation loans, called low-docs or no-docs for short, was simple: If lenders got a 20% or 25% down payment, the size of the borrower's income didn't matter: No one would walk away from that much money. And even if banks did have to foreclose, ever-rising home prices would give them a profit.

But as buyers stretched to buy the largest houses they could, some also stretched the truth. A survey by United Guarantee Corp., a Greensboro, N.C., mortgage insurer, found that 30% of applicants misrepresented their income by more than 10%. Moreover, commission-hungry lending officers were falsifying loan applications and concealing second mortgages obtained by borrowers to cause the down payments

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WALL STREET JOURNAL JULY 5, 1991



## Haste Makes . . . Quick Home Loans, Arranged Without Usual Diligence, Quickly Hurt Some Banks

*Continued From First Page*  
were applying scarcely more than the breath test. If the guy breathes, give him the loan.

The sloppy underwriting soon caused trouble. Borrowers who had lied about their incomes began defaulting when their adjustable-rate mortgages ratcheted up.

And when the Resolution Trust Corp., the federal agency handling failed thrifts, moved in to run ComFed, it discovered another problem. Many of the low-doc mortgages recorded on bank documents as 75% or 80% loans were actually 95% and 100% loans, says Mr. Pasternack, who didn't come to ComFed until last July.

Buyers were getting second mortgages from the sellers or the sellers were discounting the properties, and the buyers weren't disclosing either play on loan documents. Though second mortgages are perfectly legal, falsification of loan documents is not. In many cases, lending officers were to blame.

### Driven by Commissions

"The secret to the whole thing was putting these loan originators on commission," contends Michael Conley, a Wakefield, Mass., lawyer who represents some ComFed borrowers. "That turned out to be a disastrous marriage to the low-doc loans. Loan originators started to get greedy and stopped turning in accurate applications." ComFed loan officers were after commissions of \$300 to \$500 per loan.

Tony Kingsbury, a body-shop manager, and his wife, Jonella Parish, an insurance adjuster, couldn't afford even a 5% down payment on a \$145,000 home they were eyeing in Manchester, N.H. In February 1989, they bought it for nothing down. ComFed lent them \$95, and the builder the rest.

"They didn't do any checks at all," Ms. Parish recalls. "I brought a credit report, but they said they didn't need it." In addition, a former ComFed senior vice president, Patricia Hajjar, inflated their incomes and bank balances on the loan application, which the couple signed without reading at the closing, Ms. Parish says. The couple say they were unaware of the misrepresentations until the Federal Bureau of Investigation, which was investigating lending abuses at ComFed, got in touch with them.

Last December, Ms. Hajjar, a real-estate broker and a lawyer, were convicted in federal court in Boston of bank fraud in connection with the submission of phony loan applications on other properties. She was sentenced to three years in prison, fined \$8,000 and ordered to pay \$8,000 in restitution. She recently pleaded guilty to fraud and conspiracy and testified for the government in the trial of eight others in connection with the concealment of second mortgages on 71 loans, including Ms. Parish's. No charges were brought against any ComFed borrowers.

### Problems at the Dime

Stories of similar abuses are beginning to haunt the Dime.

For instance, a Dime borrower who works in the financial-services industry says she was flabbergasted by the loan officer who offered her a 90% no-doc loan to

buy a \$150,000 condo in suburban Boston. She says the officer told her to exaggerate her income and put down \$10,000 in assets she didn't have, and advised her she could lie about her credit-card debts because there was a delay in checking. The buyer of a Brightside Place duplex in New Hampshire says that after he got his loan he found that the Dime's loan officer had inflated his income and his wife's job tenure on the loan application.

Asked about both of these loans, Frank Wright, a Dime senior vice president, responds that the thrift never condoned such practices and that the borrowers were also at fault for signing fraudulent applications. Roger Williams, another Dime senior vice president, says: "We don't know the extent of the fraud. The further we get away from [New York], the more susceptible we were to abuses." He says the bank has referred some cases to federal prosecutors.

If homes in the Northeast had continued to appreciate, no-doc and low-doc lenders might have got away with such reckless underwriting. But when prices sank, some borrowers found themselves with loans far exceeding the home's value. Delinquencies at low-doc and no-doc lenders skyrocketed. Nationwide, according to SMR Research, 1.68% of the dollar amount of thrifts' loans on one- to four-family homes was more than 90 days delinquent at the end of last year, the latest period for which such figures are available. For bank holding companies, the rate was 1.36%.

### High Delinquency Rate

At the Dime, 9.44% of its \$6.7 billion of such mortgages was more than 90 days delinquent at March 31. In Massachusetts, its delinquencies hit an astonishing 24% of the dollar amount outstanding.

ComFed reports 13% of its home-mortgage portfolio more than 90 days delinquent. Its low-doc loans soured at four times the rate of conventional loans, Mr. Pasternack estimates.

At Citicorp, the delinquency rate was 4.4% at year end and rose to 4.8% at March 31. In comparison, Chase Manhattan Bank, which never offered no-doc or low-doc loans, had a 0.55% rate.

The Dime closed its out-of-state offices in early 1989, and early this year it eliminated all low-doc lending. Citicorp also began tightening its underwriting in 1989 and, in March, scrapped the low-doc program entirely. It says it now verifies the incomes and assets of all borrowers and does thorough credit checks.

"It comes right down to traditional credit practices: to ascertaining borrowers' willingness and ability to repay the loan," says Mr. Williams of Prudential, which also discontinued low-doc lending.

Last October, Fannie Mae stopped buying no-doc and low-doc loans. On April 1, so did Freddie Mac.

### Another System

With the secondary market shut down, no-doc and low-doc loans are far scarcer. Many lenders have replaced them with "alternative documentation" loans, which rely on borrowers' tax returns, pay stubs, bank statements and similar documents to substantiate claims. But high delinque-

cies will probably dog former no-doc and low-doc lenders for some time. "You live for years with the underwriting that you did long ago. This is the scorecard we're seeing for what banks did in 1986 and 1987, the biggest years of mortgage origination in U.S. history," SMR's Mr. Feldstein says.

And many no-doc borrowers who would not have got traditional mortgages may be struggling for a long time, too.

Mr. Kingsbury and Ms. Parish have seen their monthly payments leap from \$849 to \$1,300. (They hold a negative-amortization loan, in which the outstanding principal grows for several years because initial payments are kept artificially low.) But, although Mr. Kingsbury recently lost his job and now works only part-time as a bouncer at a bar, they are managing to stay current on their mortgage.

"It's putting all of our other bills behind," says Ms. Parish, who has taken a second job at a supermarket deli on weekends. "But we don't want to be foreclosed on. We have kids."

## Sales of New Homes Fell in May, in Sign of Industry Weakness

By a WALL STREET JOURNAL Staff Reporter

WASHINGTON — Sales of new single-family homes fell 3.3% in May to a seasonally adjusted annual rate of 474,000, the Commerce Department said, reflecting continued weakness in the housing industry.

Although monthly home-sales reports often are revised substantially in subsequent months, the news nonetheless was disappointing for the housing industry. In May 1990, sales of new homes were at a seasonally adjusted annual rate of 530,000. "No one was expecting it to be that high, but it's lower than what we expected," said Mark Obrinsky, senior economist at the Federal National Mortgage Association.

The government also revised downward its April home-sales report. The new figures show that sales of single-family homes declined 0.2% that month to 600,000, rather than growing 1.2% as reported earlier.

New-home sales have fallen steadily over most of the last year, but they rebounded slightly in February and March. Most economists believe that the housing sector of the economy hit bottom in January, and is slowly recovering. "These numbers just indicate how weak the housing recovery is likely to be," Mr. Obrinsky said.

Sales rose only in the Midwest, where they jumped to a seasonally adjusted 107,000 annual rate in May from 88,000 in April.

The U.S. now has a 7.8-month supply of new homes for sale, up from a 7.5-month supply in April.

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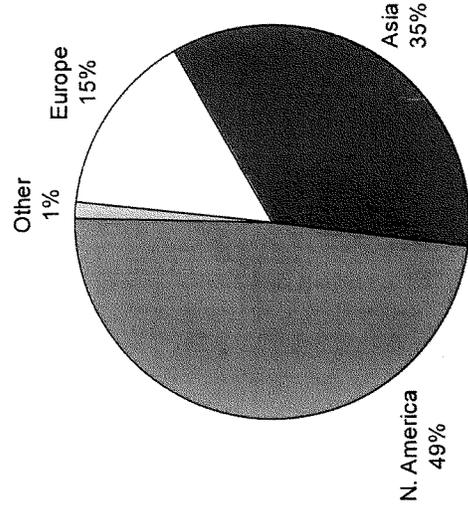
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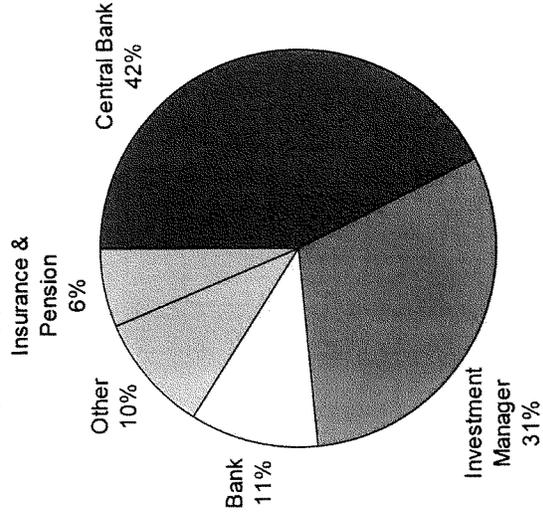


## Our debt funding program accesses diverse pools of global capital

**Geographical area**



**Investor type**



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Note: Data reflects orders placed in our USS Reference Notes® securities syndicated bond deals  
Source: Freddie Mac. Data for the 12 months ended September 30, 2008.

# Freddie Mac: Fraud high through third parties

ATLANTIC CITY, NJ-Freddie Mac has found that 65% of its fraud cases involve loans produced by third-party originators.

This is no reflection on the industry at large, said Gerald Langbauer, vice president of institutional credit risk at Freddie Mac, but because so much of the business now comes from the wholesale channel, so does the fraud.

Independent mortgage bankers account for 32% of the fraud cases while banks are the remaining 3%.

The majority of the fraud - 60% - comes from defective loans. Theft of funds or "air loans" account for 23% of the fraud cases, while flips are 17%.

It is with "air loans" that you have significant losses, Mr. Langbauer told the Regional Conference of Mortgage Bankers Associations here. Defective loans usual are those misstatements that aim to put a borrower in a house, where air loans involve funds lost, which are tough to recover.

Among the areas where Freddie Mac is finding the most fraud cases are: Michigan, California, Nevada, the Washington, D.C., metro area and New Jersey.

But the ultimate hot spot right now, he said, is Florida, and in particular Dade and Broward counties.

In Florida, the default rate is five times higher than the national average, more than double the next highest in the region and mortgage brokers are predominantly involved.

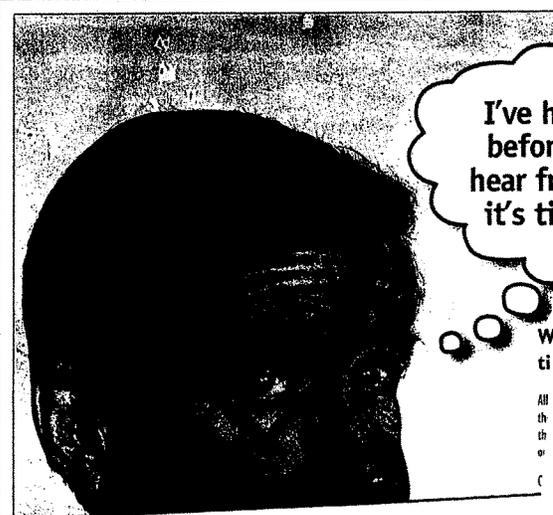
However, Mr. Langbauer said, the brokered loans are not from third-party originators, but go as far back as fourth

and fifth party originators, making them difficult to trace. These schemes are taking off in South Florida because the area has large groups of people who have limited knowledge of the English language. This makes them susceptible to unscrupulous individuals, he said.

In order to combat this fraud, Freddie Mac sent an industry letter out in June, which was a first for the agency. It advised all seller/servicers on the company's findings. It is also working

with the Florida Quality Council, a group that takes a proactive stance on getting the bad people out of the mortgage business, Mr. Langbauer noted.

Freddie Mac is also doing more industry training in Florida and it is working with mortgage lenders to find the sources of the bad loans and get a resolution. When dealing with third party originators, wholesalers should know with whom they are doing business, Mr. Langbauer said.



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Mr. TOWNS. Thank you very much, Mr. Pinto.  
Mr. Kling.

**STATEMENT OF ARNOLD KLING**

Mr. KLING. Thank you, Mr. Chairman, distinguished members of the committee. I would like my written testimony to be entered as if I had spoken it.

Mr. TOWNS. Without objection.

Mr. KLING. It is a privilege to be asked to testify in this forum today regarding the collapse of Fannie Mae and Freddie Mac and the ongoing financial crisis.

My name is Arnold Kling. My training is in economics. And in the late 1980's and early 1990's, I worked at Freddie Mac, where I was present at the creation of several quantitative risk management tools that paved the way for innovations in mortgage finance.

Speaking as a former financial engineer, I have many regrets about the role played by modern financial methods in this crisis. Rather than speak defensively about financial innovation, I want to offer constructive suggestions for public policy going forward.

I emphatically disagree with the extreme partisan narratives of this crisis. To blame the Community Reinvestment Act for what happened is wrong. To blame financial deregulation for what happened is wrong. The narrative I present in my written testimony describes a combination of government failure and market failure.

I want to focus on how both industry executives and regulators were fooled about the risks in the system. In particular, perverse incentives in bank capital requirements encouraged unsound lending practices and promoted excessive securitization. When a bank originates a low-risk mortgage, why would the bank pay Freddie Mac a fee to guarantee that mortgage against default? Freddie Mac has no intrinsic comparative advantage in bearing that credit risk. However, in practice, the bank was able to reduce its capital requirements by exchanging its loans for securities. Forbearing the exact same credit risk, Freddie Mac was allowed by its regulator to hold less capital than the bank.

By requiring Freddie Mac and Fannie Mae to hold less capital than banks, our regulatory system encouraged Freddie Mac and Fannie Mae to grow at the expense of traditional depository institutions. That turned out to be dangerous.

The perverse regulatory incentives were even more striking with high-risk loans. If a bank originates a high-risk loan, you would think that there is no way to avoid high capital requirements. But, it turns out that when a high-risk loan has been laundered by Wall Street, it can come back into the banking system in the form of a AAA rated security tranche. And I should mention that you had the people here—I know this committee has discussed the problems with the rating agencies and that the ratings were bogus. You had the people here this morning who were in a position to call them out on it. They could have run these securities—Freddie Mac and Fannie Mae could have run these securities through their stress tests, reported that these securities were going to blow up, and put a stop to the private-label subprime market right then and there. They had the power to do that. But, once they were laundered as AAA tranches, from the standpoint of capital requirements, bank

regulators closed their eyes and pretended that the risk has disappeared.

My reading of the history of the secondary mortgage market suggests the following lessons: One, capital requirements matter. Details that are easily overlooked by regulators can turn out to cause major distortions.

Two, securitization is not necessary for mortgage lending. On a level regulatory playing field, traditional mortgage lending by depository institutions probably would prevail over securitized lending. Rather than try to revive Freddie Mac and Fannie Mae, I would recommend that Congress encourage a mortgage lending system based on 30-year mortgages originated and held by old-fashioned banks and savings and loans. This would require instructing the regulators of Freddie Mac, Fannie Mae, banks, and savings and loans to all use the same capital standard for mortgages, one that is based on a stress-test methodology.

Three, subsidized mortgage credit is an inefficient tool for promoting home ownership. Unless what you want is home buyers who are buried in debt and speculating on house price appreciation, I recommend that Congress not try to create cheap mortgages but instead use other means to encourage home ownership.

Four, recent financial innovations, particularly credit default swaps, have changed our financial system in ways that current policymakers failed to recognize. Bailouts and rescues are counterproductive in today's financial crisis. Within the financial sector, deleveraging needs to slow down, and the process of shutting down failed institutions needs to speed up. Relative to these necessities, handouts from the taxpayers are a hindrance, not a help.

[The prepared statement of Mr. Kling follows:]

Testimony of Arnold Kling for a hearing December 9 of the House Committee on Oversight and Government Reform on the collapse of Fannie Mae and Freddie Mac

**Executive Summary**

**Main Causes**

I emphatically disavow the extreme partisan narratives for this crisis. To blame the Community Reinvestment Act for what happened is wrong. To blame financial deregulation for what happened is wrong. The narrative I present following this executive summary describes a combination of government failure and market failure.

I blame excessive securitization, induced by regulatory anomalies, particularly with regard to capital requirements. These anomalies were responsible for the unwarranted expansion of Fannie Mae and Freddie Mac as well as for bank participation in the phenomenon of private securitization of subprime mortgages.

I also blame mortgages with low down payments. Such mortgages encourage speculation and destabilize the mortgage market. With borrowers' equity consisting almost entirely of house price appreciation, in a rising market nearly anyone can buy a home; but when prices stop climbing almost no one can buy a home.

Finally, I blame what I call the "suits vs. geeks" divide. Financial engineers created instruments, including exotic mortgage securities and credit default swaps, that overloaded the mental circuits of industry executives and regulators.

**Mortgage securitization is not inherently efficient. It owes its growth to anomalies in accounting and regulatory treatment.**

When a bank originates a low-risk mortgage, why would the bank pay Freddie Mac a fee to guarantee that mortgage against default? Freddie Mac has no intrinsic comparative advantage in bearing the credit risk. However, in practice, the bank is able to reduce its capital requirements by exchanging its loans for securities. For bearing the exact same credit risk, Freddie Mac will be allowed by its regulator to hold less capital than the bank. With securitization, the credit risk goes to where the capital regulation is softest. If there were no regulatory differential, the bank might keep the loan in order to avoid the unnecessary transaction costs of securitizing it.

The regulatory anomaly is even more striking with high-risk loans. If a bank originates a high-risk loan, you would think that there is no way to avoid high capital requirements. However, it turns out that when the loan has been laundered by Wall Street, it can come back into the banking system in the form of a AA-rated security tranche. Most of the true risk is still there, but that risk is now hidden from capital requirements.

**Letter-of-law Regulation is thwarted by financial innovation.**

The unwarranted growth of mortgage securitization illustrates a problem known as regulatory arbitrage. Financial innovation interacts badly with what I call letter-of-the-law regulation. With letter-of-the-law regulation, we give financial institutions specific requirements, such as the precise asset weights used in risk-based capital for banks under the Basel agreement. We tell executives that as long as their

institutions meet those requirements, they are fine. The problem is that with rapid financial innovation, firms are able to stay within the letter of the law while at the same time subverting the purposes of regulation and violating their responsibility to maintain safety and soundness.

I am not a lawyer, so I do not know if there is any plausible alternative to letter-of-the-law regulation. However, I wish that somehow the executives of financial institutions that rely on explicit or implicit government guarantees could be made to comply with the spirit of regulation. I wish that they took some sort of oath to protect taxpayers from risks, and I wish that violation of that oath carried with it serious penalties, including prison.

### **Suits vs. Geeks**

In my opinion, the innovations in mortgage finance over the past twenty years have gone beyond the ability of industry executives and regulators to manage. Financial engineers and key decision-makers were not on the same page concerning the new financial instruments. This suits vs. geeks divide meant that executives were making decisions based on a distorted assessment of the risks involved.

Even now, Paul Volcker, Eugene Ludwig, Ben Bernanke, Henry Paulson, and other important public figures view the crisis through lenses that are very different from mine. To me, this is not a re-run of the bank failures of 1932, nor is it a rerun of the savings-and-loan crisis of 1980. There is a new transmission mechanism at work, particularly in the form of credit default swaps.

### **Implications**

After the executive summary, I offer a history of mortgage securitization and the financial crisis. The implications of this history for policy are the following:

1. Mortgages with low down payments are conducive to speculation in housing. This is risky for individual homeowners and destabilizing for the market as a whole. The goal of broadening home ownership should be addressed in ways that do not encourage speculative purchases.
2. Securitization is not necessary for mortgage lending. On a level regulatory playing field, traditional mortgage lending by depository institutions probably would prevail over securitized lending. The mortgage market can function without Freddie Mac and Fannie Mae.
3. Bank capital requirements for sound mortgages are overly onerous. Reducing capital requirements for loans with reasonable down payments would help lower mortgage interest rates.
4. There were specific mistakes made in the management and regulation of Freddie Mac and Fannie Mae. When, as at Freddie Mac, the chief risk officer warns that your mortgage lending policies are ill-advised, I can think of more appropriate responses than firing the chief risk officer. Also, the regulation of Freddie Mac and Fannie Mae appears to me to have been emasculated, in large part due to the combination of heavy-handed lobbying by the two firms and Congressional meddling with the regulatory process. Certainly, performance could improve with better leadership and better regulation. However, the easiest way to prevent future problems at Freddie Mac and Fannie Mae would be to let the mortgage lending function revert to depository institutions.
5. The credit default swap is not a transaction that should be encouraged.
6. Financial innovation in general does not blend well with letter-of-the-law regulation. If financial executives cannot be punished for violating the spirit of regulations, then regulators will need to take a wary view of financial innovation. It can be difficult to distinguish

innovations that provide genuine efficiency from those that serve mainly to facilitate regulatory arbitrage.

7. Policymakers appear to me to be relying too heavily on vague analogies with past crises in designing their response to the current situation. A policy that relies on rescues and bailouts strikes me as counterproductive. Such actions serve to speed up a de-leveraging process that needs to slow down, and they slow down a process of closing failed institutions that needs to speed up.

### A Full Narrative of the Crisis

In a compelling fictional narrative, there are villains, victims, and heroes. One can give a compelling account of the financial crisis of 2008 containing such characters, but it would be fictional. A true villain has to know what he is doing. In the case of the financial crisis, key executives and heads of regulatory agencies were ignorant of what was happening until it was too late.

The primary candidates for the role of villain—the executives of banks, Wall Street firms, and insurance companies—did too poorly in the end to suggest willfulness. If these companies had done nothing but deliberately foist risks on others, they themselves would have survived. The fact that Bear Stearns, Lehman Brothers, and other companies took such large losses is indicative of self-deception.

My narrative of the crisis is one of a widespread gap between what people thought they knew and what was actually true. Executives had too much confidence in their risk management strategies. Regulators, too, had excessive confidence in the measures that they had in place to ensure safety and soundness of banks and other regulated institutions. The crisis was both a market failure and a government failure.

I will argue that some of the most important financial instruments implicated in the crisis, including mortgage-backed securities and credit default swaps, owed their existence to regulatory anomalies. In the way that they specified capital requirements, regulators gave their implicit blessing both to risky mortgages laundered through securitization and to treating a broad portfolio of risky assets as if it were a safe asset.

The financial structure rested on a housing bubble. A deep question is whether there are natural forces that always make an economy prone to booms and busts. If so, then had the boom and bust not occurred in housing and mortgage lending, it would have taken place elsewhere. Leaving that issue aside, the focus here will be on how the boom and bust occurred where it did.

#### Housing Industrial Policy

Housing and mortgage debt are heavily influenced by public policy. It might even be fair to say that housing is to the United States what manufacturing exports were to Japan in the decades following the Second World War—a sector viewed by government as critical for the health of the economy. Like manufacturing exports in Japan, housing in the United States has been the focus of industrial policy, in which government and private firms worked together to try to maintain continuous expansion. Increased home ownership and cheap, accessible mortgage finance were major policy goals, regardless of which political party held Congress or the Presidency.

This housing industrial policy can be traced back quite far. However, I will start in 1968, which was the year that mortgage securitization made its debut. In that year, Lyndon B. Johnson was an unpopular President fighting an unpopular war in Vietnam. Under the circumstances, having to ask Congress to increase the limit on the national debt always caused friction and embarrassment for the Administration. At the time, the national debt included the funds raised by government housing agencies. In 1968, the government found two ways to get this debt off its books.

The Federal National Mortgage Association, which had been created in 1938 to fill the void left by bank failures, functioned by purchasing home loans from independent originators known as mortgage bankers. Fannie Mae, as it was later called, acted like a giant national bank, financing mortgages from

all over the country. At that time, it did not issue any mortgage securities. Instead, it funded its holdings by issuing bonds, as an agency of the Federal government. To get Fannie Mae debt off its books, the government privatized Fannie Mae, by selling shares to investors. The government may have retained an implicit promise not to allow Fannie Mae to fail, but this implicit promise appeared nowhere on the government's balance sheet.

Selling Fannie Mae still left the government issuing debt to finance mortgages under loan programs of the Federal Housing Administration (FHA) and the Veterans' Administration (VA). To take these mortgage loans off the books, the Johnson Administration created the Government National Mortgage Association (GNMA), which pooled loans insured by FHA/VA into securities and sold them to investors. This meant that the government no longer had to issue its own bonds to finance these mortgages. However, the government continued to guarantee that FHA/VA mortgages would not default.

Mortgage securitization always has had two major advantages. One is that it permits accounting gimmicks, such as moving mortgages off the government books and thereby lowering the official national debt. We will see similar accounting tricks at work with every major surge in securitization.

The other major advantage of securitization is that it allows less-regulated firms to act more nimbly than depository institutions. When the regulated banking sector has been unable to satisfy mortgage demand, securitization has, for better or worse, stepped in to fill the gap. While the depository institutions (banks and savings and loan associations) have been restrained more firmly by state regulators or agencies in Washington, issuers of mortgage securities have been able to provide funds. Still, if the regulatory playing field had always been level, it is unlikely that securitization would have emerged.

#### **Indirect Lending and Agency Costs**

To understand the problems inherent with securitization, imagine that you are a bank executive faced with two alternative routes for obtaining mortgage loans—a direct route and an indirect route. In the direct route, your loans are originated by your own staff. You establish standards, policies, and procedures for loan origination. You choose the markets in which you would like to originate loans, and you will probably focus on communities where you know the local economy. You hire and train personnel to follow internal guidelines. Your compensation policies incorporate incentives for them to accept or reject applicants in accordance with company policy. Once the loan has been made, if the borrower misses a payment, your staff follows company procedures for contacting the borrower and resolving the problem.

In the indirect route, loans are originated by persons unknown to you, following guidelines established by someone else. The loans may come from communities with which you are totally unfamiliar. The originators may very well be paid on commission, which they can only receive if they close a loan—never if they reject an applicant. If the loan gets into trouble, you will have no control over how the delinquency is handled.

No sane bank executive would choose the indirect route over the direct route. In economic jargon, the “agency costs” of the indirect route are prohibitive. The originators of mortgages in the indirect route are operating under incentives that are contrary to the bank's interest. The misalignment of incentives between the bank and those acting as its agents in the indirect route will force banks to incur additional costs to monitor and review the work of the originators. Even with most diligent efforts, the bank is

likely to incur higher losses from defaults, as originators squeeze bad loans through the cracks of the bank's monitoring systems.

It is surprising, therefore, that as of 2008, nearly three-fourths of mortgage debt in the United States had been originated using the indirect method. To reach this point required a combination of Wall Street ingenuity and regulatory anomalies.

Some of the ingenuity involved finding an intermediary to bear the risk of mortgage loan defaults. For example, GNMA securities are guaranteed by the government, with the default risk on the mortgages ultimately borne by FHA. As we will see, the concept of guaranteed securities spread to other types of mortgages, although the quality of the guarantees became suspect during the crisis period in 2008. Without the guarantees—or the apparent guarantees—indirect lending would not have been possible. Even with guarantees, there was nothing cost-effective about indirect lending. The main cost advantages of securitization came from accounting and regulatory anomalies.

### **The Growth of Securitization**

In 1970, there were many regulatory constraints hampering savings and loans (S&L's, also known as thrifts), the dominant mortgage lenders at the time. Their deposit interest rates were limited by government-set ceilings, under what was known as Regulation Q. Because of ever-rising inflation, market interest rates were much higher than Reg Q ceilings, and the thrifts were soon to be starved for funds. Nimble, less regulated competitors—money market funds—siphoned money away from retail deposits.

Thrifts in California were particularly frustrated by a shortage of funds. At the time, depository institutions could not operate across state lines, and the relatively abundant savings in the Eastern United States could not reach the West.

To address the mismatch between savings in the East and mortgage demand in the West, Congress established Freddie Mac, with a goal of creating a national “secondary market” in mortgages. Freddie Mac was placed under the Federal Home Loan Bank Board, the agency that had oversight of the savings and loans. Unlike the thrifts themselves, Freddie Mac could move funds from one coast to the other. For example, Freddie Mac could bundle mortgage loans originated by a thrift in California into securities that Freddie Mac could sell to a thrift located in New York.

Freddie Mac was able to do what the thrifts themselves were not able to do because of regulation. Had Regulation Q not been in effect, California thrifts could have increased interest rates on deposits to attract sufficient funds to allow them to meet mortgage demand using the direct method of lending. Alternatively, if restrictions on interstate banking been lifted, a multi-state holding company could have channeled excess savings from its banks in the East to be used for mortgage loans by its banks in the West without resorting to indirect mortgage origination.

To make the secondary mortgage market efficient, Freddie Mac stepped in to guarantee security-holders against mortgage defaults. If a mortgage in a Freddie Mac security stopped making payments, Freddie Mac stepped in, pulled the mortgage out of the pool, and paid investors the full principal due on that mortgage. At that point, Freddie Mac would attempt to recover as much as it could through the foreclosure process.

### **My Freddie Mac Experience**

*Freddie Mac's role as guarantor of the mortgages that it securitized required a large and intricate operation to monitor, manage, and price mortgage credit risk. I became part of that operation, joining Freddie Mac in December of 1986. I spent much of my first few years there helping to implement a mortgage pricing model developed by Chester Foster and Robert Van Order (Foster, Chester and Robert Van Order, 1984, An option based model of mortgage default, Housing Finance Review 3, no. 4, 351-372.), two economists who joined Freddie Mac after working for the Department of Housing and Urban Development. The pricing methodology employed simulations of a variety of paths for house prices, with default probabilities depending on the house price scenario as well as characteristics of the mortgages. For example, loans for investment properties or for cash-out refinances had higher default risk than loans for owner-occupied purchases. Loans with low down payments had higher default risk than loans with higher down payments.*

*Late in 1989, I shifted to a different position at Freddie Mac, where I helped implement its quality control sample. Because loans were being originated by third parties, Freddie Mac operated a large division devoted to monitoring the performance of these loan sellers. The quality control process selected a sample of loans for re-underwriting by Freddie Mac staff. Re-underwriting was costly both to Freddie Mac and to originators, so the idea of the sample was to try to select a minimum number of loans for re-underwriting in such a way as to identify originators who were failing to properly screen loan applicants and property characteristics. This was just one of the processes that Freddie Mac needed in order to compensate for the misalignment of incentives that exists in securitized lending.*

*In the early 1990s, I took on another task at Freddie Mac, which was to look into ways to automate the underwriting of loans. We came to realize that credit scoring had a number of advantages over human underwriting. It was cheaper, and the statistical methodology behind the scoring system made fewer errors—it rejected fewer good borrowers while accepting fewer bad borrowers. Finally, from the standpoint of indirect lending, switching from human underwriting to credit scoring based on data held by the large credit reporting services helped to eliminate one of the potential sources of misrepresentation on the part of loan originators, because they no longer had control over credit underwriting. Ironically, the gains in efficiency that credit scoring produced also set the stage for private securitization, in which Wall Street firms were able to make inroads into the mortgage market and threaten the dominance of Freddie Mac and Fannie Mae.*

*When I was at Freddie Mac, there was hardly any gap between the suits and the geeks. The Foster-Van Order model of mortgage default was ingrained in the corporate culture. The CEO, CFO, and other key executives understood this model and its implication that mortgage defaults would be much higher for mortgages with low down payments. Moreover, the suits bought into the idea of using a stress test to set capital requirements. Using a stress test methodology, in which mortgages are evaluated according to how well they would survive a downturn in house prices, the capital required to back mortgages with low down payments is prohibitively high.*

*When a new CEO came to Freddie Mac in 2003 (several years after I had left), a gap apparently opened up between the suits and the geeks. Warnings issued by the Chief Risk Officer and others about low down payment mortgages were ignored by the CEO.*

The decade of the 1970's was not kind to the savings and loan industry. With inflation out of control, market interest rates steadily rose. Relaxation of regulation Q interest rate ceilings proved to be a

mixed blessing, to say the least. Although it enabled thrifts to raise interest rates to stem the loss of deposits, it raised their cost of funds above the rates that they were earning on mortgage loans originated in prior years, when inflation and interest rates had been lower.

In the late 1970's, Lew Ranieri and Robert Dall, two executives at the bond-trading firm of Salomon Brothers, created a vision of a U.S. mortgage market dominated by securitization, which would enable investment banks to participate in the largest credit market in the world. With the thrift industry on the ropes, their timing was good. However, it took a combination of luck and intentional lobbying to shape the playing field in order to fulfill their vision.

Starting in 1980, newly appointed Federal Reserve Chairman Paul Volcker decided to break the back of inflation with contractionary monetary policy. Interest rates soared to double-digit rates, and many thrifts became insolvent. However, before they were shut down by their regulators, many thrifts made one last desperate effort to borrow money to stay in business.

The S&L's wanted to use their mortgage assets to raise cash, but they did not want to sell those mortgage assets. Under accounting rules that prevailed at the time, the thrifts were allowed to record their mortgage assets as if they had not declined in value. In fact, in an environment where new mortgages were being originated with interest rates of 12 percent, an old mortgage that carried a 6 percent interest rate and a \$100,000 outstanding balance was worth approximately \$50,000. Selling such loans would mean recognizing the losses, which would expose the negative net worth of the institution, which in turn would force regulators to shut it down.

(At the time, some academics were arguing that thrifts should have been shut down regardless. Their point was that under market-value accounting, they should have recognized the losses on their mortgage loans even if they held them. However, market-value accounting was novel and unpopular—only after the crisis had passed was market-value accounting widely adopted by banking regulators around the world.)

In summary, without selling mortgage loans, the thrifts could not raise cash to operate. On the other hand, if they sold the loans, they would have to recognize losses on the assets. The thrifts appeared to be in a trap.

Wall Street proposed a solution. They created a new security program at Freddie Mac, called Guarantor. Under this program, a thrift would exchange a package of its old mortgages to Freddie Mac for a security backed by those mortgages. The security could then be used as collateral for borrowing by the thrift. Freddie Mac earned a fee (as high as two percent) for engaging in this purely paper transaction. Wall Street firms earned fees finding institutional investors to lend to thrifts, with the securities as collateral. The losers, ultimately, were the taxpayers, since most of the thrifts ultimately still went bankrupt, having been bled by the fees and having made further unsound investments.

The key to the Guarantor program was a regulatory accounting ruling, much sought after by all parties, that the exchange of mortgages for a security backed by those mortgages did not require the thrift to write down the security to market value. Even though the loans that the thrifts received from institutions were based on market values, rather than book values, the thrifts were allowed to keep the securities on their books at fictional book values. Without this peculiar accounting treatment, Guarantor would not have gotten off the ground. Instead, thanks to regulators' tolerance of an accounting fiction, Guarantor became a large program at Freddie Mac. Fannie Mae, seeing the profit opportunity, entered the mortgage security business with its own version of Guarantor, called Swap.

Up to this point, Fannie Mae and Freddie Mac operated differently from one another. Freddie Mac primarily bought loans from thrifts, packaged the mortgages into securities, and sold the securities to investors. Fannie Mae primarily bought loans from mortgage bankers and held them in its portfolio, financed by debt. Thus, Fannie Mae took interest rate risk as well as mortgage credit risk.

In 1988, Freddie Mac stock was divided among thrifts. In 1989, the stock was made available to the public on the New York Stock Exchange, thus privatizing the agency just as Fannie Mae had been privatized twenty years earlier. In its new form, Freddie Mac adopted and increasingly implemented Fannie Mae's strategy of buying loans for its portfolio, funded with debt.

#### **Capital Requirements Advantage GSE's**

By 2003, Freddie Mac and Fannie Mae together held 50 percent of the mortgage debt outstanding in the United States. Depository institutions could no longer compete effectively with the two companies, known as Government-sponsored Enterprises, or GSE's.

The key competitive advantage of the GSE's involved capital requirements. Banks are required to hold 8 percent capital against risk-weighted assets. In 1989, the United States adopted requirements developed by the Bank for International Settlements. These are known as the Basel I agreements, because the BIS is located in Basel, Switzerland. Under Basel I, mortgage loans have a risk weight of fifty percent, so that the capital requirement for a mortgage loan would be 4 percent. More refined capital requirements, known as Basel II, allow low-risk mortgages, with down payments of more than 40 percent, to receive a risk weight of 20 percent, while loans with down payments of 20 to 40 percent have a risk weight of 35 percent.

For mortgage loans with a down payment of 20 percent or more, bank capital requirements are much higher than they are for Freddie Mac and Fannie Mae. Freddie Mac and Fannie Mae are subject to different regulations. In practice, their ratio of capital to assets was less than 3 percent, which was well below that of banks.

The GSE's capital requirements were based in part on a stress test. They were supposed to hold sufficient capital to be able to withstand a decline of housing prices comparable to a severe historical recession. Whether this stress test was calculated properly for the portfolio of high-risk loans that the firms acquired starting in around 2004 is questionable. However, for loans with substantial down payments made to credit-worthy borrowers, the capital requirements for the GSE's were more accurate than the crude requirements given to banks. For an analysis of how risk weightings create regulatory arbitrage and artificially boost mortgage securitization, see the paper "Risk-Based Capital Requirements for Mortgage Loans," by Paul S. Calem and Michael Lacour-Little.  
[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=295633](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=295633)

As of 2003, the capital requirements were an anomaly that artificially restrained depository institutions from competing effectively with the GSE's. However, capital requirements were not yet a source of instability in the banking system. Problems in the banking system developed only when securitized sub-prime mortgage lending took off.

#### **Private Securitization**

By 2004, a number of market developments caused the emergence of a significant segment of mortgage

loans with low down payments, originated by mortgage brokers and securitized by Wall Street firms. These mortgage securities are called private securities, to distinguish them from securities issued by the GSE's.

Private securitization reached for a segment of the market that was considered too high-risk by the GSE's. That segment included borrowers with impaired credit or with income levels that historically would have been considered too low to qualify for the housing expenses being incurred. This so-called sub-prime market was dominated by private securitization.

One of the developments that promoted private securitization was credit scoring. In the late 1990's, credit scoring had replaced human underwriting at the GSE's. In addition to being inexpensive and reasonably accurate, credit scoring helped to reduce the agency costs associated with indirect lending. A credit score is objectively calculated by an independent specialty firm (Fair, Isaac is the most well known), which takes away the concern that a third-party underwriter could be hiding flaws in the borrower's credit history.

Another development was the concept of risk tranches. The cash flows from a pool of mortgages could be divided in such a way that all of the first, say, 5 percent, of mortgage defaults would be borne by the subordinate security, with senior securities insulated from that portion of default risk. Insulated in this way, senior securities were able to earn AA or AAA ratings from agencies, which in turn made those securities eligible to be held in institutional portfolios. For example, a bank could hold a AA security and have it receive a 20 percent risk weight.

In reality, a senior security backed by sub-prime mortgages with down payments of less than 5 percent was much more likely to suffer losses than a prime mortgage with a 20 percent down payment made by the bank. But even under Basel II, capital regulations gave a 20 percent risk weight to the security and a 35 percent risk weight to the safe mortgage loan. The regulators were telling the banks to prefer securities backed by someone else's junk loans over safe loans originated directly by the bank.

The AAA and AA ratings of mortgage securities have come under fire. Relative to those ratings, the actual performance of the securities has been dismal, and a Congressional hearing in October uncovered internal memos in the agencies warning that the ratings were inaccurate. The problems with the ratings are discussed extensively in a paper by Joshua D. Coval, Jakob W. Jurek, and Erik Stafford. They cite evidence that at least one of the rating agencies, Fitch, did not even consider the possibility of house price declines when it rates mortgage securities. ([http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1287363](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1287363))

Economists report that large Wall Street firms had internal models of mortgage default risk that showed that a AAA-rated mortgage security was far riskier than a AAA-rated corporate bond. These risk models were used by sophisticated investors to value mortgage-backed securities. On the other hand, the ratings made a difference to less-sophisticated investors, particularly banks, given the incentives created for the latter by capital requirements. (See the September 15, 2008 press briefing of the Shadow Financial Regulatory Committee. [http://www.aei.org/events/eventID.1790/event\\_detail.asp](http://www.aei.org/events/eventID.1790/event_detail.asp))

#### **Innovation Feeds a Bubble**

The financial innovations of credit scoring, senior-subordinated private mortgage securities, and loans with low down payments served to broaden the mortgage market. As more households became able to borrow, the demand for homes expanded and prices rose. At first, this had the effect of reducing

mortgage defaults.

A homeowner's equity consists of the down payment plus any price appreciation that has taken place since the home was purchased. When that equity is positive, a borrower who finds it difficult to make the payments on a home will either sell the house or refinance it with a larger mortgage rather than default.

As long as house prices were appreciating, the performance of mortgage securities was excellent. This encouraged more lending, which encouraged more home purchases, which in turn fed into faster house price appreciation. Much of the new home buying was speculative. Over 15 percent of home loans in 2005 and 2006 went for non-owner occupants, meaning that they were bought for investment purposes. This was more than triple the rate of investor loans that were made a decade earlier. (See "The 2006 HMDA Data," by Robert B. Avery, Kenneth P. Brevoort, and Glenn B. Canner, Federal Reserve Bulletin, December 2007. <http://www.federalreserve.gov/pubs/bulletin/2007/pdf/hmda06final.pdf>) Economist William Wheaton estimates that the housing stock grew by six percentage points more than the number of households, as the speculative demand for housing boosted production.

Policymakers encouraged this burst of housing speculation. Enforcement of the Community Reinvestment Act for banks and the "affordable housing goals" for the GSE's meant that these companies had to make sure that a sizable percentage of mortgage loans went to low-income borrowers, even as the run-up in house prices was increasing the ratio of median home prices to median incomes. While traditional rules of thumb suggested that a house price should be no more than three times the borrower's income, in some California counties the ratio of price to income approached ten.

Pressed to meet their "affordable housing" goals, the GSE's for the first time began to back sub-prime loans and other mortgages with low down payments. Despite internal warnings that these purchases threatened the safety and soundness of Freddie Mac and Fannie Mae, the two companies took on unprecedented exposure to credit risk. Under the stress test methodology, the mortgages that the GSE's were now guaranteeing would have required much higher levels of capital than traditional mortgage loans. However, concerned with not diluting earnings, the companies postponed raising the capital needed to restore compliance with the stress tests.

Freddie and Fannie were never the dominant high-risk lenders. Nonetheless, they took on more risk than they should have, with less capital than was prudent. Had they maintained a focus on safety and soundness and stayed out of high-risk lending, the firms would have done less to inflate the house price bubble. Freddie and Fannie would be in good shape now to pick up the pieces of the faltering private securitization market. Instead, the two firms themselves required a taxpayer bailout.

#### **Suits vs. Geeks**

The conflict between executive decisions and internal warnings at Freddie Mac and Fannie Mae was an example of what I call the "suits vs. geeks" divide. The geeks were staff who used statistical models to predict mortgage defaults under alternative scenarios and to translate those simulations into values of various mortgage securities. The suits were executives with decision-making authority. Often, the geeks saw lower values and higher risk in the securities than the suits, but the suits were in charge of setting corporate portfolio policy.

Innovative financial instruments, such as senior-subordinated structures for private mortgage securities, were understood by financial engineers (the "geeks" as I term them). They were understood less well

by executives and major policymakers (the “suits”). The geeks regarded the AA and AAA designations by the rating agencies as faulty. The suits took the ratings as reliable.

Geeks watched suits develop ever-increasing confidence in quantitative risk management, including credit scoring and bond default modeling. The latter was used to create the market for credit default swaps, which will be discussed below. Once their initial skepticism was overcome, suits became excessively confident in quantitative risk modeling. Only when the crisis came did the suits renew their skepticism about the risk models.

The geeks treated mortgage securities as having embedded put options that were very close to being in the money. That is, the security-holder has effectively sold mortgage borrowers an option to default. Borrowers are more likely to exercise that option if their equity in the home is negative, in which case the option is in the money. When initial down payments are low, it only takes a small decline in home prices to make the default option in the money. This option to default will be exercised particularly aggressively by non-own-occupants (recall that the rate of investor loans had tripled by 2005 and 2006 to over 15 percent of all mortgages).

The suits treated mortgage securities as bonds, ignoring the power of the embedded options. In August and September, when policymakers began to perceive the severity of the crisis, the suits thought that mortgage securities could not possibly have lost as much value as their market prices indicated. Federal Reserve Board Chairman Ben Bernanke insisted that if the securities were “held to maturity” that they would have higher values. Treasury Secretary Henry Paulson proposed to have the government buy and hold these securities in order to “unclog” the financial system. However, this thesis, which in effect was arguing that the geeks had mispriced mortgage securities, proved to be incorrect. The banks that had invested heavily in these securities were truly under-capitalized. The mistakes had been made by the suits, not the geeks.

#### **A Complex Phenomenon**

Overall, I would describe the housing and mortgage credit bubble as a complex phenomenon that emerged for a number of reasons. I would assign much of the blame to the growth of securitization, which in turn was affected by a number of regulatory anomalies, notably capital requirements that favored securities backed by risky mortgages over ordinary direct mortgage lending, even when the latter included loans with sizable down payments.

I would assign another large share of the blame to the emergence of a large volume of mortgage loans with low down payments. This created a situation in which housing equity consisted largely of price appreciation. That accentuated the housing cycle, because with no money down almost everyone can buy a home when prices are rising and almost no one can buy a home when prices stop rising.

Finally, I would assign some blame to the “suits vs. geeks” divide. Knowledge of mortgage credit risk and the behavior of mortgage securities was separated from power over portfolio decisions. The executives who took on mortgage credit risk at banks, insurance companies, and the GSE's did not fully appreciate the chances they were taking. The financial engineers who were responsible for the creation and pricing of complex mortgage securities did not educate key executives or heads of regulatory agencies about the true nature of the new products. It was easier to let everyone believe that securitization reflected the “genius” of Wall Street, when in fact it was a more dubious process artificially stimulated by regulatory anomalies.

### Credit Default Swaps

A number of commentators have pointed out that the loss of market value at financial institutions appears to substantially exceed the markdown in housing values. I believe that credit default swaps played a major role in causing this loss multiplier effect.

With a credit default swap, the buyer of a swap pays a regular fee equal to a percent of the bond's principal value. The seller of a swap agrees that in the event of a default, the seller will purchase the bond from the swap buyer for its full principal amount. Thus, the credit default swap acts like an insurance policy on the bond.

Credit default swaps were traded privately, with investment banks acting as dealers. That meant that there was counterparty risk. Counterparty risk is when one party to a contract could default on that contract. In particular, the buyer of a credit default swap has to worry about whether the seller will truly make good in the event that the bond default occurs. Counterparty risk is an issue, but below I will argue that it is *not* the main problem with credit default swaps.

[As the credit default swap market grew, some policy experts recommended that swaps should be traded on an organized exchange. Exchanges, such as the Chicago Mercantile Exchange (where commodity contracts are traded) or the New York Stock Exchange (where stocks are traded), eliminate counterparty risk.

For example, suppose that we are talking about corn for delivery in three months. A large food processor might contract with a specific farmer March to deliver corn in August. That would involve counterparty risk, where either the farmer or the food processor might default in August.

Instead, the food processor might buy corn futures on an organized exchange. Meanwhile, the farmer might sell corn futures on the exchange. The farmer and the food processor are no longer on opposite sides of the transaction. Instead, each is making a separate transaction with the exchange. If the farmer defaults, it is the exchange that bears the cost, not the food processor. It is up to the exchange to set up margin requirements, capital requirements, and eligibility rules to protect itself from defaults.]

In my opinion, the problem with credit default swaps is not counterparty risk. The problem is that there is no natural seller of default swaps. With corn futures, there is a natural buyer (the food processor) and a natural seller (the farmer). With credit default swaps, there is a natural buyer (the holder of a risky corporate bond), but there is no natural seller. Without a natural seller, I doubt that an organized exchange can work. The exchange has no way of ensuring that its parties can meet their obligations, except by imposing impossibly stringent requirements for capital or collateral.

In practice, the sellers of credit default swaps are relying on two strategies, neither of which is really sound. One strategy is diversification. That means that a large seller, such as an insurance company, will have many swaps outstanding, but only a few defaults will occur at a time. The analogy would be with a large life insurance company, which can presume that only a small fraction of policyholders will die at any one time. However, the crisis of 2008 made a mockery of diversification, as the threat of defaults became widespread.

Once again, capital requirements give rise to an anomaly. One way to think about credit default swaps is that some quantitative financial engineers believe that a diversified portfolio of B-rated bonds can have lower risk and a higher reward than a lone AA bond. However, this diversification is not

recognized by bank capital regulations. If the financial engineers are correct, then there is a profit opportunity for a AAA-rated insurance company to insure B-rated bonds held by banks, allowing banks to sneak B-rated bonds past regulators and allowing the insurance company to benefit from the diversification strategy.

The anomaly is that bank capital requirements make no allowance for gains from diversification, while they accept the insurance company's guarantee as legitimate. This is inconsistent. Either a portfolio of B-rated bonds truly can have lower risk than a lone AA bond, in which case bank capital requirements should say so; or else the claim is false that a portfolio of B-rated bonds has low risk because of diversification (the risks may in fact be highly correlated), in which case the capital requirements should recognize that under adverse circumstances the insurance company that sells the credit default swap may not be able to fulfill its obligation. If the seller of the credit default swap is likely to fail to perform in crisis, that in turn means that banks should not be able to lower the capital required to hold B-rated bonds by purchasing credit default swaps.

In other words, with consistent capital regulations, diversification either does or does not substantially reduce the risk of low-rated bonds. If the risk is truly diversified away, then banks can undertake the diversification themselves. If the risk is not truly diversified away, then having an insurance company undertake the diversification does not reduce the risk to banks of holding those bonds.

Apart from diversification, another strategy for selling credit default swaps is dynamic hedging. Suppose that the seller of a default swap on a bond issued by XYZ Corporation starts to suspect that the probability of a default on that bond is increasing. The seller can hedge its risk by selling short either XYZ Corporation stock or other XYZ Corporation bonds. In the event of a default, the loss that the seller will take by having to purchase the defaulted bond at par will be offset by the gains on the short-selling.

The problem with dynamic hedging is that it only works in a relatively stable market, in which few others are attempting similar strategies. When everyone is trying dynamic hedging at once, the result is a wave of short-selling that overwhelms markets.

Overall, then, if dynamic hedging is used by sellers of credit default swaps, they generate systemic risk. The individual swap sellers form contingency plans which, in the aggregate, are not compatible. When swap sellers perceive an increase in risk, they all seek to short securities simultaneously, creating the equivalent of a bank run. This run would occur just as easily if swaps were traded on an exchange as if they were traded over-the-counter.

Another systemic issue with credit default swaps is that they are subject to liquidity risk, even if the fundamental calculations of default risk are correct. Credit default swaps are like options that start out deeply out of the money. Initially, the probability of default might be thought to be much less than 1.0 percent. The seller of the swap is thus collecting a fee for selling a put option that is very unlikely to be exercised.

Because the put option is so far out of the money, its value can change even if it remains well out of the money. That is, if the probability of default goes from one in ten thousand to one in one hundred, the value of the swap goes way up (meaning that the seller's net worth goes way down), even though there is still a low likelihood that the seller will have to take a loss. This can cause the sellers of credit default swaps to suffer liquidity and solvency problems even if none of the bonds actually defaults!

A long story in the *Wall Street Journal* of October 31, 2008 explains how this affected AIG insurance, a major seller of credit default swaps. ("Behind AIG's Fall, Risk Models Failed to Pass Real-World Test," <http://online.wsj.com/article/SB122538449722784635.html>) The story notes,

"The buyers of the swaps -- AIG's "counterparties" or trading partners on the deals -- typically have the right to demand collateral from AIG if the securities being insured by the swaps decline in value, or if AIG's own corporate-debt rating is cut.

"..The credit crisis hammered the markets for debt securities, sparking tough negotiations between AIG and its trading partners over how much more collateral AIG should have to post."

Suppose that an insurer has sold a credit default swap on bond X. When the probability of a bond X default is really low, the option embedded in the credit default swap is far out of the money. Neither party has to be concerned that the option will be exercised. However, once the probability of default rises to some level of plausibility, say, 5 percent, the seller of the swap is going to have to demonstrate the ability to make good on the swap. In an organized exchange, the seller would have to meet a margin call. In the over-the-counter market, the seller is forced to post collateral, which acts like a margin call. Even when default is still unlikely and the option is still out of the money, the margin calls can strain the balance sheet of the seller of the swap. In addition, as the probability of a default on bond X rises, the value of the default swap changes adversely for the seller of the swap. This means that the insurer must recognize a loss, even though default remains unlikely.

Thus, even without a single default, an increase in the likelihood of defaults can undermine the seller of default swaps. The seller may lose liquidity due to margin calls or lose solvency due to the change in the value of the swaps.

There are many ways for financial institutions to get caught up in processes that amount to selling put options that are far out of the money. The GSE's, by providing guarantees of mortgages, were selling put options that were out of the money as long as house prices were not falling sharply. Holders of senior tranches in mortgage securities were in the same position. A lesson of this crisis is that sellers of out-of-the-money options can become too complacent about the risks that are being taken to earn the option premium. As the probability increases that the options will be exercised, the seller's institutional viability can be undermined long before the options actually are in the money.

I am concerned that leading policymakers do not understand how credit default swaps are creating excess demand for safe assets. The problem is that buyers of swaps demand that sellers post collateral. The only collateral that buyers will accept is short-term Treasury securities.

The demand for safe collateral has two adverse effects. First, it increases the demand for short-term Treasuries, artificially raising their price (lowering their interest rate), while driving down the prices (driving up the interest rates) on other securities. Second, it squeezes the liquidity of sellers of credit default swaps, threatening the viability of those firms, which in turn triggers even more demands for collateral in the system and even further flights to safety.

The problem is similar to a bank run. As institutions lost confidence in the solvency of their counterparties in transactions such as repurchase agreements or credit default swaps, they demanded more collateral as protection. This increase in the demand for collateral further weakened the institutions, causing more counterparties to demand collateral, creating a vicious cycle.

I propose a metaphor for what was happening. Imagine a casino with several poker tables. The gamblers start to become wary and suspicious. Some of them stand up and start to shout and point fingers at one another. They say, "I do not have faith that you have the funds to cover your bets. Give me money now, before you run out." They start grabbing and pushing and shoving. Order breaks down, and the casino degenerates into an uncontrolled riot.

What is needed in this situation, in my opinion, is a stern sheriff. The sheriff needs to clap his hands on the gamblers' shoulders and say, "Boys—sit down, and keep your hands to yourselves. We're going to get things settled here, but you need to wait. Those of you who are patient and wait until we've got things sorted out will get most of what you are entitled. But those of you who are not patient and who push and grab will get a lot less."

With an uninsured bank, the stern sheriff approach could stop a bank run. Suppose that the bank has loans that are coming due in three months, but right now it is short of cash. The stern sheriff approach would be to charge a high fee for bank withdrawals now, with a much lower fee in three months when it expects loan repayments to give it plenty of cash on hand. Customers who participate in the run will be hit with high fees. Customers who wait three months will preserve more of their wealth.

Similarly, the government could impose penalties on firms that make extravagant demands for collateral to back repurchase agreements, credit default swaps, and similar instruments in this environment. These penalties would help deter the collateral demands. That in turn would relieve the liquidity squeeze that is taking place.

Instead of the stern sheriff, we have had Mr. Bernanke and Mr. Paulson running around with huge bags of money, frantically dumping it on the tables in casino. \$30 billion to cover Bear Stearns' bets, \$100 billion to cover AIG's bets, \$300 billion to cover Citigroup's bets, and so forth. This policy of trying to cover the gamblers' bets only serves to agitate the situation. It rewards the impatient, grab-it-while-you-can-get-it mindset that was driving the disorderly riot. The way I see it, we should have punished the impatient grabbers and instead rewarded firms that were willing to sit back and let the contracts play out.

Consider the credit default swaps sold by AIG. AIG's counterparties, such as Goldman Sachs, started demanding collateral from AIG. These counterparties are behaving like depositors during a bank run. But should government treat Goldman Sachs the way it would an individual bank depositor?

When individual depositors rush to take their money out of a bank, the FDIC provides funds to protect the depositors. That policy is based in law as well as a moral concern for the well-being of the uninformed individual depositor. The alternative of forcing depositors to hold tight until the bank's cash position improves seems unreasonable.

However, when Goldman Sachs and other institutions engage in a run on AIG, the legal and moral situation is different. The government has made no promise to guarantee that Goldman Sachs' transaction will be safe. Goldman Sachs is not a naïve individual depositor for whom we should feel an obligation to offer relief. The alternative of ordering Goldman Sachs and other buyers of credit default swaps to hold tight, waiting for the bonds to either pay off or default, seems to me to be a perfectly reasonable way to stop the run on AIG. If government is going to intervene at all in these private contracts, instead of providing billions in guarantees I think it would be better to stop AIG's counterparties from raiding AIG in order to get collateral.

We need de-leveraging in the financial system, but the process should be gradual. It is counterproductive to have everyone try to de-leverage at once. For now, institutions involved in risky long-term agreements ought to face up to the fact that these will not be converted to risk-free short-term agreements.

While the process of de-leveraging needs to be slower, the process of weeding out failed financial firms needs to be faster. The sooner the worst banks are out of the way, the sooner that interbank credit can re-emerge.

The various bailouts and Federal Reserve lending facilities contribute to the confusion between failed firms and viable ongoing concerns. They also foster the illusion that the private sector can unload all of its long-term risky assets at once. As long as everyone believes that only the U.S. Government is capable of carrying a portfolio of risky assets, that belief will be self-fulfilling.

In voting for the Emergency Economic Stabilization Act of 2008, Congress deferred to the expertise of Treasury and Federal Reserve officials, as well as advice from prominent figures such as Paul Volcker, Eugene Ludwig, and Warren Buffet. My concern is that this expertise reflects mostly their understanding of past financial crises, without adequate knowledge of the latest financial instruments and how they affect the institutions involved.

The executives of financial firms had their mental circuits overloaded by the new financial instruments, and they made major mistakes as a result. I fear that the Treasury and the Fed are suffering from a similar overload as they deploy hundreds of billions of dollars of taxpayer money.

Mr. TOWNS. Thank you very much, Mr. Kling.  
Mr. Calomiris.

**STATEMENT OF CHARLES CALOMIRIS**

Mr. CALOMIRIS. Thank you, Mr. Chairman. It is an honor and a pleasure to appear before you and the committee today to share my views on the role of the GSEs in the current financial crisis and the lessons for GSE reform going forward. I would like to ask that my written testimony and two background articles which provide more detailed analysis in support of my statement also be entered into the record.

Mr. TOWNS. Without objection.

Mr. CALOMIRIS. Mr. Chairman, before I begin, I would like to correct a typographical error in one of those background documents, the one authored by myself and Peter Wallison. I think I can just do it orally.

In that document, on page 8, in the second column, there are two sentences that need to be replaced. They read as follows: In the addition, Freddie Mac's disclosures indicate that, of the loans added to its portfolio of single family loans between 2005 and 2007, 97 percent were interest-only mortgages; 85 percent were Alt-A; 72 percent were negative amortization loans; 67 percent had FICO scores less than 620; and 68 percent had original loan-to-value ratios greater than 90 percent. There were typos in that two-sentence excerpt, and that needs to be replaced with the following.

Mr. TOWNS. Let me say, based on that, let me read this and you can sort of respond to it as you do your presentation, Mr. Calomiris. The committee has received a letter from a former Fannie Mae executive, Mr. Barry Zigas. Mr. Zigas disputes the way you interpret Fannie Mae and Freddie Mac's financial data in a recent article you published with Mr. Peter Wallison of the American Enterprise Institute. So, you can respond. Since the article is now a part of our hearing record, I am going to ask unanimous consent to submit Mr. Zigas's letter in the hearing record and ask that you respond to it for the record. So, you can do that as you move forward.

Thank you.

Mr. CALOMIRIS. Thank you, Mr. Chairman.

Actually, it was through the kindness, I guess, of the chairman, who showed me that letter earlier or had it sent to me that I looked at the article and recognized these typographical errors. So, this correction actually responds and completely corrects the article and deals with all of those things that gentleman found, and I appreciate his pointing them out to me.

Mr. TOWNS. I will give you an extra minute in your testimony.

Mr. ISSA. Mr. Chairman, I might ask from a parliamentary standpoint, wouldn't it be in our best interest as a unanimous consent that we enclose that, that the two be placed next to each other in the record, so that there not be a chance that this oral testimony would somehow not be exactly next to the written? Because I would like the record to be accurate as to the original and perhaps—

Mr. TOWNS. Without objection.

[The information referred to follows:]

**The Subprime Turmoil: What's Old, What's New, and What's Next**

Charles W. Calomiris \*

October 2, 2008

\* Henry Kaufman Professor of Financial Institutions, Columbia Business School, and Research Associate, National Bureau of Economic Research. This paper was prepared for presentation at the Federal Reserve Bank of Kansas City's Symposium, "Maintaining Stability in a Changing Financial System," August 21-22, 2008, in Jackson Hole, Wyoming. For comments on previous drafts of this paper, which was entitled, "Not (Yet) a Minsky Moment," the author is grateful to: Lee Alston, the late George Benston, Michael Bordo, Richard Cantor, Mark Carey, Bob Eisenbeis, Richard C.S. Evans, John Geanakoplos, Thomas Glaessner, Gikas Hardouvelis, Kevin Hassett, Richard Herring, Charles Himmelberg, Glenn Hubbard, Charles Jones, Matthew Jozoff, Ed Kane, George Kaufman, Stanley Longhofer, Sebastian Mallaby, Joseph Mason, Chris Mayer, Douglas McManus, Allan Meltzer, Zanny Minton Beddoes, Jacques Rolfo, Eric Santor, Amrit Sekhon, Suresh Sundaresan, Craig Torres, Goetz Von Peter, Peter Wallison, David Wheelock; participants at the Kansas City Fed's Jackson Hole Conference, and participants at the FDIC 2007 Annual Bank Research Conference, the 2008 Annual Fain Lecture at Brown University, the IMF Conference on Financial Cycles, Liquidity and Securitization, the Conference on Money and Financial Markets at Ryerson University, the CRETE conference in Naxos Greece; and participants in other seminars at Columbia University, the American Enterprise Institute, the University of Frankfurt, the Federal Reserve Bank of New York, the Bank of Canada, the Central Bank of Cyprus, and the Hellenic Bank Association. Jeff West provided excellent research assistance.

*A sound banker, alas! Is not one who foresees danger and avoids it, but one who, when he is ruined, is ruined in a conventional and orthodox way along with his fellows, so that no one can really blame him.*

John Maynard Keynes, "The Consequences to the Banks  
of the Collapse in Money Values," 1931

### **Introduction and Executive Summary**

We are currently experiencing a major shock to the financial system, initiated by problems in the subprime mortgage market, which spread to securitization products and credit markets more generally. Banks are being asked to increase the amount of risk that they absorb (by moving off-balance sheet assets onto their balance sheets), but losses that the banks have suffered limit their capacity to absorb those risky assets. The result is a reduction in aggregate risk capacity in the financial system – a bank credit crunch caused by a scarcity of equity capital in banks – as losses force those who are used to absorbing risk to have to limit those exposures.

This essay considers the origins of the subprime turmoil, and the way the financial system has responded to it. There are both old and new components in both the origins and the propagation of the subprime shock.

With respect to origins, the primary novelty is the central role of agency problems in asset management. In the current debacle, as in previous real estate-related financial shocks, government financial subsidies for bearing risk seem to have been key triggering factors, along with accommodative monetary policy. While government encouragement of risky borrowing and loose money played a major role in the current U.S. housing cycle, investors in subprime-related financial claims must share the blame for making ex ante unwise investments, which seem to be best understood as the result of a conflict of interest between asset managers and their clients. In that sense, sponsors of subprime securitizations and the rating agencies – whose unrealistic assumptions about subprime risk were known to investors prior to the runup in subprime investments – were

providing the market with investments that asset managers demanded in spite of the obvious understatements of risk in those investments.

With respect to the propagation of the shock, much is familiar – the central role of asymmetric information is apparent in adverse selection premia that have affected credit spreads, and in the quantity rationing of money market instruments – but there is an important novelty, namely the ability of financial institutions to have raised more than \$434 billion (as of the end of the third quarter of 2008) in new capital to mitigate the consequences of subprime losses for bank credit supply. The ability and willingness to raise capital is especially interesting in light of the fact that the subprime shock (in comparison to previous financial shocks) is both large in magnitude and uncertain in both magnitude and incidence. In the past, shocks of this kind have not been mitigated by the raising of capital by financial institutions in the wake of losses. This unique response of the financial system reflects the improvements in U.S. financial system diversification that resulted from deregulation, consolidation, and globalization.

Another unique element of the response to the shock has been the activist role of the Fed and the Treasury, via discount window operations and other assistance programs that have targeted assistance to particular financial institutions. Although there is room for improving the methods through which some of that assistance was delivered, the use of directly targeted assistance is appropriate, and allows monetary policy to be “surgical” and more flexible (that is, to retain its focus on maintaining price stability, even while responding to a large financial shock).

In light of these new and old elements of the origins and propagation of the subprime turmoil, the essay concludes by considering the near term future of financial and macroeconomic performance, and the implications for monetary policy, regulatory policy, and the future of the structure of the financial services industry.

Downside risks associated with the credit crunch increased in the wake of the financial upheaval of September 2008. At this writing, a comprehensive plan to recapitalize the financial system is being considered by Congress. An intervention based on preferred stock injections into banks would be preferable to the Fed-Treasury TARP proposal of government purchases of bank assets.

Although credit conditions are a major concern, dire forecasts of the outlook for house prices reflect an exaggerated view of effects of foreclosures on home prices.

Inflation and inflation expectations have risen and pose an immediate threat. Monetary policy should maintain a credible commitment to contain inflation, which would also facilitate US financial and nonfinancial firms' access to capital markets.

Regulatory policy changes that should result from the subprime turmoil are numerous, and include reforms of prudential regulation for banks, an end to the longstanding abuse of taxpayer resources by Fannie Mae and Freddie Mac, the reform of the regulatory use of rating agencies' opinions, and the reform of the regulation of asset managers' fee structures to improve managers' incentives. It would also be desirable to restructure government programs to encourage homeownership in a more systemically stable way, in the form of downpayment matching assistance for new homeowners, rather than the myriad policies that subsidize housing by encouraging high mortgage leverage.

What long-term structural changes in financial intermediation will result from the subprime turmoil? The conversion of Morgan Stanley and Goldman Sachs from standalone investment banks to commercial (depository) banks under Gramm-Leach-Bliley is one important outcome. The perceived advantages of remaining as a standalone investment bank – the avoidance of safety net regulation, and access to a ready substitute for deposit funding in the form of repos – diminished as the result of the turmoil. Long-term consequences for securitization will likely be mixed. For products with long

histories of favorable experiences – like credit cards – securitization is likely to persist and may even thrive from the demise of subprime securitization, which is a competing consumer finance mechanism. In less time-tested areas, particularly those related to real estate, simpler structures, including on-balance sheet funding through covered bonds, will substitute for discredited securitization in the near term, and perhaps for years to come.

*1. What's Old and What's New about the **Origins of the Turmoil?***

The financial turmoil that began in the summer of 2007 continues, and likely will continue, through the end of 2008, and perhaps beyond. The turmoil has many dimensions in addition to the obvious statistics of falling asset prices, increased foreclosures, and widening default spreads – the “financial revulsion” (a wonderfully descriptive term that unfortunately has fallen out of use in recent decades) marks the end of a boom in housing prices, the collapse of the young subprime mortgage market, and the demise of a recent wave of complex securitization structures engineered by Wall Street to share risk and conserve on financial intermediaries’ capital (the so-called originate-and-distribute model of financial intermediation). It also marks the end of one the longest periods of high profitability, ample equity capital, and abundant credit supply in U.S. banking (1993-2006). For these reasons, the turmoil is much more than a cyclical readjustment in prices, risk appraisal, risk tolerance, or credit supply; it represents an end to important secular trends in asset prices, financial innovation, and financial intermediation, which persisted for more than a decade.

From the perspective of a longer-term view of financial shocks, such reversals are not new. The Great Depression saw similar long-term trend reversals. Asset prices that had boomed in the 1920s collapsed in the 1930s. The stock issues boom and the tendency of retail investors to become stockholders on a large scale (both of which can be regarded as financial structural changes of the 1920s), were brought to an end in the 1930s (for roughly thirty years). And much like the securitized

mortgage finance sector today, the high-fliers of the 1920s, the utilities companies, went from a booming sector that thrived on the new funding sources of the 1920s to struggling enterprises and wards of the state.

The Great Depression is not the only example of an historical financial crisis that witnessed a long-term reversal in financial structure trends. Indeed, the Depression was quite different from the current turmoil in its origins; there are many better historical parallels to choose from.<sup>1</sup> When searching history for precedents and lessons it is important to recognize distinctions among financial crises (exemplified in Table 1). Some entail severe losses (losses from the Dot.com collapse were greater than the large losses from the current subprime turmoil), others do not (e.g., the Penn Central crisis, or the panics of the national banking era). In some cases, the incidence of losses across the economy is easy to discern (e.g., in the Dot.com collapse), in others (like the current subprime debacle, the Penn Central crisis, or the national banking era panics) losses are not easy to measure or locate within the financial system. Some revolve around bank lending behavior (like today's problems), others are located mainly in stock and bond markets (e.g., the Dot.com collapse). Some are closely related to real estate (the agricultural problems of the 1920s and the 1980s), others are not.

What are the typical historical ingredients of crises that are most similar to the current turmoil? What has caused severe credit collapses linked to real estate booms and busts in the past? Accommodative monetary policy has been a key factor in historical credit and asset pricing cycles of all types historically (Bordo and Wheelock 2007a, 2007b, Bordo 2007). This has long been recognized by commentators on financial crises. In reviewing White's (1996) edited compendium of prominent articles on financial crises, Calomiris (1998) noted an overarching theme of the collection:

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<sup>1</sup> Although agricultural problems continued from the 1920s into the 1930s, the Depression was not caused by shocks relating to a real estate bust. The Great Depression was caused primarily by shocks relating to worldwide monetary and exchange rate policy, which were propagated, in part, through their effects on the financial system. For a recent review of the contributing factors to the Depression, see Parker (2007).

the most severe financial crises typically arise when rapid growth in untested financial innovations coincided with very loose financial market conditions (that is, an abundance of the supply of credit).

In historical and contemporary real estate-related financial crises, a third factor has also been key to causing the most severe losses: the presence of government subsidies encouraging widespread underpricing of risk, which makes the costs of financial collapses particularly large (see Calomiris 1989, 1990, 1992, 2008, Caprio and Klingebiel 1996a, 1996b, Dermirguc-Kunt, Kane, and Laeven 2008).

In exploring the roots of the subprime debacle it is reasonable to begin the search for causes in this familiar territory. Can one conclude that the current turmoil offers simply another illustration of familiar broad themes that are well known to financial historians? Is the current mess just another example of what happens when one mixes loose monetary policy (magnified by the so-called global savings glut of the past several years),<sup>2</sup> distortionary policies that subsidize risk taking (like various government subsidies for leveraging real estate, discussed below), and financial innovations that complicate risk assessment (an innovative, fast-growing market for securitized assets)?

Real estate debacles are common historically. A little more than one hundred years ago, five of the financial collapses of that era (Argentina 1890, Australia 1893, Italy 1893, the Western United States 1893, and Norway 1900) all displayed similar trend reversals in real estate markets, albeit to different degrees.<sup>3</sup> Four of these crises (Australia, Argentina, Italy, and Norway) constitute the most severe banking crises of the 1875-1913 period worldwide where severity is measured in terms of the negative net worth of failed banks as a proportion of annual GDP.<sup>4</sup> All four of these cases have been

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<sup>2</sup> By some measures, monetary policy was unusually accommodative during the subprime boom. The real fed funds rate, measured less the core PCE, or less the University of Michigan five-year expected inflation measure, was persistently negative from 2002-2005 to a degree only seen once before in the post-World War II era, in 1975-1978. The effects of loose monetary policy (which is generally confined to lowering only short-term interest rates) was magnified by global factors that promoted correspondingly low long-term rates (the so-called "conundrum"). Caballero et al. (2008) argue that special circumstances relating to the comparative advantage of financial intermediation in the United States can explain the conundrum.

<sup>3</sup> These episodes are discussed in detail in Calomiris (2008).

<sup>4</sup> Brazil is excluded from the list due to lack of available data.

linked in the economic history literature to government subsidies in real estate finance that gave rise to booms in real estate investment. The most severe ones (Australia and Argentina, both of which resulted in nearly unprecedented resolution costs of roughly 10 percent of GDP) clearly were cases in which particularly large government subsidies financing land development drove extraordinary booms in land markets that ended badly.

The Argentine financial collapse of 1890 was at its core the end of an experiment in the subsidization of real estate risk in the pampas. Argentina's banks were permitted to originate mortgages (*cedulas*) that were guaranteed to be paid by the state if the borrower was unable to do so. These mortgages traded at par with Argentine government securities in the London money market. This arrangement was designed to expand credit supply for land (the political brainchild, of course, of the recipients of the subsidy). In the process, it also encouraged extreme risk taking by lenders (the incentive consequences of guaranteeing mortgage repayment are essentially the same as guaranteeing deposit repayment or GSE liabilities in our modern financial system).

The Australian case was a bit different; financial market policies toward the private sector were not the primary means through which the government promoted the land boom that preceded the bust of 1893. The pre-1890 Australian economic expansion was largely an investment boom in which the government played a direct role in investing in land and financing farmers' investments. Government investments in railroads, telegraphs, irrigation, and farms were financed by government debt floated in the British capital market and by government-owned savings banks and postal savings banks (M. Butlin 1987, N. Butlin 1964, S. Butlin 1961, Davis and Gallman 2001).

The smaller losses during the Norwegian and Italian land busts reflected less aggressive, more regionally-focused government policies that promoted land development. In Norway, that was achieved through a government-sponsored lender and an accommodative central bank; in Italy, through liability protection for the Banca di Roma, which famously financed a Roman land boom at

the behest of the Pope, who had lobbied for national government insurance of the bank's liabilities (Canovai 1911). The Norwegian banks' losses amounted to roughly three percent of GDP, and the Italian banks' losses (which largely reflected exposures to the Roman land market) were roughly one percent of GDP (Calomiris 2008).

The agricultural finance collapse of the 1890s in the Western U.S. (concentrated in Kansas and Nebraska) was a different matter; it had little to do with government policy. Here, mortgage brokers and local bankers mistook the quality and riskiness of the newly settled lands of the so-called "middle border," and in retrospect, invested far too much in lands that failed to meet those expectations; those overly optimistic initial assessments were brought to light during the drought-stricken years after 1887 (Bogue 1955, Calomiris and Gorton 1991). It is noteworthy that bank failures during the U.S. crisis of 1893 were highly concentrated in the states whose lands had produced surprising losses; the losses of failed banks for the U.S. as a whole were small as a fraction of GDP (less than one-tenth of one percent) – in sharp contrast to the other four cases – reflecting the region-specific nature of that crisis, and the absence of an active role of government subsidization of real estate risk, which was present in the other four cases.

In the 20<sup>th</sup> century, boom-and-bust cycles in agricultural land prices, sometimes with dramatic consequences for farm and bank failures, were also apparent, and the most severe of these episodes (the farm land price collapses of the 1920s and the early 1980s) – like the land booms and busts of Australia, Argentina, Italy, and Norway in the 1890s – were traceable to government policies that subsidized real estate financing.

Following a typical wartime pattern, agricultural prices were bid up substantially during World War I. Some optimistic, risk-loving farmers in some states in the United States substantially expanded their land under cultivation in response to that short-term change (wrongly inferring a permanent change had occurred), while others did not. Interestingly, not all states empowered

optimistic farmers to the same degree. In North Dakota, South Dakota, and Nebraska, the losses from overly optimistic agricultural lending that came home to roost in the 1920s were much larger than in adjoining states. Those three states empowered land value optimists by establishing large land financing subsidies in the form of mandatory deposit insurance systems for state-chartered banks. Optimistic farm land speculators could organize small new banks and attract funds easily in the presence of deposit insurance. All state banks shared (via mutual liability for each other's deposits) any losses that occurred. The result was that these three states' state-chartered banks expanded their agricultural lending at a much faster pace than other states, and did so through the establishment of new, small (very undiversified) rural banks with very low equity capital (Calomiris 1990, 1992).<sup>5</sup>

A similar pattern repeated itself at the national level during the agricultural boom of the 1970s. Carey (1994) constructed a theoretical and empirical model of how credit subsidies administered through the Farm Credit System "fed the optimists" during the 1970s. As land prices escalated, non-Farm Credit System lenders withdrew from financing loans collateralized by obviously overbought land, while government lenders did not (and eventually constituted 100% of the marginal loan supply for agricultural loans). Carey's empirical evidence of the existence of a land bubble in the 1970s is unusually convincing; unlike in residential real estate (where projections of fundamentals relating to permanent income and demographic trends make it difficult to establish the existence of a bubble) by focusing on agricultural land, whose value can be clearly linked to soil productivity and crop price trends (which are observable characteristics), one can measure the extent to which land values deviate from reasonable projections of the net present value of income earned from the land.

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<sup>5</sup> Wheelock and Wilson (1994) show similar patterns, cross-sectionally, within Kansas. Banks in Kansas that voluntarily entered the Kansas deposit insurance system operated less prudently and suffered larger losses than other Kansas banks. The compulsory systems of Nebraska and the Dakotas, however, offered greater subsidization of risk, and resulted in greater loss.

In summary, real estate-related financial crises with the most disastrous loss consequences have typically been the result of government financial policies that subsidized the taking of real estate risk.<sup>6</sup> How relevant are these historical cases – Australia and Argentina in the 1890s, the Dakotas and Nebraska in the 1920s, or the U.S. farm boom and bust of the 1970-1985 period – for understanding the current turmoil? Did government investment and credit subsidies drive the current boom and bust in the same manner as it drove these most severe trend-reversing real estate busts of the past, which resulted in huge macroeconomic declines and enormous taxpayer-borne resolution costs?

Clearly, U.S. financial policy subsidizes the bearing of risk in financing residential real estate. The U.S. government subsidizes homeownership in several ways, but each of those subsidies is delivered in a way that promotes financial fragility in the real estate market. The primary subsidies are: (1) the deductibility of mortgage interest on one's home,<sup>7</sup> (2) FHA programs to provide credit to buyers (which permit 97% leverage at origination, and permit cash out refinancing that leave leverage as high as 95%), (3) government funding subsidies via Federal Home Loan Bank lending (which played a large role in financing IndyMac and Countrywide) and liability protection for Fannie Mae and Freddie Mac (formerly implicit, now explicit) along with political pressures on those institutions to increase their "affordable housing" programs, which increased demand for subprime mortgages by Fannie and Freddie, (4) government initiatives (including the Community Reinvestment Act, or CRA) that have pressured banks to increase the access of low-income and minority individuals to

<sup>6</sup> Obviously, the cases discussed above are not a complete list. Including other examples would confirm the central conclusion of this discussion. For example, the U.S. Panic of 1837 and Panic of 1857 also were significant financial crises with real estate aspects, particularly related to infrastructure expansion. The 1830s saw overbuilding of canals by state and local governments, through a combination of government expenditures, state government bond flotations, and loans from state-chartered banks whose charters specifically envisioned financing these projects. The series of events that triggered the Panic of 1837 is controversial (Temin 1969, Schweikart 1987, Rousseau 2002), but whatever the trigger, the Panic brought huge losses related to prior infrastructure investment. The westward expansion of the 1850s resulted primarily from private investments in railroads, which was undermined by adverse political news relating to the brewing conflict over western expansion between the North and the South (Calomiris and Schweikart 1991). Compared to the Panic of 1857, the Panic of 1837 resulted in far more severe losses for banks and securities investors who financed the government-promoted real estate investments of the 1830s.

<sup>7</sup> Because owners of rented residential properties are permitted to deduct their mortgage interest expenses, the benefit of which presumably is passed on to renters, it is wrong to say that permitting homeowners to deduct their mortgage interest subsidizes homeownership; rather, it is perhaps better to say that allowing homeowners to deduct interest avoids taxing homeownership.

bank credit, and (5) default mitigation protocols, developed during the 1990s and early 2000s, which have required banks that originate loans held by Fannie, Freddie, and FHA to adopt standardized practices for renegotiating delinquent loans to avoid foreclosure.

These five categories of initiatives either encourage creditworthy borrowers to increase their mortgage leverage (by establishing benefits of maintaining high leverage) or expand access to borrowing for people who would not otherwise be able to secure or retain mortgage loans. Over the last several decades, the government and private lenders have both expanded the maximum allowable leverage on a home, and reduced the minimum creditworthiness of individuals with access to mortgage finance, which has magnified the subsidies from these various credit programs. The most important of these influences in recent years seems to have been the role of Congressional politics in encouraging Fannie and Freddie to grow their subprime portfolios. Accounting scandals at Fannie and Freddie in 2003 and 2004 galvanized the GSE reform movement. Critics, including Alan Greenspan, worried increasingly about the systemic risks posed by the growing size and portfolio risks of these institutions, and undertook a concerted effort to rein in the housing GSEs, which culminated in proposed legislation by Senate Republicans in 2005 (Calomiris and Wallison 2008). Apparently, this drove the GSEs to redouble their efforts to appeal to Congressional Democrats by substantially expanding their exposures to subprime mortgages from 2005 through 2007. As of 2008, Fannie and Freddie had a combined exposure to subprime and Alt-A mortgages of more than one trillion dollars.

Alternative means for subsidizing homeownership do exist in other countries. In particular, one alternative is a program of government matching of downpayments by new homebuyers. This offers an alternative, risk-reducing means of promoting homeownership (Calomiris 2001). But governments typically prefer promoting homeownership by subsidizing lending. The primary explanation for Congress' and other governments' preference for credit subsidies, historically and

currently, revolves around the differing electoral politics of on- and off-budget subsidies. Downpayment matching by the government is a budgeted transfer payment, while the costs of subsidizing housing via the five categories of credit intervention listed above are hidden (until a financial collapse makes them apparent). The desire of legislators to avoid visible budgeted costs in favor of hidden guarantee costs seems to be a consistent theme of political history. That has an important consequence: the powerful political interests that favor real estate subsidies receive their government largesse in a form that promotes financial instability.

Undoubtedly, subsidies for mortgage leverage and government policies that have expanded access to credit were key drivers of the current U.S. turmoil. This is not just a U.S. problem; in Germany, for example, the government-supported Landesbanken are the locus of some of the most severe losses. Clearly, it is desirable to reduce government subsidization of mortgage risk.

But loose monetary policy and government encouragement of subprime investments by Fannie Mae, Freddie Mac, and other government interventions to promote affordable housing do not offer a complete explanation of the current mortgage mess in the United States. Subprime loan securitizations were bought by private sector players, not just by Fannie Mae or Freddie Mac. And the purchasers and originators of claims on these mortgages were not just regulated commercial banks (who had to meet CRA or other similar regulatory pressures), but included all classes of institutional investors. I will argue that another influence, namely an investment agency problem, was also important for understanding the timing and severity of the subprime shock. Before making that case, it is useful to review more comprehensively the frameworks used by economists to explain financial crises, and how well or poorly those competing frameworks perform in explaining the facts of the current subprime turmoil.

*Different frameworks for explaining booms and busts*

There are several non-mutually exclusive frameworks in economics that are capable of delivering what are variously termed “credit cycles,” “cycles of mania and panic,” “booms and busts,” and the like. I would characterize the literature as divided into four broad frameworks: (1) variation in fundamentals over time, (2) irrational myopia, (3) government subsidies that distort risk pricing, and (4) agency in asset management.<sup>8</sup> I have already described the way government subsidies that distort risk pricing can produce booms and busts. I briefly review the other three frameworks to explain why asset management agency problems, in combination with loose monetary policy and a preexisting set of government policies that encouraged high leverage, played the dominant role in the origins of the current turmoil.

The first framework, the “fundamentalist” model, posits that credit cycles reflect exogenous events, which alter rational perceptions of future cash flows and lead to endogenous changes in tolerances for risk, reflected in leverage limits, risk pricing, and asset prices. Recent examples of such models include Von Peter (2008) and Geanakoplos (2008). According to these models, which build on prior theoretical work on credit cycles and business cycles by Bernanke and Gertler (1989, 1990) and others, agents behave rationally and respond to evolving news. Responses to news become especially pronounced in environments of asymmetric information, and can deliver large changes in leverage and asset pricing. One strength of this class of models is that it is capable of explaining why some credit cycles are much more severe than others – the severity of the cycle should depend on the size of the exogenous shock, and on the financial condition (state variables such as leverage, liquidity, etc.) of financial intermediaries, firms, and consumers at the time news shocks arrive.

This framework implies many testable implications (identifying shocks, and measuring differences in responses that vary according to the state variables of the agents). There is a large

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<sup>8</sup> There is another category of theoretical models (which have fallen out of fashion in the past decade) that posit financial crises resulting from knife-edge phenomena relating to multiple equilibria and endogenous liquidity scarcity. I discuss this class of models elsewhere (Calomiris 2008), where I show that these models are of little use for understanding the likelihood, timing and varying severity of financial crises.

literature measuring responses over the credit cycle and linking them to identifiable shocks and propagators. Importantly, this literature shows that severe credit events do not happen in every cycle. For example, Calomiris and Gorton (1991) show that the timing of the nationwide banking panics during the period 1870-1913 can be fully explained with a dual threshold criterion: if and only if the quarterly liabilities of failing businesses rose sufficiently (by 50%) while stock prices were falling sufficiently (by more than 9%), a banking panic ensued. Calomiris, Orphanides and Sharp (1997) find that firms' investment contractions during recessions do depend on their preexisting leverage, but that dependence is complex and reflects the fundamental circumstances of individual firms; the combination of firms' sales growth fundamentals and leverage is what matters, not just leverage, *per se*, when considering how severely firms are punished by contracting credit markets. Similarly, Calomiris and Mason (2003a) show that bank depositors varied their withdrawal responses to the shocks buffeting banks during the Great Depression according to the fundamental positions of their respective banks. Calomiris and Mason (2003b) show that regional variation in the extent of the credit crunch during the Great Depression was related to characteristics of the banking systems in different states.

Variation over time in the pricing of risk (as described by Bordo 2007, and Bordo and Wheelock 2007a, 2007b) arises in a fundamentals-based model of credit cycles. Asymmetric information problems in financial intermediation cause variation over time in the effective supply of credit available to borrowers, and the pricing of risk will vary with the supply of credit. For example, if reductions in the riskless interest rate are associated with increases in the value of bank equity capital, and if increases in equity capital in turn increase the supply of loanable funds, then credit spreads may fall with riskless interest rates. Indeed, this particular transmission mechanism of monetary policy was a key insight in Bernanke's (1983) fundamentalist model of financial markets

during the Great Depression, which found further microeconomic empirical support in Calomiris and Mason (2003b) and Calomiris and Wilson (2004).

A limitation of the fundamentalist approach is that it explains variation in risk pricing, but not under- or over-pricing of risk. Several empirical studies have argued that risk pricing not only varies over time, but becomes excessively favorable during booms, implying a failure of markets to adequately protect against loss and to price underlying risk fully (Dell'Ariccia, Igan, and Laeven 2008, Jimenez, Ongena, Peydro-Alcalde, and Saurina 2007, and Mendoza and Terrones 2008). Indeed, I will argue below that there is strong evidence of the underpricing of risk in subprime lending from 2004 to 2007.

How can mispricing of risk be explained? Hyman Minsky (1975) and Charles Kindleberger (1978) advocate a behavioral theory of manias (during booms) and panics (during crashes), which is rooted in the tendency of human nature to overreact. Myopia and herd-like behavior cause endogenous cycles of greed and fear to dominate investment behavior rather than rational long-term calculations of forecasted fundamentals. This theory posits the perpetual under- and over-pricing of risk as the result of human nature's purported tendency to engage in cycles of euphoric greed, followed by fear and panic.

Despite its appeal for explaining risk mispricing, the Minsky-Kindleberger approach suffers from an important empirical defect: as a theory about human nature, it should have nearly universal application. At least within the context of roughly similarly organized financial markets and economies, boom and bust cycles should be pretty similar in their length and severity. That implication is a problem for the theory; some financial crises, as even the brief review of cases above illustrates, have much more severe consequences than others. This variation, of course, is precisely what fundamentalist models of financial cycles are capable of explaining. If one wants to know why

*this particular turmoil of 2007-2008* is so much worse than others in the past, the Minsky-Kindleberger view is going to be hard pressed to explain it.

Neither the Minsky-Kindleberger view nor the “fundamentalist” model can explain the origins and peculiar severity of the current turmoil. The fundamentalist view cannot explain the private sector’s under-pricing of subprime risk. Furthermore, unlike the Russian/Long-Term Capital crisis of 1998, or 9/11, there was no identifiable exogenous shock driving the current turmoil; the problem came from within the financial system. The Minsky-Kindleberger view, while capable of explaining under-pricing of risk, does not explain the relative severity of shocks like the current one. Furthermore, as discussed at length below, there is evidence that subprime risk under-pricing was intentional, not the result of euphoria or ignorance.

In my view, the three specific, key influences that worked together to produce the massive ex ante underpricing of risk in the two years prior to mid-2007 were: (1) the global savings glut (a surge in the supply of investable funds resulting from loose monetary policy, and other global influences, including the exchange rate/reserve accumulation policy of China), (2) the massive increase in demand for subprime instruments by Fannie Mae and Freddie Mac, and (3) agency problems that led asset managers to purposefully deploy an increasing proportion of funds in bad investments.

The three influences fed on each other. Fannie and Freddie bid up the prices of subprime instruments and seemed to offer a reliable source of growing, taxpayer-supported demand in support of subprime mortgage-backed securities’ prices. The global savings glut encouraged excessive risk taking by providing a vast pool of resources available for investment; this factor, by itself, would tend to encourage excessive risk taking by non-hedge fund money managers who are compensated on the basis of the volume of risky assets that they manage. Indeed, the fact that LBO financing and other asset classes, not just subprime mortgages, seem to have been overpriced in 2006 and 2007, provides evidence of a general environment of excessive risk taking. But the agency problem was especially

pronounced for subprime investments because of the behavior of the GSEs, as well as the novelty of subprime lending and the *particular loss experience on subprime foreclosures in 2001-2003*, which created a unique moral-hazard opportunity for asset managers to enjoy “plausible deniability” in the pricing of risk.

Asset managers invested too much in risky assets because of an incentive conflict. If they had informed their clients of the truth – that the supply of good investments in risky assets has been outstripped by the flood of financial savings, and that consequently, the risk-reward tradeoff does not warrant further investment in risky assets – then asset managers would have been required to return money to clients rather than invest in risky assets. Presumably the money would then have ended up in bank deposit accounts or other investments. Returning the money to investors under these circumstances makes investors better off (given the poor return to bearing risk), but it can make asset managers worse off (if their compensation depends primarily on the size of the funds they manage), since the management fees earned grow in proportion of the amount of funds invested in risky assets.<sup>9</sup>

*Agency in Asset Management: “Plausible Deniability” and the 6% Solution*

What is the evidence that asset managers who bought or retained securitization claims or other liabilities relating to subprime mortgages willingly over-invested their clients’ money in risky assets that did not adequately compensate investors for risk? Others (e.g., Mason and Rosner 2007a, 2007b, IMF 2008, Ellis 2008) describe in detail the faulty assumptions that underlay the securitization of subprime mortgages and related CDOs. Of course, it is always difficult to establish the ex ante unreasonableness of any assumptions. Nevertheless, some facts known to investors in

<sup>9</sup> If this account is correct, it implies a testable hypothesis for future empirical work: institutional investors who were investing their own money, or who are properly incentivized to focus on the long-run performance of their portfolios (i.e., many hedge fund managers), should have been more choosy about their investments in subprime mortgages and related CDOs. Casual empiricism is consistent with this prediction, although I am not aware of any formal analysis that supports it.

advance of the subprime collapse are hard to explain without appealing to an asset management agency problem.

Ratings agencies and sponsors, who engineered the financing structure of subprime MBS through their chosen assumptions regarding the probability of default (PD) and loss given default (LGD) on portfolio pools (and other assumptions), assumed unrealistically low expected losses on subprime MBS pools prior to the crisis, and failed to timely revise them upward, despite the high growth of subprime and changes in the population of originators and borrowers that should have been cause for concern. Indeed, ratings agencies and sponsors maintained highly optimistic assumptions about the market until the middle of 2007, long after clear signs of serious problems had emerged. The expected loss assumptions were unreasonably low, and independent observers drew attention to that fact far in advance of the summer of 2007. The low expected loss assumptions were fundamental to the growth of subprime MBS in the four years leading up to the crisis. A low assumed expected loss is crucial for explaining how subprime mortgages were able to finance themselves more than 80% in the form of AAA debts, and more than 95% in the form of A, AA, or AAA debts, issued by subprime MBS conduits.

The low assumed expected loss had two parts: a low assumption of the probability of default (PD), and a low assumption of the loss given default (LGD), which is also called the “severity” of loss. It is hard to document the pre-2007 PD and LGD assumptions used by ratings agencies or sponsors.<sup>10</sup> Data on expected losses for subprime pools, however, do exist (the product of LGD and PD). Assumed expected losses were roughly 4.5% circa 2004, and rose to roughly 6% in 2006. Realized losses on these cohorts are now projected to be several times these numbers.<sup>11</sup>

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<sup>10</sup> The modeling assumptions used in rating subprime pools have become much more transparent since the middle of 2007, and it is now possible to know LGD assumptions by type of product and by cohort, but this sort of information seems to be unavailable retrospectively.

<sup>11</sup> The original collateral pool loss expectations for the 2006 subprime vintage were in a range between 5.5% and 6%, according to Moody's (2007e). In 2004, some industry sources indicate that Moody's expected loss assumption for subprime pools was 4.5%.

Where did the low loss assumptions come from, and how could institutional investors have accepted these as reasonable forward-looking estimates? Subprime was a relatively new product, which grew from humble beginnings in the early 1990s, and remained small even as recently as several years ago (Table 2); not until the last three years did subprime originations take off. Given the recent origins of the subprime market, which postdates the last housing cycle downturn in the U.S. (1989-1991), how were ratings agencies able to ascertain what the LGD would be on a subprime mortgage pool?

A significant proportion of subprime mortgages defaulted in the wake of the 2001 recession, although the volume of outstanding subprime mortgages was small at that time (Figure 1). In fact, only in the last quarter has the default rate on subprime mortgages exceeded its 2002 level. The existence of defaults from 2001-2003 created a default loss record, which provided a basis for low expected loss projections. Subsequent experience was even better; the 2003 cohort of subprime mortgages realized cumulative losses of only 3% prior to July 2007 (Merrill Lynch 2007, p. 9, note 11).

There were two major problems with using the 2001-2003 experience as a basis for a forward-looking forecast of future losses from subprime foreclosures. First, and most importantly, the loss experience of 2001-2003 occurred in the wake of a very unusual (almost unique) macroeconomic event, namely a recession (in 2001) during which the housing market continued to boom. Low realized losses reflected the fact that housing prices grew dramatically from 2000 to 2003 (see Figure 11). In a flat or declining housing market – the more reasonable forward-looking assumption for a high-foreclosure, recessionary state of the world – both the probability of default (PD) and the LGD would be much greater (as today's experience demonstrates). The PD would be greater in a declining housing market because borrowers would be less willing to make payments when they have little

equity at stake in their homes.<sup>12</sup> The LGD would be greater in a declining housing market because of the effect of home price appreciation on lenders' losses.<sup>13</sup>

This error was forecastable. For the most part, the housing cycle and the business cycle coincide very closely. Most of the time in the past (and presumably, in the future) when recession-induced defaults would be occurring on subprime mortgages, house prices would be not be appreciating. Thus, it is reasonable to assume that times of high foreclosure are also times of high LGD. This implies that the loss experience of 2001-2003 (when house prices rose) was not a good indicator either of the probability of foreclosure or of the LGD for subprime mortgage pools on a forward-looking basis. Anyone estimating future losses sensibly should have arrived at a much higher expected loss number than the 4.5%-6% numbers used during the period 2003-2006.

Another reason that the expected losses were unrealistically low relates to the changing composition of loans. Even if 6% had been reasonable as a forward-looking assumption for the performance of the pre-2005 cohorts of subprime borrowers, the growth in subprime originations from 2004 to 2007 was meteoric, and was accompanied by a significant deterioration in borrower

<sup>12</sup> Foreclosure is a strategic decision on the part of borrowers and lenders, and thus reflects changes in house values. Calomiris, Longhofer and Miles (2008) show that negative shocks to house prices produce increases in foreclosures.

<sup>13</sup> According to Fitch (2006b, p. 6), the 2004, 2005, and 2006 cohorts of subprime mortgages had average loan-to-value ratios of 81.5% and average loan sizes of roughly \$163,000. On average, foreclosures costs on a home in the U.S. average roughly \$59,000, which is a large fraction of the size of subprime mortgages (Getter 2007). Foreclosures, on average, are completed eighteen months after the first missed payment – Getter 2007). Costs consist of lost loan principal, real estate taxes and insurance payments, maintenance, real estate commissions, legal fees, and other physical collection costs. When house prices rise, some of the costs lenders bear in foreclosure are recoverable, although not all foreclosure costs can be recovered, even when home prices of foreclosed homes rise dramatically (Mason 2007). In essence, the LGD is kinked as a function of home price change: home price declines have a one-for-one dollar effect on realized losses (since they reduce the ability to recover principal, accrued interest, and other recoverable costs one-for-one), but home price appreciation only has a fractional effect on foregone losses, since some expenses cannot be recovered from the proceeds of the sale of the house. For example, under an assumption of a 15% prospective decline in house prices, as of January 2008, JPMorgan projected that the LGD for a sample of Prime Alt-A Hybrid ARM portfolios that were originated in 2003 was 12.8%, but the LGD for the 2006 cohort of similar mortgages, under the same price change assumption, was 44.6%. That difference reflected the fact that on average the 2003 cohort had substantial equity (25.5% equity at origination plus 27.3% estimated appreciation from origination to January 2008), while the 2006 portfolio had 24.3% equity at origination and house prices were estimated to have declined 17.0% from origination to January 2008. Thus, the huge 31.8% estimated difference in LGD was attributable to a 44.3% difference in price change (less than a one-for-one effect). A reasonable forward-looking average LGD assumption for subprime mortgages prior to 2007 would probably have been upwards of 40%, consistent with realistic foreclosure cost estimates and a zero-price change housing outlook (Merrill Lynch 2007, p. 9), not the lower LGD numbers actually assumed prior to 2007. The low LGD assumptions employed reflected unrealistic assumptions of continuing home price appreciation, which persisted into the middle of 2007.

quality (Ellis 2008).<sup>14</sup> Was it reasonable to assume that these changes would have no effect on the expected loss of the mortgage pool? The average characteristics of borrowers changed dramatically (resulting in substantial increases in the PD, which were clearly visible by 2006 even for the 2005 cohort, as is apparent in Figure 2).

Mason and Rosner (2007a, 2007b) raised these and many other criticisms of subprime underwriting standards before August 2007. As early as the summer of 2006, critics pointed to the implausible loss assumptions of subprime mortgage pools, and the need to stress test them with a housing downturn. This was not rocket science.

Even more remarkably, subprime and Alt-A originations for 2006 and early 2007 continued despite mounting evidence of performance problems in existing portfolios, which were discussed openly by the ratings agencies. Gary Gorton, in his oral comments at the 2008 Kansas City Federal Reserve Bank's Jackson Hole Conference described the originations in 2006 and 2007 by Merrill, UBS, and Citibank as "shocking." As Gorton's (2008) paper emphasizes, the core assumption on which subprime lending had been based was the permanent appreciation of home prices. By the middle of 2006, that assumption came into question. Gorton (2008) shows that the ABX market had become concerned about subprime performance by the middle of 2006. According to Fitch's (2006a, p. 21) extremely negative discussion of subprime prospects, the environment became increasingly negative after the first quarter of 2006, as reflected in the fact that "the number of sub-prime downgrades in the period between July and October 2006 was the greatest of any four-month period in Fitch's history for that sector" (up to that point). Fitch (2006a, p. 21) correctly predicted that "the sensitivity of sub-prime performance to the rate of HPA [home price appreciation] and the large

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<sup>14</sup> Low LGD assumptions also help to explain the rise of "no-docs" or "low-docs" subprime mortgages (less graciously called "liar" mortgages) that produced the uniquely loss-creating loan cohorts of 2005, 2006, and 2007 (Ellis 2008). The probability of default (PD) – which increases when screening is relaxed – matters less when the LGD is low. Cutting processing costs and time delays by adopting a no-docs process and charging a few extra percentage points of interest may be a more profitable way to run a subprime origination business, despite the adverse selection consequences for the pool of adopting this practice, if you believe that the LGD is low.

number of borrowers facing scheduled payment increases in 2007 should continue to put negative pressure on the sector. Fitch expects delinquencies to rise by at least an additional 50% from current levels throughout the next year and for the general ratings environment to be negative, as the number of downgrades is expected to outnumber the number of upgrades.” Nevertheless, in the midst of all this negative news, the originations continued at a feverish pace (Table 2), and not until the middle of 2007 did serious problems become reflected in significant changes in modeling assumptions by the ratings agencies.<sup>15</sup>

Institutional investors managing the portfolios of pensions, mutuals, insurance companies and banks continued to buy subprime-related securitization debt instruments, and banks that sponsored these instruments continued to retain large amounts of the risk associated with the subprime MBS and CDO securitizations they packaged, through purchases of their own subprime-related debts and credit enhancements for subprime conduits. Were the bankers who created these securitizations and retained large exposures for their banks related to them, and other sophisticated institutional investors who bought subprime-related securities, aware of the flawed assumptions regarding PD and LGD that underlay the financial engineering of subprime MBS by ratings agencies? These assumptions were widely publicized as part of the process of selling the securities. Did they object? Apparently not.

There is also evidence that bankers who securitized subprime mortgages put the worst of the subprime mortgages into their securitization portfolios (retaining the better subprime mortgages on their balance sheets). Keys, Mukherjee, Seru, and Vig (2008) examine a dataset on securitized subprime mortgage loans and find that lenders purposely placed inferior subprime mortgages into securitization portfolios. Specifically, although the mortgages in the pools appeared to be similar to non-securitized mortgages, based on prima facie credit indicators (such as FICO scores), those that were securitized ultimately had substantially higher default rates. These results suggest that

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<sup>15</sup> In July 2007, as problems in subprime started to appear, loss assumptions increased substantially to roughly 8-11% (Merrill Lynch 2007, Moody's 2007a, 2007b, 2007c, 2007d). By the end of 2007, loss estimates had grown much more; in some subprime portfolios, estimated pool losses could exceed 50%.

securitization was associated with the purposeful adverse selection of risk. In other words, securitizations purposely created hidden risks for buyers, including the sponsoring institutions that retained much of the risk created by their own securitizations.

Why did bankers create these risks for their own and other institutions, and why did other sophisticated institutional investors buy these overpriced securities? One answer is that asset managers were placing someone else's money at risk, and earning huge salaries, bonuses and management fees for being willing to pretend that these were reasonable investments. And furthermore, they may have reasoned that other competing banks and asset managers were behaving similarly, and that they would be able to blame the collapse (when it inevitably came) on a surprising shock. The script would be clear, and would give "plausible deniability" to all involved. "Who knew? We all thought that 6% was the right loss assumption! That was what experience suggested, and what the rating agencies used." Plausible deniability may have been a coordinating device for allowing asset managers to participate in the feeding frenzy at little risk of losing customers (precisely because so many participated). Because asset managers could point to market-based data, and ratings at the time as confirming the prudence of their actions on a forward looking basis, they were likely to bear little cost from investor losses.

If the understatement of subprime risk was so clear, then why didn't hedge funds sell these investments short? As Gorton (2008) discusses, individual subprime MBS and CDO debt instruments were not traded widely. The ABX market, which traded in aggregate subprime-related indexes, developed only in January 2006; before that time, it was not possible for informed investors to express opinions about the level of risk in this market by buying or selling the various subprime indexes.

This account does not place the primary blame for the mispricing of risk on sponsors or rating agencies. After all, sponsors were only supplying what asset managers of their own institutions or

outside buyers were demanding. And the rating agencies were also doing what the investors wanted – going through the mechanical process of engineering conduit debt structures, and rating them, based on transparently rosy assumptions. I doubt that rating agencies were deceiving sophisticated institutional investors about the risks of the products they were rating; rather they were transparently understating risk and inflating the grading scale of their debt ratings for securitized products so that institutional investors (who are constrained by various regulations to invest in debts rated highly by NRSROs) would be able to invest as they liked without being bound by the constraints of regulation or the best interests of their clients. Many observers wrongly attribute rating agencies' behavior to the fact that sponsors, rather than investors, paid for the ratings. But that fact seems irrelevant; sponsors and investors alike knew what was going on, and if the investors had not wanted the ratings to be inflated, then the ratings agencies would not have inflated them. Ratings grade inflation was demand-driven.

Another fact confirms that conclusion. Collateralized debt obligations (CDOs), which increasingly repackaged subprime mortgages, grew dramatically alongside the subprime mortgage boom. From 2000 to 2005, the percentage of non-conforming mortgages that became securitized as MBS increased from 35% to 60%, while the percentage of conforming mortgages securitized rose from 60% to 82%. In 2005, 81% of new CDO pools consisted of MBS, and as of October 2006, 39.5% of existing CDO pools covered by Moody's consisted of MBS, of which 70% were subprime or second-lien mortgages (Mason and Rosner 2007a, p. 28). CDO issuance roughly doubled in 2006 (Figure 3). Were institutional investors aware that rating agencies were rating CDOs using a different scale from the normal corporate bond ratings? Yes. Moody's published retrospective data on the probability of default (as of the end of 2005) for Baa CDO tranches and for Baa corporate debts. As of 2005, the Baa CDO offerings had a roughly 20% five-year default probability, compared to a

roughly 2% five-year default probability for corporate Baa bonds.<sup>16</sup> Despite the rhetoric rating agencies publish claiming to maintain uniformity in their ratings scale, it was common knowledge before and during the subprime boom that investment grade debt issues of subprime MBS and CDO conduits were much riskier than their corporate counterparts. Indeed, this fact had been known about securitization debt issues since the early 1990s, and was the topic of a high-profile article published by two New York Fed economists (Cantor and Packer 1994).

An anecdote conveyed to me by a rating agency executive supports the view that asset managers, not sponsors and rating agencies, were driving the market's decision to overpay for risky debts. It is well known that sponsors of CDOs engage in an activity called ratings shopping. Sponsors ask rating agencies to tell them, hypothetically, how much AAA debt they would allow to be issued against a given pool of securities being put into the CDO portfolio. If a rating agency gives too conservative an answer relative to its competitors, the sponsor just uses another rating agency. On one occasion, when one agency was uninvited by a sponsor from providing a rating (because the rating agency did not offer to approve as high a percentage limit for AAA debt as the other agencies), the agency warned a prominent institutional investor not to participate as a buyer, but was rebuffed with the statement: "we have to put our money to work." Clearly, the institutional investors understood and controlled the rating process. They were sophisticated and informed buyers, and because they controlled the cash, they determined what constituted acceptable risk measurement by sponsors and rating agencies.

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<sup>16</sup> According to *Bloomberg Markets* (July 2007, p. 56) "Corporate bonds rated Baa, the lowest Moody's investment grade rating, had an average 2.2 percent default rate over five-year periods from 1983 to 2005, according to Moody's. From 1993 to 2005, CDOs with the same Baa grade suffered five-year default rates of 24 percent, Moody's found." Long before the recent turmoil, Moody's was aware that its Baa CDO securities were about 10 times as risky as its Baa corporate bonds. There was improvement in default experience on CDOs in 2006, and the default rate fell to 17%, reflecting that some previous impairments were cured in 2006. Nevertheless, the gap between corporate bonds and CDOs remained large. Based on additional data, through 2006, the comparable numbers are 2.1% and 17.0%. Moody's refers to missed payments in CDOs as "impairments," which are curable prior to maturity. Despite ratings' agencies statements that letter grade ratings should represent consistent portrayals of risk across different debt instruments (e.g., corporate debt and debts from securitizations), in fact, this has not been the case. For statements by ratings agencies affirming that ratings should have a consistent meaning "without regard to the bond market sector" see Mason and Rosner (2007b, pp. 7-8, 19).

To what extent is it plausible to argue that the novelty of securitization products (subprime MBS, CDOs, etc.) made investors and rating agencies unable to gauge risk properly? As I have already noted, data were available prior to the turmoil that showed (1) that assumptions regarding subprime losses were unrealistically low, and (2) that the ratings given to debts issued by securitization conduits exaggerated the quality of those debts. Furthermore, the novelty of a securitization product, in and of itself, was an indicator of a need to adjust estimates of risk upward. Experience suggests that rating agencies frequently underestimate the risks of new products and learn from major credit or fraud events that their risk measures and controls are inadequate. Experience prior to the subprime collapse (in credit card securitization, in delinquent consumer account receivable securitization, and in other areas) has shown that the learning curve related to underestimation of risk can be steep. Decades of experience with steep learning curves in new securitization products indicates yet another reason that properly incentivized institutional investors should have been cautious about the new, fast growing markets in subprime mortgages and CDOs.

Indeed, it is particularly strange to look at the measurement of subprime risk in contrast to the measurement of risk in the much older credit card securitization business. In credit card securitization, market participants paid close attention to the identities of originators, to their performance in the past, to the composition of portfolios, and to how compositions changed over time, and originators were rewarded with greater leverage tolerances for “seasoned” receivables with good track records (Calomiris and Mason 2004a). In contrast, until the middle of 2007, the ratings of subprime portfolios (based largely on the 6% or below expected loss assumption) seem to have been extremely insensitive to changes in borrower quality, product type (which is correlated with unobservable aspects of borrower quality), or the state of the housing market. And there was dramatic new entry into subprime origination in 2004-2006, yet these new entrants offering new, riskier products to new customers seem to have been able to raise funds under more or less the same low

loss assumptions as old originators who offered older, lower-risk products.<sup>17</sup> The principles learned over twenty years in the credit card securitization business were thrown out the window.

Various regulatory policies unwittingly encouraged the “plausible deniability” equilibrium. Regulation contributed in at least four ways. First, insurance companies, pension funds, mutual funds, and banks all face regulations that limit their ability to hold low-rated debts, and the Basel I and II capital requirements for banks also place a great deal of weight on rating agency ratings. By granting enormous regulatory power to rating agencies, the government encouraged rating agencies to compete in relaxing the cost of regulation (through lax standards). Rating agencies that (in absence of regulatory reliance on ratings) saw their job as providing conservative and consistent opinions for investors changed their behavior as the result of the regulatory use of ratings, and realized huge profits from the fees that they could earn from underestimating risk (and in the process provided institutional investors with plausible deniability).

Second, unbelievably, Congress and the SEC were sending strong signals to the rating agencies in 2005 and 2006 to encourage greater ratings inflation in subprime-related CDOs! In a little known subplot to the ratings-inflation story, the SEC proposed “anti-notching” regulations to implement Congress’s mandate to avoid anti-competitive behavior in the ratings industry (Calomiris 2007a). The proposed prohibitions of notching were directed primarily at the rating of CDOs, and reflected lobbying pressure from ratings agencies that catered most to ratings shoppers.

Notching arose when CDO sponsors brought a pool of securities to a rating agency to be rated that included debts not previously rated by that rating agency. For example, suppose that ratings shopping in the first generation of subprime securitization had resulted in some MBS securities that were rated by Fitch but not Moody’s (i.e., perhaps Fitch had been willing to bless a higher proportion of AAA debt relative to subprime mortgages than Moody’s). When asked to rate the CDO that

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<sup>17</sup> Interestingly, Moody’s (2007a) found that performance varied greatly across different subprime portfolios in ways that had not been foreseen; the identity of the originator was a very important determinant of differences in loss experience.

contained those debts issued by that subprime MBS conduit, Moody's would offer either to rate the underlying MBS from scratch, or to notch (adjust by a ratings downgrade) the ratings of those securities that had been given by Fitch.

Rating agencies that offered more favorable subprime MBS ratings reportedly lobbied Congress to prohibit notching, complaining that this constituted an anti-competitive practice, and arguing that the dominant players (Moody's and S&P) should instead accept ratings of other agencies without adjustment when rating CDO pools. This effectively would have further emboldened the most lenient rating agencies to be even more lenient to ratings shoppers, since it effectively would have required the relatively conservative agencies (e.g., Moody's) to accept the ratings of other agencies in repackaging securities rated by others. Unbelievably, the SEC agreed that notching was anti-competitive and proposed to prohibit notching. In light of the CDO debacle, and a flood of criticism from academics (including myself), the SEC quietly withdrew this proposed anti-notching regulation (at least for the time being). But it still contributed to the subprime rating problem. In the face of the threatened anti-notching rule, the likely response by the relatively conservative rating agencies was to loosen their ratings standards on subprime MBS and CDOs. This policy constituted an attack on any remaining voices of conservatism within the ratings industry that argued for the importance of preserving long-run reputational capital: trying to swim against the tide of grade inflation would put conservative rating agencies at risk of running afoul of their regulator.

Third, changes in prudential bank capital regulation introduced several years ago relating to securitization discouraged banks from retaining junior tranches in securitizations that they originated, and gave them an excuse for doing so. This exacerbated agency problems by reducing sponsors' loss exposures. The regulatory changes relating to securitization raised minimum capital requirements for originators retaining junior stakes in securitizations. Sponsors switched from retaining junior stakes to supporting conduits through external credit enhancement (typically lines of credit of less than one

year), which implied much lower capital requirements.<sup>18</sup> Sponsors that used to retain large junior positions (which in theory should have helped to align origination incentives) no longer had to worry about losses from following the earlier practice of retaining junior stakes. Indeed, one can imagine sponsors explaining to potential buyers of those junior claims that the desire to sell them was driven not by any change in credit standards or higher prospective losses, but rather by a change in regulatory practice – a change that offered sponsors a plausible explanation for reducing their pool exposures.<sup>19</sup>

More fundamentally, the prudential regulatory regime lacked any device for ensuring that bank risk would be adequately measured or that capital would be commensurate with risk. As Adrian and Shin (2008) show, both risk and leverage increased during the subprime boom, which provides prima facie evidence of the regulatory failure to measure risk and budget capital accordingly. Interestingly, Calomiris and Wilson (2004) show that in the 1920s this was not the case. During that lending boom, as banks' risks increased, market discipline forced banks to reduce their leverage in order to limit the riskiness of their deposits. In the presence of deposit insurance and anticipated too-big-to-fail protection, however, debt market discipline is now lacking. If prudential regulation fails to limit risks, banks may fail to maintain adequate capital cushions. The recent failure of banks to

<sup>18</sup> There were two important regulatory changes that took place in the last several years. In 2001, regulatory capital requirements were increased on junior stakes retained by sponsors; effectively, retaining a first-loss position in a securitization conduit required the sponsoring institution to maintain an equal amount of capital to the size of the retained position (<http://www.occ.treas.gov/ftp/bulletin/2001-49a.pdf>). In contrast, holding AAA debts issued by the sponsor's conduit required a 1.6% capital position against those AAA securities held (8% of a 20% risk weight). In 2004, regulators exempted conduit sponsors from the newly enacted GAAP consolidation rules for securitization (which in some cases would have otherwise required securitized assets to be treated as on-balance sheet assets for purposes of calculating capital requirements). Those 2004 regulations also established new rules for capital requirements on liquidity and credit enhancements from sponsors for their conduits (<http://www.occ.treas.gov/fr/fedregister/69fr44908.pdf>). For example, an asset-backed commercial paper conduit with \$100 million in securities as assets, issuing \$90 million in commercial paper, with liquidity enhancement from the sponsor in the form of a line of credit of less than one year had to maintain \$720,000 in capital against that credit line (8% x 10% "credit conversion factor" x \$90 million). These regulations seem to have encouraged banks to use external enhancements and to hold AAA issues from their conduits, rather than hold first loss positions in their conduits.

<sup>19</sup> Of course, either through external enhancement or voluntary provision of support to their conduits, sponsors may still be taking a position that could result in large losses, and of course, many did so by absorbing losses that otherwise would have been born by other investors.

maintain adequate capital in the face of rising risk suggests a need for fundamental reform of prudential regulation, which is explored in detail in Section III.

Fourth, the regulation of compensation practices in asset management likely played an important role in the willingness of institutional investors to invest their clients' money so imprudently in subprime mortgage-related securities. Casual empiricism suggests that hedge funds (where bonus compensation helps to align incentives and mitigate agency) have fared relatively well during the turmoil, compared to other institutional investors, and this likely reflects differences in incentives of hedge fund managers, whose incentives are much more closely aligned with their clients.

The standard hedge fund fee arrangement balances two considerations: the importance of incentive alignment (which encourages long-term profit sharing by managers), and the risk aversion of asset managers (which encourages limiting the downside risk exposure for managers). The result is that hedge fund managers share the upside of long-term portfolio gains but have limited losses on the downside. Because hedge fund compensation structure is not regulated, and because both investors and managers are typically highly sophisticated people, it is reasonable to expect that the hedge fund financing structure has evolved as an "efficient" financial contract, which may explain the superior performance of hedge funds.

The typical hedge fund compensation structure is not permissible for some other, regulated, asset managers. Mutual fund managers must share symmetrically in portfolio gains and losses; if they were to keep 20% of the upside, they would have to also absorb 20% of the downside. Since risk-averse fund managers would not be willing to expose themselves to such loss, mutual fund managers typically charge fees as a proportion of assets managed and do not share in profits. This is a direct consequence of the regulation of compensation, and arguably has been a source of great harm to investors, since it encourages asset managers to maximize the size of the funds that they manage,

rather than the value of those funds. Managers who gain from the size of their portfolios rather than the profitability of their investments will face strong incentives not to inform investors of deteriorating opportunities in the marketplace, and not to return funds to investors when the return relative to risk of their asset class deteriorates.

To summarize, the subprime debacle is best understood as the result of a particular confluence of circumstances in which incentive problems combined with unusual historical circumstances. The longstanding problems of asset management agency problems and government distortions in real estate finance got much worse in 2003-2006. The specific historical circumstances that drove this included (1) loose monetary policy, which generated a global savings glut, (2) GSE politics in Congress that drove Fannie Mae and Freddie Mac to expand their purchases of subprime assets, (3) prudential regulatory policies that increasingly encouraged lax risk management, and (4) the historical accident of a very low loss rate during the early history of subprime mortgage foreclosures in 2001-2002. Monetary, regulatory, and GSE policies combined with the historically low loss rates to give incentive-conflicted asset managers, rating agencies, and securitization sponsors a basis of “plausible deniability” on which to base unreasonably low projections of default risk.

Government actions must bear a significant share of the blame for this outcome, and not just because regulators failed to prevent bank sponsors from behaving more prudently. GSE purchases of subprime assets, increased regulatory reliance on ratings, regulatory actions that encouraged grade inflation, ineffective bank capital regulations including rules that discouraged sponsors from retaining junior risk exposures, proposed SEC anti-notching rules, and regulatory limits on profit sharing by asset managers, all contributed to the “plausible deniability” equilibrium.

*II. What's Old and What's New about the **Propagation** of the Turmoil?*

What aspects of the reactions of financial markets to the subprime shock have been similar to, or different from, the propagation of financial shocks in the past? As in the case of the origins of the subprime shock, the propagation of the subprime shock in the financial system shares many features with previous responses to financial shocks. The role of uncertainty about the size and incidence of the shock across different financial institutions (“asymmetric information” about losses) has produced a wide variety of familiar market responses, which I review (widening credit spreads, ebbs and flows of optimism and pessimism, quantity rationing in money markets, a contraction in the supply of credit, and lender of last resort interventions by the central bank).

Nevertheless, there are three elements to the current turmoil that are quite new, and surprisingly so, when considered together. The first novelty is that the shock is unusually severe, as it combines the worst features of previous historical shocks (namely, on the one hand, a large realization of loss, and on the other hand, large uncertainty about the precise size and location in the financial system of that loss). The second novelty is that financial institutions have been unusually willing to raise capital and successful in doing so, and have thereby mitigated the consequences of the subprime shock. This second feature is even more remarkable when considered in combination with the first. A third novelty has been the aggressive use of coordinated Fed and Treasury assistance to particular financial institutions through the discount window and special programs.

This section first reviews aspects of the current turmoil that are qualitatively familiar from the history of financial system responses to similar financial shocks, then discusses the three novel aspects of the adjustment to the shock. With respect to the second novelty, the special role of the evolution of the structure of the banking system in the past two decades is described (through a combination of deregulation, consolidation and globalization), which helps to explain the unprecedented ability and willingness of banks to issue new equity in the wake of losses.

*What's Old About the Financial System's Responses to the Shock*

Subprime mortgages either served as backing for MBS, or were held on balance sheet. Subprime MBS was sometimes repackaged into CDOs, increasingly so leading up to the 2007 collapse of the subprime market. Subprime MBS and CDO conduits issued debts of various ratings which were sold to institutional investors (AAA debts constituted the vast majority – roughly 80% of subprime MBS pools and an even larger percentage of CDO pools). Sponsors of MBS and CDOs did not sell all the securities issued by their conduits. Banks, in particular, purchased substantial amounts of their own conduits' AAA debts (which enjoyed favored risk weights as assets from the standpoint of bank capital regulation), and many of those debt purchases ended up being parked in ABCP conduits or SIVs run by the sponsoring bank.<sup>20</sup> These conduits financed themselves primarily or largely by asset-backed commercial paper, which was sold to MMMFs and other money market investors (Fitch 2005). Additional exposures to these pools also took the form of so called “external credit enhancements,” by sponsors and other intermediaries (especially monoline insurance companies), who provided various types of liquidity or credit guarantees to the MBS, CDO, and ABCP conduits.

The sequence of events relating to the subprime shock and its spread is described in several papers (IMF 2008, Brunnermeier 2008, Buiters 2008, Greenlaw, Hatzius, Kashyap, and Shin 2008, Herring 2008), and in numerous press accounts, and will not be reviewed in detail here. The important elements of the story are that it became clear very quickly in the late summer and early fall of 2007 that losses were growing rapidly on the large amount of subprime mortgages that had been originated in the previous three years, and that the models that had quantified the risks on those mortgages had grossly underestimated prospective losses. The precise size of the future loss was (and

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<sup>20</sup> Arteta, Carey, Correa and Kotter (2008) analyze the risk choices of banks that established commercial paper issuing conduits. European banks were particularly heavy users of this means of finance. The authors argue that the relative reliance on this form of financing reflected several influences, including moral-hazard problems in risk management for heavy users.

remains) hard to gauge, since the structures of the securities are so complex (Gorton 2008) and these new products have such limited track records, particularly in a declining house price environment. The problem was not just the novelty of the product itself, but the fact that its early years of growth had occurred in a booming housing market; there was no way to predict accurately how defaults would evolve in a soft housing market. Furthermore, underwriting standards had deteriorated, as “no-docs” and “low-docs” subprime mortgages proliferated. That meant that the experience of prior cohorts of subprime borrowers offered little reliable evidence on future defaults even if housing conditions did not soften materially.

Not only was the aggregate size of loss related to subprime exposures hard to gauge, the incidence of those losses was also hard to measure. Some subprime MBS had been repackaged into complex CDOs and CDO-squareds. And sponsors of CDO conduits, including some of the largest banks, had placed significant amounts of the debts issued by those CDO conduits into their own ABCP and SIV conduits, which in turn financed themselves with commercial paper and various notes. External credit enhancements for the various conduits issuing all these securities were complex, and exposures of guarantors were not easy to quantify. The precise size of portfolios held by different intermediaries, and the proliferation of external credit enhancements that entailed uncertain loss exposures made loss estimation difficult. Markets in the debt instruments were virtually nonexistent, so there was little hope of marking to market.

Estimates of the total loss from subprime and other relatively risky (Alt-A) mortgages within the first several months of the turmoil were in the neighborhood of \$100-400 billion, which reflected widely disparate views of the probability of default and the loss given default. These losses remain uncertain. At the moment, reasonable estimates fall at the high end of that range. Additional losses related to other consumer, corporate, and commercial real estate lending will, in aggregate, likely reach a similar magnitude. Confusion about the size of loss and its incidence led to a flight to quality,

as investors sought liquidity. Thus, in addition to the initial (uncertain) shocks to net worth of financial institutions, liquidity risk became a major factor.

As emphasized by Mishkin (1991) and Calomiris and Gorton (1991), in historical financial crises the incidence of shocks was hard to gauge (e.g., 1893 or 1907). Asymmetric information about the true financial positions of borrowers and banks led to a contraction in the willingness of parties to lend to each other, which resulted in a flight to quality. In the 2007-2008 turmoil, rising default risk, market illiquidity and the flight to quality were visible in rising long-term debt default risk spreads, and falling Treasury bond yields, as shown in Figures 4 and 5, which plot the CDS spread, the 10-year Treasury yield, and the spread between the Baa corporate rate and Treasuries. Figure 6 shows that the spread between jumbo mortgage interest rates and conforming mortgage interest rates widened, and both mortgage rates rose, despite the aggressive Fed rate cuts that drove money market rates lower. The widening jumbo-conforming spread reflects, in part, the relative liquidity of conforming mortgages, and in part, the fact that relatively expensive homes are more dependent on the private (non-GSE) securitization market, which saw a rise in its relative cost of funding.

Widening of spreads is also visible between different money market instruments. The flight to quality was apparent in a widening spread between LIBOR and Treasury bill yields (Figure 7), the rising relative cost of longer-term LIBOR (Figure 7), and the rising cost of financial commercial paper relative to nonfinancial (Figure 6).

The spread between overnight LIBOR and overnight fed funds (Figure 8) also rose. Both of these are costs of unsecured interbank borrowing for one day. Loans of fed funds, however, typically entail credit from small banks, while LIBOR loans are from large banks. The widening spread between overnight LIBOR and fed funds (which had generally remained within 5 basis point prior to

the turmoil)<sup>21</sup> reached almost 180 basis points toward the end of 2007 and over 400 basis points in September 2008. Large banks were unwilling to lend during the turmoil, either because they were scrambling for liquidity or because they doubted each other's credit quality.

Interestingly, although there is one primary underlying source of loss affecting the year-long period of July 2007-September 2008 being graphed in the various figures (namely, subprime and other losses on existing loans), the figures display large movements up and down in spreads, reflecting variation in estimated losses, adverse selection costs and market illiquidity as uncertainty about the size and consequences of the losses rose and receded in various waves, clearly visible in CDS spreads in Figure 4. This is a familiar pattern in the history of asymmetric information crises, including the national banking era crises and some of the regional banking crises during the Great Depression, which saw similar ups and downs in the perception of risk, and concerns about concentrations of risk in particular financial institutions, which arose in response to particular news events over time (see Sprague 1910, Wicker 1996, Calomiris and Mason 1997, and Bruner and Carr 2007). During historical banking panics, when confusion about the incidence of shocks produced large adverse selection costs in banking, actions by banks, clearing houses, and regulators that

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<sup>21</sup> Bartolini, Hilton, and Prati (2005) examine the LIBOR-fed funds spread prior to the turmoil, and find that, since 1990 (which marked an important regulatory change, eliminating reserve requirements on interbank borrowing in the Libor market) the two markets have been closely integrated. They find that during the 660 days of trading from February 11, 2002 to September 24, 2004, using actual transactions data from the two markets to compute hourly and daily spreads between the two markets, the two rates were always very similar. Using hourly data, the two rates never diverge by more than 15 basis points, and reveal temporally scattered observations of gaps of 10-15 basis points only for 20 hours of trading during the 660-day period. Daily differences between the two rates are even smaller; spreads only exceed 5 basis points on 5 out of the 660 days, and never exceed 8 basis points. Figure 13, therefore, marks an unprecedented departure from the previously observed behavior of these two interest rates. The spread peaks August 10 at 128 basis points, and averages 49 basis points in the period August 9 to September 11. Bartolini, Hilton and Prati (2005) point out that "the Eurodollar market may draw a greater share of larger, more internationally-oriented institutions, which are more likely to operate foreign branches or International Banking Facilities through which they can borrow Eurodollars." Bartolini, Hilton and Prati (2005) emphasize, therefore, that the counterparty risks in the two markets may not be identical. That observation suggests that the widening spread during the turmoil of August and September reflects adverse-selection problems that increased the counterparty risks for large-size transactions involving large, international banks (possibly the European banks with the large ABCP exposures discussed above), or rising liquidity demands by large banks that reflected their exposure to the subprime shock. The fed funds market, which often entails smaller transactions between small bank lenders and large bank borrowers should have been less affected by the liquidity demands of large banks or their adverse-selection problems, and apparently it was less affected.

resolved uncertainties about the incidence of shocks helped to restore confidence, reduce adverse selection costs, restore liquidity and eventually brought the panics to an end.<sup>22</sup> Similarly, during the past year, news that helped reassure market participants that the turmoil was being contained (e.g., Fed intervention to prevent a meltdown of Bear Stearns) produced reductions in spreads.

It is difficult to decompose the various contributing factors that affect spreads during an asymmetric-information crisis. Four separate factors are at work: (1) increased expected loss for risky debts, (2) changes in the pricing of any risk of loss reflecting the reduced net worth of asset buyers (i.e., diminishing marginal utility of consumption), (3) changes in the pricing of risk relating to adverse-selection costs (reflecting the difficulty of observing risk), and (4) changes in the pricing of liquidity reflecting an increased desire for liquidity on the part of buyers. Recent research by Schwarz (2008) suggests that during the past year changes in the pricing of liquidity have been more important than credit risk in explaining widening spreads (see also Allen and Carletti's 2008 view of the central role of systemic liquidity problems in the current turmoil). LIBOR spread widening, in particular, largely has reflected the heightened liquidity demand of borrowers.<sup>23</sup> Despite the progress made in disentangling the various influences on spreads, some aspects of the recent experience remain puzzling. Why, for example, did the spreads on Fannie Mae and Freddie Mac debts (over comparable-maturity Treasuries) not fall more as the result of government commitments to protect Fannie's and Freddie's debtholders from the risk of default in July 2008, which should have caused Fannie and Freddie debts to be viewed as close substitutes for U.S. Treasuries?

An important aspect of financial system adjustment to severe shocks is the tendency for quantity rationing in money market instruments, which is a source of liquidity risk during financial crises. Short-term near money market instruments with a risk of loss – uninsured deposits,

<sup>22</sup> See Sprague (1910), Gorton (1985), Calomiris and Gorton (1991), Calomiris and Schweikart (1991), Calomiris and Mason (1997), and Bruner and Carr (2007).

<sup>23</sup> Schwarz (2008) is able to isolate default risk and liquidity effects on LIBOR spreads by comparing synthetic spreads (in which no financial instrument is held, and only default risk should affect pricing) with actual deposit transactions (in which both default risk and liquidity affect pricing).

commercial paper, and repos – respond to increases in risk primarily through quantity rather than price adjustment. Thus, in addition to rising spreads in bond, CDS, and money markets, a major part of the adjustment process to the subprime turmoil was a contraction in money market instruments.

LIBOR deposits of maturities greater than a few days virtually disappeared from the banking system in the first months of the turmoil. This is consistent with the theoretical framework of Calomiris and Kahn (1991). Very short-term (demandable) debt becomes more necessary during difficult times owing to its superior ability to discipline bank risk taking (through the threat of funding withdrawal) in an environment of highly asymmetric information; any bank that would attempt to borrow at longer term under difficult circumstances would both be avoiding discipline of short-term debt (giving rise to a moral-hazard cost) and revealing a desire to avoid that discipline (giving rise to an adverse-selection cost), and would thus pay a higher interest rate. Only banks with risky intentions or unobservably weak banks would try to lock in long-term credit. This explains why longer term, one-month or three-month LIBOR lending was virtually nonexistent in the immediate aftermath of the shock.

Asset-backed commercial paper issues, which were strongly connected to CDOs, were withdrawn rapidly from the market, while other commercial paper remained relatively unaffected (only in September and October of 2008 did nonfinancial paper rollover become a potential problem, as the liquidity crisis deepened). As Figure 9 shows, ABCP grew rapidly in 2006 and the first half of 2007, reflecting the close link between ABCP and CDO originations. ABCP fell even faster; most of the decline in outstanding commercial paper occurred in the immediate aftermath of the August-September 2007 shock, and reflected mainly the contraction of ABCP; while other financial commercial paper contributed somewhat to the decline, nonfinancial commercial paper has remained virtually unchanged (at least through mid-September 2008). This shows that the initial fallout from the shock has mainly to do with the loss in confidence in the architecture of securitization per se, and

secondarily with rising adverse-selection costs for financial institutions. It is interesting to note that even within ABCP, it appears that a significant share of ABCP was being rolled over even during the period of sharp ABCP contraction. That is, the decline of ABCP appears to be substantially less than the decline that would have occurred if all maturing ABCP had been withdrawn from the market. Apparently, there was not a categorical refusal to roll over ABCP.<sup>24</sup> Some of the apparent “rollover” of ABCP also likely reflects banks purchasing their own paper.<sup>25</sup>

Bear Stearns’ heavy reliance on overnight repos and high leverage to fund itself led to its collapse in March 2008 as counterparties became concerned about its increasing risk, and as mortgage-backed securities ceased to be acceptable in the market as collateral for overnight repos (a shock that would have been extremely difficult to anticipate even a few months before). Liquidity risk was an important part of that story, since by any reasonable estimate (Bernstein Research 2008a) Bear Stearns was not insolvent. But Bear’s heavy reliance on the risk-intolerant overnight repo market for its funding (Bernstein Research 2008b) meant that it could not continue to rollover its liabilities. Historical evidence from the Panics of 1893 and 1907 confirm that quantity rationing in

<sup>24</sup> Even at the height of the ABCP “run,” the aggregate liquidity risk for U.S. banks from the contraction of ABCP appears to not have been very large, although Citigroup stands out as the U.S. bank with more than its share of liquidity risk exposure (including its so-called structured investment vehicles, or SIVs, which issue a variety of debts, including ABCP). Much of U.S. ABCP consists of paper issued by so-called “multiseller issuers,” which tends to be maturity-matched so that liquidity risk is minimal. Most of the remaining ABCP can suffer from significant liquidity risk due to the mismatch between longer maturing assets (which include a wide variety of securities, loans, receivables, swaps, and repos) and short-term commercial paper liabilities. Most of that paper, however, was issued by foreign institutions. According to data from Moody’s, on average during the first quarter of 2007, of the \$1.3 trillion in average ABCP outstanding administered (and, to a first approximation, issued by) the top 20 ABCP administrators, Citibank accounted for \$98 billion, Bank of America accounted for \$49 billion, and JPMorgan Chase accounted for \$45 billion. Given the shrinkage in ABCP that has occurred over the past weeks, the total remaining liquidity risk exposure to U.S. banks from ABCP issues, including any ABCP issued from SIVs, is roughly \$100 billion, with Citigroup accounting for about half of that. This is a very small liquidity risk for the three American banks, given the sizes of their balance sheets and their liquid asset holdings. This discussion draws on data from Moody’s ABCP Program Index, March 31, 2007, and descriptions in JPMorgan Securities Inc. (2007).

<sup>25</sup> From a regulatory capital standpoint, under Basel I rules, banks may have an incentive to purchase ABCP rather than fund its retirement via a line of credit, since a loan has a full risk weight, but commercial paper does not. Banks may also wish to purchase ABCP to resell it, once market liquidity improves. It is unclear the extent to which ABCP that remains outstanding according to these data is being effectively retired by being purchased by banks that run the ABCP conduits.

money markets can take the form of sudden runs (on deposits and repos) in response to an increase in risk even when the underlying risk of insolvency remains quite low.<sup>26</sup>

The risk intolerance of money market instruments has been visible historically and in recent times, both in response to idiosyncratic events at particular banks and firms, and in response to aggregate shocks. Calomiris, Himmelberg, and Wachtel (1995) analyze the exit of contemporary commercial paper issuers, which occurs reliably and quickly in response to deterioration in earnings and sales growth. Calomiris (2007b) shows that, in response to sudden adverse news affecting a commercial paper issuer, orderly exit from the commercial paper market often occurs even before commercial paper matures; issuers remove their paper from the market, sometimes at a price equal to accrued par (to prevent investors from suffering any loss as the result of the adverse news event) as a means of preserving their reputations with the investor community, in hope of reentering the market subsequently. Uninsured bank deposits, historically and currently, also display patterns of rationing in response to adverse shocks. This can occur as a sudden run on one bank or on many banks (Calomiris and Schweikart 1991, Calomiris and Gorton 1991, Calomiris and Kahn 1991), or as a more gradual response by depositors to reduce certain classes of deposits that are particularly risk-intolerant (Calomiris and Mason 1997, 2003a, Calomiris and Wilson 2004, Calomiris and Powell 2001).

A final familiar theme from previous financial disturbances is that financial failures typically reflect fundamental weakness, not random market behavior. Bear Stearns was not insolvent in March 2008, and the same may be said of Lehman Brothers and AIG in September 2008; nevertheless, the unwillingness of creditors to permit Bear to continue in its weak state reflected its unusually large exposure to subprime risk, and its unusually high leverage. The market properly singled out the investment bank with the weakest fundamentals. Similarly, Northern Rock was an observably weak

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<sup>26</sup> In 1873, 1893 and 1907, suspension of convertibility stopped runs on New York City banks from continuing. Discount rates on cashier drafts on New York banks immediately after suspension show that market perceptions of risk of deposit loss were quite small even at times of extreme withdrawal pressure (just before suspensions), according to data reported in Sprague (1910).

institution with large asset side risk and very high leverage. This non-random pattern of failure is important because it reminds us that financial market discipline is often well-informed, selective, and helpful in containing systemic loss by preventing weak institutions from continuing to operate. Similar patterns of informed, selective, and helpful market discipline have been apparent in historical banking crises, as well. That is not to say that market discipline is perfect; asymmetric information implies that not all financial institutions that lose the confidence of their creditors are as weak as their creditors fear. Furthermore, as the events of September 2008 illustrate, once a liquidity crisis becomes systemic, even institutions with little fundamental risk exposure (like Goldman Sachs and Morgan Stanley) find themselves at risk of being taken down. Still, market discipline has a fair record in identifying doubtful risks even in the midst of severe financial crises (Calomiris and Mason 1997, 2003a, Bruner and Carr 2007).

*What's New about the Response to the Shock: Unprecedented Recapitalizations*

The greatest concern about the subprime turmoil and the collapse of the securitization markets that came with it, from the perspective of potential macroeconomic implications, is the possibility that the failures of financial institutions and the large subprime-related losses within surviving financial institutions would substantially reduce equity capital available to support lending. Although many financial institutions have suffered substantial losses, the primary systemic concern for the macroeconomy is the health and lending capacity of commercial banks, given their central role in providing consumer and business credit.

The losses in bank equity were occurring at a time when banks needed capital more than ever to absorb erstwhile securitized assets back onto their balance sheets and support new lending. From the beginning, policy makers worried that the combination of lost capital and reintermediation of securitized assets in the wake of the subprime shock could lead to a huge bank credit-supply

contraction, similar perhaps in effect to the credit crunch of the Great Depression (Bernanke 1983, Calomiris and Mason 2003b, Calomiris and Wilson 2004), or the credit crunch of 1989-1991 (Bernanke and Lown 1991, Baer and McElravey 1993, Boyd and Gertler 1994).

In the bank capital crunches of the 1930s and 1989-1991, despite the scarcity of bank equity capital, and consequent scarcity of credit, financial institutions suffering from large losses raised virtually no new equity capital (Calomiris and Wilson 2004). Financial economists attribute the lack of new equity offerings by banks in response to large losses to adverse selection problems that result from asymmetric information. Any bank trying to issue equity at a time where potentially large hidden losses remain unidentified will experience a large decline in its stock price, as the market infers that the offering institution may have unusually high losses that it wants to share with new shareholders. That price reaction would make a stock offering highly dilutive, and thus value-destroying, for existing shareholders. During the subprime turmoil, asymmetric information was high, and adverse selection costs were visible in money market spreads and bond spreads, and in money market quantity rationing. Those same information problems should be all the more costly to a bank trying to raise equity capital, since adverse selection problems are much greater for (junior) equity offerings than for (senior) short-term debts (Myers and Majluf 1984).

From the standpoint of the ability of banks to raise equity in response to losses, both the size of the shock and the ability to ascertain who will bear its costs are highly relevant. Adverse selection costs of raising equity are higher when shocks are large and uncertain in their incidence. From that perspective, one might have expected little equity to be raised in the wake of the subprime shock. Compared to other financial shocks, this one was both large and highly uncertain in its incidence.

In financial history, for the most part, the largest financial shocks affecting banks (measured in units of loss as a percentage of GDP) have generally not been “asymmetric-information” shocks. The losses from the U.S. agricultural bust of 1920-1930, for example, were large, but for the most

part, these shocks – which were visible in agricultural commodity price declines, and consequent land value declines with clear consequences for local banks – were not shocks in which asymmetric information was very important. The classic asymmetric-information shocks of the national banking era panics of 1873, 1884, 1890, 1893, 1896, and 1907, in contrast, were not associated with large financial system losses, but rather with confusion about the incidence of those losses, which created problems for banks because of the risk intolerance of depositors. In that sense, the current shock is unusually severe in that it is both large (losses on subprime and Alt-A mortgages and related instruments could be as high as 4% of GDP) and markets have been quite uncertain about the incidence of those losses (Greenlaw, Hatzius, Kashyap, and Shin 2008).

The large size and uncertain incidence of the subprime shock explains the protracted process of financial system adjustment to the shock. What it does not explain, however, is the remarkable fact that financial institutions have recapitalized themselves with over \$434 billion of new capital over the year ending September 2008 (Figure 10). Banks showed an unprecedented capacity to mitigate the consequences of the subprime shock by raising new equity. In September 2008 alone, as Goldman Sachs and Morgan Stanley sought to insulate themselves from the liquidity crisis, and as Merrill, Wachovia, and Washington Mutual were acquired, the financial system raised capital in excess of \$40 billion.

That is not to say that new capital has prevented a credit crunch. The last year has seen a dramatic reduction in some securitization flows. For example, according to Bear Stearns (2007), commercial mortgage backed securities issues that had averaged \$18 billion per month for January through August 2007, fell to only \$4 billion in September 2007. As Figure 11 shows, however, commercial and industrial lending expanded rapidly during the August and September upheaval, and continued to grow at a reasonably fast pace throughout the past year, an achievement that stands in sharp contrast the huge contractions in lending that occurred in the 1930s and in 1989-1991.

This unprecedented achievement was not a random event, but was rather a predictable consequence of two sets of factors: (1) the favorable condition of banks balance sheets at the time the subprime shock hit, and (2) major structural changes in the financial system that made this unprecedented recapitalization occur. Those structural changes were a consequence of the consolidation, deregulation, and globalization of banking and finance that occurred in the past two decades. With these exceptional historical circumstances in mind, some observers foresaw that the unprecedented bank recapitalization would likely occur in response to the capital losses, and argued that it could prevent the subprime turmoil from triggering a major recession, a forecast that at least thus far has proved to be accurate.

First, with respect to the preexisting condition of U.S. banks at the time of the subprime shock, as Fed Chairman Ben Bernanke noted from the outset, commercial banks were otherwise doing reasonably well and had substantial equity capital. Although the capital position of U.S. banks as of 2007 was inadequate in light of the risks that they had taken, banks were in better shape than they had been in the 1980s. In the late 1980s, bank balance sheets were extremely weak, owing to the series of shocks banks had faced. Banks had suffered losses due to interest rate rises in the early 1980s, LDC loan problems, agriculture land value collapses in the mid-1980s, commercial real estate collapse in the late 1980s, and southwestern oil and real estate distress in the mid-to-late 1980s. Moreover, the overall economic environment was one of anemic macroeconomic performance. Banks were not well diversified regionally, and had limited sources of income. By the end of the 1980s some money center banks were barely solvent. In contrast, U.S. banks enjoyed profitable and diverse operations and ample equity capital at the time the subprime shock hit. Their wide range of profitable ventures included nontraditional and traditional banking products, within and outside the United States.

According to the Federal Reserve Board Statistical Release H8, large, domestically chartered U.S. commercial banks (the primary point of vulnerability in the financial system to the current securitization shock) maintained a seasonally adjusted capital account of \$702.5 billion, as of September 12, 2007, which was 12.1% of seasonally adjusted assets. Their assets included \$1,346.9 billion in securities, most of which were U.S. Treasury and Agency securities. These banks had significant capacity for absorbing additional loans and mortgage backed securities while remaining in compliance with minimum regulatory capital requirements.<sup>27</sup> As of December 2006, total equity for the largest 50 U.S. bank holding companies (which is distinct from the data on the chartered banks of those holding companies, cited above) was \$819 billion, and tier 1 capital for these holding companies was \$570 billion of that amount, while total holding company assets were \$9.6 trillion. Thus, the tier 1 leverage ratio, on average, was 6.17% for this group, implying that banks could accommodate substantial new mortgage originations and other lending on balance sheet in an orderly fashion.

The diversification of banks' portfolios, operations, and sources of income – especially those of large, global banks – were also significantly better circa 2007 than in 1989 or 1930. Banks hold much more diversified portfolios today than they used to, they are less exposed to real estate risk than they were in the 1980s, and much less exposed to local real estate risk, although U.S. banks' exposure to residential real estate has risen since 2000 (Wheelock 2006). In prior episodes of real estate decline (the 1920s, 1930s, and 1980s) much banking distress resulted from exposures to regional shocks, because of the absence of nationwide branch banking. In the 1980s, shocks associated with

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<sup>27</sup> Regulatory requirements include a 4% tier 1 risk-based capital requirement (as a fraction of risk-weighted assets), an 8% tier 1 plus tier 2 risk-based capital requirement (as a fraction of risk-weighted assets), and a leverage requirement ("adequately-capitalized" banks generally must maintain 4% of tier 1 capital relative to total assets; "well-capitalized" banks must maintain a ratio of 5% of tier 1 capital relative to total assets). It is highly desirable for banks to be considered "well-capitalized," and banks maintain a buffer above their minimum requirements. The leverage requirement is probably the most binding of these constraints going forward, especially since banks will be re-intermediating mortgage assets, which have less than a full risk weight, and likely will continue to maintain less than a full risk weight under Basel II.

commercial real estate investments in the northeast, and oil-related real estate problems in the southwest, were particularly significant sources of banking distress.<sup>28</sup> During the last two decades, however, banks have become much more diversified regionally, owing to state-level and federal reforms of branching laws, and internationally, as the result of the globalization of banking and finance.

Although banks are likely to absorb roughly half of the losses from the subprime fallout according to most estimates, as Figure 10 shows, those bank losses have been distributed globally, not just within the United States. Banks also have a more diverse income stream due to the expansion of bank powers, which culminated in the 1999 Gramm-Leach-Bliley Act. Diversified banks should be able to weather the subprime shock much better than in the 1930s or late 1980s, when variation in regional circumstances led to significant shocks to regionally isolated banks and to the supply of bank credit. That the industrial organization of banking is crucial for facilitating banking systems' abilities to adjust to shocks without experiencing major disruptions has been a consistent theme of banking history. Bordo (1985) emphasized the peculiar fragility of American banking in the late nineteenth and early twentieth centuries, which reflected the geographical fragmentation of U.S. banks historically, and this theme has been echoed in many other studies.<sup>29</sup>

The superior condition and prospects of banks (relative to the 1980s), owing to their diversification and the highly profitable environment of the last 15 years, reflected the favorable influences of deregulation, consolidation, and globalization, which reshaped the U.S. banking system. Those influences not only helped mitigate the effects of the subprime shock by making the initial condition of banks stronger; they also helped banks raise new capital. The keys to raising capital are

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<sup>28</sup> Wheelock (2006) finds that, in the 1980s, substantial declines in real estate prices translated into significant deterioration in local banking condition.

<sup>29</sup> For a review of branching deregulation and its positive effects on banking sector performance, see Calomiris (2000) and Jayaratne and Strahan (1996). Evidence on the role of regional shocks in banking distress and credit contraction during the 1980s is provided in Wheelock (2006); for the 1920s and 1930s, see Alston, Grove, and Wheelock (1994), Alston (1984), Calomiris (1992), Calomiris and Mason (1997, 2003a, and 2003b), and Calomiris and Wilson (2004).

convincing the market that the downside of loss can be bounded reasonably, and that favorable future prospects exist (in pursuit of which new capital will be deployed). Banks that are stronger, larger, and more diverse are much better able to bound losses and credibly argue for favorable prospects.

Deregulation also helped facilitate the orderly restructuring of large distressed investment banks in 2008. The acquisitions of Bear Stearns and Merrill Lynch by JP Morgan Chase and Bank of America would not have been possible without the repeal of Glass-Steagall. Clearly, the claim that “deregulation” produced the subprime crisis is a false diagnosis. Regulatory failure (especially with respect to the GSEs and prudential banking regulation) was a major contributor to the crisis. But deregulation of branching and bank powers over the past two decades has helped to mitigate the fallout from the crisis in many ways.

Several other factors also favored bank recapitalization. First, despite what may seem a slow process of recognizing loss, in comparison with the loss recognition practices of banks and S&Ls in the 1980s, loss recognition has been fast. This reflects a substantially improved regulatory environment in which it is much harder for banks to disguise losses or delay their recognition.<sup>30</sup> Second, many hedge funds and sovereign wealth funds were relatively unaffected by the subprime shock, and had ample funds to invest. Thus, there were sophisticated investors with adequate resources available to recapitalize banks, if adverse-selection concerns could be overcome. Here again, globalization of finance has helped to cushion the subprime shock considerably. In addition to assisting in recapitalizing banks, nonbank investors (hedge funds and private equity firms) with ample resources to invest are also taking pressure off of bank balance sheets by purchasing assets.

*What's New about the Policy Response to the Shock: Unprecedented Activism*

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<sup>30</sup> It seems unlikely that fair value accounting has been of great use during the recent turmoil. Many market observers believe that fair value accounting has exaggerated losses (given the absence of useful transacting data, and the illiquidity of markets) and produced unreliable statements of earnings (Wallison 2008). More significant, to my mind, is the credibility of the regulatory environment, which allows investors to have some confidence that disclosures of bank exposures are reasonably accurate.

Another new feature of the response to the current turmoil is the level of activism of the Fed and the Treasury. The number and boldness of their actions has been striking, even prior to the September 2008 campaign to implement the comprehensive TARP plan for massive purchases of financial assets. The terms of lending, and collateral requirements, were quite flexible. Primary dealers and Fannie and Freddie were granted access to the discount window, not just depository banks. A major Wall Street investment bank and the world's largest insurance company were bailed out by the combined efforts of the Fed and Treasury. And Fannie Mae and Freddie Mac were rescued, as well, and they were subsequently placed in conservatorship, as the initial effort to keep them afloat proved inadequate.

Not surprisingly, many people find all this a bit worrying. Government loans, guarantees and investments in troubled financial institutions (which even include potential capital infusions into the GSEs), not to mention government purchases of assets (as contemplated under the TARP plan) not only put taxpayers' resources at risk today, they also change the risk-taking behavior of financial institutions going forward. If financial institutions know that the government is there to share losses, that makes risk taking a one-sided bet, and so more risk is preferred to less. There is substantial evidence from financial history – some of it very recent – that this “moral-hazard” problem can give rise to hugely loss-making, high-risk investments that are both socially wasteful and an unfair burden on taxpayers.<sup>31</sup>

Of course, the presence of moral-hazard cost does not mean that all government assistance is ill-advised. If assistance is provided only when the systemic consequences of not providing assistance are truly large, that will limit moral-hazard costs, and if assistance is structured to limit abuse, then

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<sup>31</sup> There is a large literature measuring the moral-hazard costs of protection. These costs take various forms. For example, Alston (1984) shows that the foreclosure relief measures instituted to combat the agricultural distress of the 1920s and 1930s raised credit market costs for non-defaulting borrowers. Additionally, there is the cost of wasteful resource allocation from increased risk taking. The academic literature looking at the adverse consequences for risk management of protecting banks is large. See, for example, Calomiris (1990), Barth, Caprio and Levine (2006), and Demirguc-Kunt, Kane, and Laeven (2008), among many others.

assistance can be particularly worthwhile. Were these two conditions met? Were the interventions by the Fed, the Treasury and the Congress justified by the systemic risks of failing to intervene, and did they structure assistance in a cost-minimizing manner?

To address these questions, and to place the recent assistance decisions in context, it is useful to review the debate on the role of the lender of last resort as it has evolved in recent years. The debate about the potential gross benefits of assistance has revolved around the question of how important asymmetric information and adverse selection are during episodes of financial shocks. In the 1980s and early 1990s, several prominent economists argued that it might be desirable to abolish the discount window, on the theory that central banks should only manage the aggregate amount of liquidity in the system (via open market operations), and leave it to the financial system to (efficiently) determine the proper allocation of credit (Goodfriend and King 1988, Bordo 1990, Kaufman 1991, 1992, and Schwartz 1992). Proponents of abolishing the discount window recognized that in days of yore it served a purpose, but argued that in the modern era of an efficiently operating fed funds market, and other efficient private markets for lending among financial institutions, there was no point in Fed lending to banks.

Calomiris (1994) challenged that view, and referred to the Fed's use of the discount window during the Penn Central crisis as an example of how asymmetric information costs can cause erstwhile efficient markets to shut down, giving a role to the Fed in preserving market liquidity through specifically targeted assistance. During the Penn Central episode, which was in some ways similar to the recent turmoil, albeit on a much smaller scale, the market lost confidence in the screening apparatus of the rating agencies for determining access to the commercial paper market. The commercial paper market essentially shut down, and many borrowers faced significantly increased liquidity risk as they were unable to rollover their outstanding commercial paper. By targeting assistance to commercial paper issuers, via pass through discount window lending

channeled through banks, the Fed targeted a temporarily dysfunctional part of the financial system for assistance, and prevented commercial paper borrowers from having to cut their investments and engage in a counterproductive scramble for liquidity. As the recent turmoil illustrates, despite the ongoing technological improvements and sophistication of our financial system, asymmetric information problems that disrupt the operation of normally efficient markets remain an important ingredient of market reality. The discount window, therefore, remains an important component of the Fed's toolkit.

How should assistance be structured? Specifically, on what terms (how long a maturity, and at what interest rate?), and against what kind of collateral should loans be made? Should nonbanks be permitted access to the window? Are loans good enough, or are other investments sometimes warranted? An exploration of the full range of possible policy interventions to deal with financial shocks is beyond our scope here; the following is a selective review.<sup>32</sup>

Bagehot (1873) famously argued that the lender of last resort should lend freely at a penalty rate on good (but not perfect) collateral.<sup>33</sup> This prescription still holds validity today, but the devil is in the details. The lender of last resort should lend at a penalty rate to avoid abuse of access to the window. The term of the loan should be long enough to relieve pressure in the market; too short a term forces borrowers to bear imminent rollover risk, which does little to assuage the flight to liquidity. It makes little sense for the lender of last resort to exclude systemically important financial institutions from receiving assistance, although once it is clear that nonbanks are eligible for assistance, they should be subjected to prudential regulations (analogous to those that apply to banks) to limit potential abuse of safety net access.

An effective lender of last resort should not be too picky about collateral. Lending against collateral assets that are of higher average quality (lower risk) than the borrower's overall asset

<sup>32</sup> For a broader treatment of alternative mechanisms, see Calomiris, Klingebiel, and Laeven (2005).

<sup>33</sup> For many interesting discussions of the application of this principle historically, see Meltzer (2003) and Capie and Wood (2007).

portfolio may do harm rather than good. If a lender of last resort lends against very high-quality collateral, that effectively subordinates depositors of the bank, and thereby increases the risk of depositor loss, which could counterproductively prompt deposit withdrawals. Indeed, Mason (2001) shows that this was precisely the problem with the first attempts of the Reconstruction Finance Corporation to provide assistance to banks during the Depression. The 1933 switch to preferred stock investments (which were junior claims relative to deposits) made RFC assistance much more effective.

As Meltzer (2003) shows, the Fed has never clearly enunciated a policy rule for its lender of last resort interventions. It prefers instead to make ad hoc interventions, and has behaved inconsistently over time. Nevertheless, in theory, it is possible to justify a consistent rule that would contain most if not all of the assistance innovations of the Fed and Treasury – longer term discount window lending, to banks and nonbanks, on collateral of average quality (including mortgage-backed securities today), and even the proposed use of preferred stock injections into Fannie and Freddie as a substitute for lending. But in granting access to its resources the lender of last resort still must adhere to two principles: (1) potential adverse systemic consequences with large social costs must be a real possibility (not just a chimerical convenience), and (2) the structure of assistance should minimize moral-hazard costs. Our financial leaders owe us a detailed explanation and justification of the various financial assistance packages that they have orchestrated, and a coherent vision and set of rules to guide policy going forward that is consistent with these two principles, lest wasteful and risk-increasing rescues become a habit. Neither the Fed nor the Treasury provided such a coherent vision in justifying their decisions regarding whether and how to assist Bear Stearns, Fannie Mac, Freddie Mac, Lehman or AIG. Neither did the Fed or the Treasury explain why the new comprehensive TARP approach was appropriate after September 18, 2008, but not before, or why this asset

purchasing approach was superior to other means to stabilizing markets (notably, preferred stock purchases in banks, which have been favored as a superior alternative by most economists).

Was intervention necessary and pursued in a least-cost manner in the three most controversial (pre-September 18, 2008) actions by the Fed and the Treasury, namely the assistance given to Bear Stearns, the GSEs, and AIG?

The assistance provided to Bear Stearns seems defensible as an action to limit the risk of adverse systemic consequences of Bear Stearns' failure. Bear was a counterparty to many derivatives transactions, and a major repo issuer. A failure of Bear Stearns would have created substantial confusion regarding the net positions of derivatives market participants, and would have produced a major shock to the repo market and to money markets more generally. Assistance provided a means of orderly exit (the acquisition of Bear Stearns by JP Morgan Chase), and avoided what could have been substantial disruption in the repo market, derivative markets, and financial markets generally.

Was the structure of assistance appropriate? In particular, was the \$30 billion loss exposure accepted by the Fed and Treasury really necessary?<sup>34</sup> It is not clear (and hard to second-guess in retrospect) whether the Fed and the Treasury could have gotten a better deal in their negotiations with JP Morgan Chase. By all accounts, JP Morgan Chase enjoyed a windfall from the transaction, even after the renegotiation of the Bear Stearns stock price by Bear shareholders, which raised the acquisition price from \$2 a share to \$10, after the bailout. On the other hand, there were few if any alternative qualified bidders, so the Fed's (or Treasury's) ability to bargain was limited. Most importantly, Bear Stearns' stockholders suffered huge loss (compared to their pre-acquisition stock price), and thus moral hazard should not be much encouraged by this episode.

The promise of assistance to Fannie Mae and Freddie Mac that was given in July 2008 also seems to have been warranted in the sense that their role in the mortgage market was too important to

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<sup>34</sup> Although the exposure to loss was on the Fed's balance sheet, it was indemnified by the Treasury, so it may be best to think of this arrangement as a Treasury action, facilitated by the Fed, rather than a Fed lending decision.

ignore, and their ability to continue accessing the bond market had become questionable. The market wanted to know whether the long-anticipated implicit government backstop would, in fact, be forthcoming. Upon the announcement of the Fed and Treasury plan, the GSEs access to debt markets was initially restored, even before key aspects of the plan for assistance had been approved by Congress. After the July intervention, however, concerns about the GSEs mounted and ultimately creditors demanded concrete injection of resources by the government, which was undertaken by placing the GSEs into conservatorships in September 2008. The government now have pledged to support the GSEs through preferred stock injections, as needed, to maintain the flow of mortgage credit and to support GSE obligations. These preferred stock injections may be desirable as a short-term measure, but there are several aspects of the proposal that are problematic.

First, GSE fragility reflected longstanding incentive problems and excessive risk taking in anticipation of safety net protection. The GSEs made moral hazard a cornerstone of their business plan for decades. Critics of the GSEs argued that the government's implicit protection warranted greater regulation, or privatization, or winding down, of GSE operations (Calomiris and Wallison 2008). The GSEs and their defenders responded that there was no implicit protection, and therefore, no need to prevent abuse. In the meantime, they built up subprime mortgage exposures of more than \$1 trillion on a paper thin capital base.

The short-term assistance program for the GSEs, even if legitimately motivated by systemic concerns, should have been accompanied by a clearly enunciated, long-term proposal to wind down the GSEs, or fully and credibly privatize them (and make them subject to a clearly specified receivership or conservatorship regime). Nationalization of the enterprises would have been another reasonable option. The July assistance legislation and the September creation of the conservatorships does neither, and simply leaves the long-term future of the GSEs open – a surefire method to

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

What about the government's September 2008 decision not to intervene to rescue Lehman Brothers, and its opposite decision to rescue AIG? The decision not to rescue Lehman has been criticized as causing much of the late-September 2008 liquidity strains in the market. That decision reflected the view by policy makers that the markets had been given ample time (six months) to adjust to the possibility of a Lehman failure, and that therefore Lehman's failure would not have grave systemic consequences. In the case of AIG, the larger size, global ramifications, and suddenness of the increased risk of failure on the heels of AIG's ratings downgrade may explain the government's different course. Here the government provided assistance, albeit at the price of requiring 80% of the firm's equity.

The government changed course dramatically on September 18, 2008. Up to that point, ad hoc decisions whether and on what terms to intervene had been the means of dealing with problems. On September 18, the Treasury and Fed propose a comprehensive asset purchase (TARP) plan (alongside new prohibitions on short sales of financial stocks and insurance of money market mutual funds, which were experiencing large withdrawals after one prominent fund "broke the buck" of contributors' principal in the fund)? The best explanation for the change in course revolves around the "bear run" on the stock of Morgan Stanley and Goldman Sachs that occurred on the 17<sup>th</sup> and 18<sup>th</sup> of September. The previous policies of the government indicated that the government's intervention to rescue an ailing firm was uncertain, but that when it did intervene, stockholders suffered large losses. That "punitive intervention" policy made sense from the perspective of limiting moral-hazard consequences of providing assistance, but it had one bad consequence: short sellers could be confident that they would very likely profit from shorting the stock of any financial firm experiencing liquidity trouble; if the institution did not receive assistance, then short sellers would profit as the

firm scrambled to raise cash, and if it did receive assistance, shares would plummet as the result of the policy of punitive intervention. The vulnerability of Morgan Stanley and Goldman Sachs despite the fact that neither of them had significant exposures to subprime problems may have convinced policy makers that the liquidity crisis had reached a new level of severity.

### III. What's Next?

In the first year since the subprime turmoil erupted, economic growth has been sluggish and the employment situation has worsened, but the ability of banks to reintermediate off-balance sheet positions without sharply curtailing credit supply (which was the consequence of banks' preexisting regulatory capital cushion, their continuing earnings from other sources, as well as substantial capital flotations and dividend cuts) prevented the credit crunch from causing the sort of severe recession that otherwise would have accompanied a financial sector shock of this magnitude.

The near-term outlook for the economy and the financial sector has deteriorated recently, as the financial sector was buffeted in September by one of the most dramatic months in its history. Fannie Mae and Freddie Mac went into conservatorship. AIG was rescued by the government, Lehman Brothers failed, Merrill Lynch became part of Bank of America, Washington Mutual and Wachovia were acquired in FDIC-assisted transactions, and Morgan Stanley and Goldman Sachs became bank holding companies. By the end of September, the risk of further significant financial failures within the United States had been substantially reduced, if only by the fact that the fates of virtually all significant financial institutions had already been resolved. But European banks were beginning to experience severe strains and credit spreads were extremely elevated in the U.S. and abroad as equity and debt markets seized up, and the risk of a much more severe credit crunch loomed.

At the same time, the inflation picture worsened. Many observers commented that the Fed's aggressive fed funds rate cuts may have gone too far. There has been a substantial acceleration in inflation, and a rise in at least one (controversial) measure of long-term inflation expectations (the Cleveland Fed measure shown in based on the spread between indexed and nominal 10-year Treasuries, shown in Figure 12). Many market participants commented that the failure by the Fed to convince the market that it would ensure price stability has been a significant drag on the stock market.

Low U.S. stock prices, especially for banks, are a major cause for concern. Low stock prices discourage banks from raising new equity. Despite the enormous amount of equity raised thus far, unless stock prices rise to encourage banks to continue to raise equity capital, credit supply decline likely will accelerate. The Treasury and Fed have offered the TARP asset purchase plan as a means of staving off the risk of a severe decline in credit and economic activity.

The remainder of this section (1) evaluates the TARP proposal, (2) evaluates the risks in the housing market related to the growing wave of foreclosures, (3) offers a few monetary and long-term regulatory policy recommendations, and (3) provides an assessment of how the subprime turmoil will reshape the structure of the financial system.

#### *TARP and a Preferred Alternative*

The TARP proposal, which was pending before Congress at this writing, would have the U.S. government spend up to \$700 billion acquiring distressed assets from financial institutions. The proposal has significant shortcomings.

First, it places taxpayers in a first-loss position with respect to the assets they buy. To mitigate that problem, Congress added several proposed items, including the awarding of stock warrants to the government by asset-selling institutions, ex post assessments to be paid by all surviving financial

institutions (to be designed subsequently) to recoup any ultimate taxpayer losses, limits on executive pay, and a variety of other features. These features reflect the desire to insulate taxpayers from the large potential risks associated with the acquisition of subprime-related assets and other assets, and entail significant uncertainties for taxpayers and participating institutions from their implementation. The asset purchases and the various risk-mitigating measures also provide extraordinary discretion to the Secretary of the Treasury.

Second, the plan is to purchase assets at above “fire-sale” prices but below “hold-to-maturity” value (to use Chairman Bernanke’s terms). This aspect of the plan reflects the recognition that purchasing assets at the lowest possible price in the midst of a liquidity crisis would do little to help banks, since it would not add to the capital of sellers and could force all banks to mark their portfolios to extremely low values. Given that most of these instruments do not trade in a secondary market, are highly heterogeneous and complex, and are not going to be purchased at the lowest (i.e., current market) price, it is hard to see how their prices will be determined. Discretionary authority combined with an ill-defined objective is a recipe for mischief, unaccountability, and even corruption.

Third, the plan entails moving a huge amount of the financial system’s assets out of the private sector and into the public sector. This may be good news for the price of Northern Virginia’s real estate, but it will produce inefficient disposition of assets and reduce employment in New York’s financial center at a time when job losses there are already quite high.

There is a better way. The Reconstruction Finance Corporation’s (RFC) preferred stock program, which began in 1933, was quite successful at giving banks needed capital and liquidity in the 1930s, and it did so at minimal risk to taxpayers. Infusing banks with preferred stock protects taxpayers against loss by making recipient bank stockholders bear the first tier of losses on their assets (thus avoiding the need for complex contracting schemes involving warrants, assessments and

compensation limits), avoids the near-impossible task of pricing subprime-related securities, and keeps the workout of distressed assets in private hands (and in New York). The U.S. experience in the 1930s and Finland's in the 1990s show that preferred stock injections can boost systemic stability with little risk to taxpayers (Mason 2001, Englund and Vihriala 2003, Calomiris and Mason 2004b). The RFC was successful in limiting the abuse of its preferred stock investments because it codified and followed clear practices specifically designed to limit abuse. Those included limiting common stock dividend payments, requiring recipients to devise a plan to increase capital, and retaining significant corporate governance authority to limit abuse of protection. A properly designed RFC approach is head-and-shoulders better than the TARP approach being advocated by Messrs. Paulson and Bernanke.

*Will U.S. House Prices Collapse?*

If the above account of the origins of the turmoil is correct in placing significant blame on agency problems in asset management, then that implies an important corollary: agency problems are also likely causing an overreaction to the subprime shock. Over-selling on the downside is a standard theoretical and empirical result in the literature on agency in asset management. It results from the desire of portfolio managers to avoid stocks that are seen by the public as obvious poor performers.

The most dire predictions of financial sector loss begin with forecasts of a large decline in house prices. Using flawed measures of prices, many commentators believe that U.S. house prices have already fallen by more than 15% and may decline by substantially more in the near term. Such a decline implies that prime mortgages, not just subprime and Alt-A loans, could suffer substantial losses. The main worry is that a massive wave of subprime foreclosures and resulting distress sales of subprime borrowers' houses will produce a steep house price decline for all houses, fueling further foreclosures (by "walkaway" prime borrowers) and leading to further price declines.

Calomiris, Longhofer and Miles (2008) show that the empirical basis for this view is highly suspect.<sup>35</sup> Roughly three quarters of the U.S. mortgage market (measured in numbers of homes) is prime and conventional (non-subprime, and non-jumbo). The value of these homes is accurately measured by the OFHEO indexes (there are two quarterly index numbers, one based on purchases of homes, the other based on both purchases and appraisals during refinancings – see Leventis 2007 for details). Regardless of which of the OFHEO indexes one employs, these price measures for the typical American home have not fallen much since the 2007 peak (Figure 13). Furthermore, even if dire foreclosure forecasts come true, Calomiris, Longhofer and Miles (2008) estimate that home prices as measured by the OFHEO index likely will not fall by very much (a peak-to-trough decline of more than 5% would be a reasonable upper bound of average decline, even if foreclosures substantially exceed estimates for 2008 and 2009), although in roughly a dozen states declines will be (and already have been) severe (Figure 14).

The OFHEO index is an accurate measure of the prices of houses financed in the prime mortgage market, and thus provides a clear indication of whether foreclosure activity is likely to produce significant price decline in that market. Other price indexes (the median sales price index, and the Case-Shiller national index – plotted in Figure 13) are biased measures of the overall housing market. Case-Shiller, in particular, gives great weight currently to distressed subprime sales, and to jumbo sales, particularly in a few states (due to its uneven coverage of the national market). The OFHEO indexes, in contrast, mainly measure the value of houses in the prime market. Thus, there is little reason to believe that prime mortgages will suffer large losses from subprime foreclosures.

If this upbeat assessment is correct, it is very good news for the recovery, since it indicates that the housing market is nearing its bottom. Recovery will not begin in earnest until markets

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<sup>35</sup> The study develops a quarterly Panel Vector Autoregressive model, using quarterly data at the state level since 1980 on employment, house sales, house permits, house prices, and foreclosures. We simulated house price declines for each of the states through 2009 by combining the model's parameter estimates with state-level foreclosure estimates for 2008 and 2009 from [economy.com](http://economy.com).

become convinced that housing prices, which underlie so much of the uncertainty in the financial sector, have reached bottom.

Calomiris, Longhofer, and Miles (2008) also argue that, the OFHEO index is superior to Case-Shiller for measuring the consumption wealth effect of house price changes, since it is more representative of households whose consumption behavior is most likely to respond to house value decline. That argument reflects theoretical perspectives on the housing wealth effect (see Sinai and Souleles 2005, and Buiter 2008). Central banks' macroeconomic models typically gauge the wealth effect using the OFHEO index as their measure of housing wealth, perhaps for similar reasons. The fact that the typical American home is unlikely to decline much in value over the period 2007-2010 due to the foreclosure wave buffeting the housing market, therefore, provides an optimistic perspective on consumption. The combination of a 5% OFHEO peak-to-trough price decline and a reasonable estimate of the housing wealth effect (a 3% elasticity) produces a very small decline in consumption.

#### *Perspectives on Monetary Policy*

I have argued that the Fed's aggressive actions with respect to the expansion in access to the discount window, the Fed-Treasury actions to prevent the collapse of Bear Stearns, and intervention to prevent the collapse of the GSEs, were appropriate responses to financial turmoil, although as many other commentators have correctly noted, in the case of the assistance to GSEs, government protection should have been delivered in a way that also committed to the right long-term resolution of the GSE problem.

During an asymmetric-information shock, the central bank needs to be able to deliver targeted assistance. The discount window is a "surgical" tool used to combat localized problems (like the current securitization shock) without changing fed funds rates, and through them, interest rates

throughout the financial system. Discount window lending inevitably entails some acceptance of risk by the central bank; to be useful, the collateral taken on loans should be good, but not riskless. At the same time, the discount window should not be used as a hidden means of transferring resources to insolvent borrowers (as the Fed did, and was roundly criticized for doing, during the 1980s).

Being able to grant access to the discount window not only allows policy makers to target microeconomic assistance to put out fires with systemic consequences in the financial system, it also frees the monetary authority to be keep the money supply and fed funds rate on an even keel, even during times of high stress. A bold use of the discount window, in other words, empowers the Fed to maintain a strong commitment to price stability even as it delivers assistance quickly where it is needed.

Unfortunately, the Fed has not pursued a combination of bold lender-of-last-resort support alongside conservative policies to promote price stability. Aggressive fed funds cuts have permitted inflation to accelerate. During the turmoil, some voices within the Fed argued that core inflation provided a better indicator of long-term inflation, despite the fact that food and energy price inflation was obviously accelerating in a secular trend, rising alongside long-term inflation expectations and partly as a direct result of a weakening dollar. This was unwise at best and disingenuous at worst. And Fed officials' promises that rate cuts would be taken back in 2008 if inflation accelerated have proven hollow.

To avoid a worsening economic contraction, banks and nonfinancial firms must be able to continue to access the stock and bond markets. U.S. corporations (whose debt capacity has improved over the past four years markedly, in response to the corporate leverage reduction wrought by the Bush dividend tax cuts – Figure 15) should be able to raise substantial funds in the bond market. But worries about inflation can limit buyers' interest in new debt offerings. Ensuring price stability

should be a priority for Fed policy, even from the standpoint of supporting the expansion of credit supply.

Until the Fed raises the fed funds rate to demonstrate its concern about the acceleration of inflation, Fed pronouncements on price stability will be seen as cheap talk. Starting sooner rather than later, the Fed needs to raise the fed funds rate, slowly and predictably, to restore confidence in its continued commitment to price stability.

#### *Regulatory Policies*

With respect to regulatory policy, an important historical lesson is that bad regulations are often wrought in the wake of large financial shocks. Post-Depression regulatory changes (the separation of commercial and investment banks, the establishment of deposit insurance, the entrenchment of entry barriers across regions) are almost universally viewed by financial historians as mistaken reactions to the Depression which remained a source of major economic costs in the decades that followed (Calomiris 2000). It is important to emphasize that knee-jerk criticisms that blame the banking deregulation of recent decades for the subprime turmoil are dead wrong. As discussed above, bank deregulation and globalization over the past decades substantially reduced the costs of the subprime turmoil. But there have been regulatory mistakes, and they need fixing.

This regulatory discussion focuses on six regulatory policy issues raised by the subprime turmoil:<sup>36</sup> (1) prudential regulation of banks and other intermediaries, (2) policy toward the GSEs, (3) government policies designed to increase the rate of homeownership, (4) changes in the regulation of asset management, (5) the regulatory use of ratings for various purposes, and (6) foreclosure relief.

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<sup>36</sup> Many other topics also warrant discussion, but not all can be treated here. The future of derivatives trading is of particular interest. Many observers are arguing that counterparty risk could be reduced by simplifying and homogenizing derivative contracts and encouraging their trading on exchanges, and by creating more efficient management of clearing and netting of positions. The allocation of regulatory and supervisory authority is another complex area of increasing debate. In particular, there are reasons to favor removing the Federal Reserve from the day-to-day business of supervision and regulation, as suggested by Secretary Paulson (see Calomiris 2006).

**Prudential regulation of banks** has been shown to be inadequate, not just in retrospect, but in prospect. Critics of the status quo prior to the turmoil noted that the magic 8% number for total risk-based capital, and the lower limits on overall leverage enforced in the U.S., have long questioned whether these levels are adequate. Other longstanding criticisms have been that the chief pillars of Basel II – reliance on rating agencies opinions and reliance on internal models – have both been roundly discredited by the collapse of subprime. Many economists (see Repullo and Suarez 2008, for a review) have also noted the desirability of allowing minimum capital requirements to decline during downturns – to mitigate the credit supply contractions that accompany bank losses during downturns – but allowing such variation while also preserving sufficient equity buffers requires a substantial increase in the average minimum capital ratio. This could be done at low cost to the economy if it were phased in over a long period of time (say over a decade or so). Once the economic recovery is underway, policy makers should begin the process of raising minimum capital requirements.

The subprime debacle brings a deeper lesson, too. Banks used securitization to avoid prudential regulatory policies that tried to limit bank asset risk per unit of capital. If prudential regulation is going to be effective it has to do more than make a new set of rules that clever bankers will innovate around. Regulation must take incentives into account and build rules that will be immune to creative accounting for risk. To accomplish that objective, capital requirements should also be made more dependent on debt market discipline, rather than just rating agency opinions or internal models. Many academics, within and outside the United States, have long favored the imposition of a minimum subordinated debt requirement as part of bank capital requirements (Shadow Financial Regulatory Committee 2000). While it is true that agency problems in asset management, like those revealed during the subprime turmoil, can weaken the accuracy of market opinions as expressed in the pricing of subordinated debts, the answer to that problem is to find ways

to encourage better incentives by asset managers, not to give up on market discipline. Bankers who know that they will be subject to the risk judgments of sophisticated creditors, who place their own money at risk, will have strong incentives to limit the true underlying risk borne by those creditors. A minimum subordinated debt standard (which was supported by academic and Federal Reserve Board (1999) research, but killed by the political lobbying of the big banks in 1999), is the sine qua non of a credible approach to defeating regulatory arbitrage in banks' risk management practices.

Largely in reaction to the disorderly LIBOR market over the past year, regulators are moving to require banks to meet minimum liquidity standards. It is likely that banks will be required to maintain adequate liquidity, not just adequate capital, as part of a reformed set of Basel requirements. Such a requirement would also reduce the dependency of banks on the Fed discount window during future financial shocks.

Another potential change in prudential regulation resulting from the subprime turmoil could be the imposition of **prudential regulations on investment banks**. Now that investment banks that are primary dealers have accessed the discount window and been the targets of other special Fed and Treasury intervention, is it possible to return to the status quo ex ante (where investment banks operate with neither the benefits of government protection nor the costs of adhering to strict guidelines for prudential regulation)? Much of the urgency of resolving that question was removed by the decisions of Morgan Stanley and Goldman Sachs to become bank holding companies under the regulation of the Federal Reserve Board. Still, the status of other investment banks, and of prospective entrants, remains unclear.

The key unresolved issue is the extent of protection going forward. Unless the government can find a way to credibly avoid providing blanket protection to primary dealers that become troubled, prudential regulation of primary dealers would be necessary. On an optimistic note, reforms in over-the-counter markets are underway that would establish a central clearing house for some

derivatives trading. This could substantially reduce and render more transparent the counterparty risks in derivatives trading. Doing so would reduce the potential costs of allowing a primary dealer to fail, and could thereby help limit the expansion of the safety net and the need to extend prudential regulation to the primary dealers.

The genie is clearly out of the bottle with respect to GSE protection, which implies a pressing need to **reform the GSEs**. For over a decade, critics of the GSEs have been pointing out that the implicit protection afforded to them by the government invited abuse of taxpayers' funds (Wallison 2001, Calomiris and Wallison 2008), and that there was no justification for preserving their unique mix of private ownership with government protection. Now that the government has bailed out the GSEs, taxpayers' exposure is no longer implicit, it is explicit. The status quo ex ante is no longer acceptable. In the long term, the GSEs either should be divided into smaller institutions and credibly privatized, or should be wound down after being nationalized. There are many acceptable ways to achieve one or the other of these options.

The government has made a point of using **credit subsidies as the primary means of encouraging homeownership** – via tax deductibility of mortgage interest, FHA guarantees, support for GSEs and Federal Home Loan Banks, and pressures on lenders to expand access to credit for would-be homeowners. This has significantly contributed to unwise risk taking and excessive leveraging in the real estate market, which promoted instability in the housing and financial markets. The argument typically made for subsidizing homeownership is that it increases people's stake in their communities, and makes them better citizens. A better way to achieve that objective is downpayment assistance for new homeowners (employed in Australia), which could deliver the same homeownership outcome in a way that stabilizes real estate markets and ensures that homeowners maintain a real stake in their homes. After all, how can homeownership significantly increase an individual's stake in the community if the individual retains only a trivial stake in his or her home?

Although it has received scant attention in the press, given the central importance of agency problems in asset management in triggering the recent turmoil, policy makers should be considering ways to **reform the regulation of asset management** to encourage better performance, greater competition, and more accountability. A good start would be the elimination of the symmetry requirement for profit sharing, which would permit asset managers to adopt compensation arrangements that would reward performance (along the lines of the arrangements employed by hedge funds). One can imagine other potential regulatory changes that might encourage greater competition and accountability on the part of institutional investors. This topic warrants more attention.

**The regulatory use of ratings**, as discussed in Section 1, has contributed to ratings grade inflation, and given “plausible deniability” to value-destroying asset managers who made poor investments in subprime mortgage-related instruments.<sup>37</sup> Unlike typical market actors, rating agencies are more likely to be insulated from the standard market penalty for being wrong, namely the loss of business. Issuers must have ratings, even if investors don’t find them accurate. That fact reflects the unique power that the government confers on rating agencies to act as *regulators*, not just opinion providers. Portfolio regulations for banks, insurers, and pension funds set minimum ratings on debts these intermediaries are permitted to purchase. Thus, government has transferred substantial regulatory power to ratings agencies, since they now effectively decide which securities are safe enough for regulated intermediaries to hold.

Ironically, giving rating agencies regulatory power reduces the value of ratings by creating an incentive for grade inflation, and makes the meaning of ratings harder to discern. Regulated investors encourage grade inflation to make the menu of high-yielding securities available to them to purchase

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<sup>37</sup> The discussion here relies heavily on Calomiris and Mason (2007).

larger. The regulatory use of ratings changed the constituency demanding a rating from free-market investors interested in a conservative opinion to regulated investors looking for an inflated one.

Grade inflation has been concentrated particularly in securitized products, where the demand is especially driven by regulated intermediaries. Even in the early 1990s, it was apparent how regulation was skewing the ratings industry. Cantor and Packer (1994) pointed out that grade inflation was occurring, and that it was driven initially by ratings agencies other than Moody's and S&P: "Rating-dependent financial regulators assume that the same letter ratings from different agencies imply the same levels of default risk. Most 'third' agencies, however, assign significantly higher ratings on average than Moody's and Standard & Poor's." In fact, those "third" agencies were already pushing more heavily into structured finance than Moody's and Standard & Poor's, rating deals that the two main agencies did not. Moody's and Standard & Poor's eventually chose to join the others in what turned out to be an incredibly lucrative fast-growing product area, which accounted for roughly half of rating agencies' fees.

It is no use blaming the rating agencies, who are simply responding to the incentives inherent in the regulatory use of ratings. The right solution is for regulators to reclaim the regulatory power that has been transferred to rating agencies to both award ratings *and* determine the meanings attached to ratings. Such reform becomes even more important in light of soon-to-be-adopted Basel II capital rules, which allow bond ratings to be used to measure default risk in regulating the portfolios of banks that do not develop their own models under Basel II's Internal Risk-Based (IRB) Capital Rules.

How can regulatory power be reclaimed? Regulating how rating agencies set standards is one possibility, but that would compromise rating agencies' ability to use independent discretionary judgment. A better solution is to reform regulations to avoid the use of letter grades in setting standards for permissible investments by regulated institutions. In the absence of regulatory use of

letter grades, banks and their regulators would look at the underlying risks of investments (their default probabilities and the expected losses given default), not letter grades. Indeed, rating agencies sell tools to investors that permit exactly this sort of analysis, and the IRB framework under Basel II presumes such data, which would render letter grades superfluous. Full disclosure of these new measures of portfolio risks, and a greater reliance on market discipline to discourage excessive risk taking would further improve the regulatory process.

An even better reform would be to eliminate the regulatory use of ratings altogether. Regulation could substitute true market discipline through mandatory subordinated debt requirements, as discussed above.<sup>38</sup> Not only would requiring banks to issue sub debt provide discipline from debtholders placing their funds at risk, the opinions of these market participants are publicly observable in bond prices and thus provide useful information to other investors and regulators.

Congress and many states are considering various ideas for **helping homeowners to avoid foreclosure**. Many homeowners, particularly highly levered subprime borrowers who are facing rising interest rates as the result of teaser rate contracts, are facing a high risk of foreclosure. Compassion, and the desire to remove downward pressure on home prices from distress sales, motivate various aid proposals. The costs of such aid could be large, and the benefits in the form of higher home prices have been exaggerated (again, see Calomiris, Longhofer and Miles 2008). Costs include the moral hazard consequences of encouraging high-risk borrowing in the future. To the extent that aid is provided, it should be targeted (e.g., to limit foreclosures on primary residences of low-income homeowners), and should depend on renegotiation by creditors and lenders, not government intervention into the foreclosure process. Any aid should require lenders to make significant concessions to reduce borrowers' leverage and reduce the risk of default going forward,

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<sup>38</sup> For evidence of the desirability and feasibility of employing greater market discipline, see Board of Governors (1999), Mishkin (2001), and Barth, Caprio and Levine (2006).

and post-assistance cash out refinancing should be strictly prohibited for borrowers participating in assistance programs.

*Long-Term Structural Consequences of the Subprime Turmoil*

Will securitization remain an important feature of financial intermediation or has it been discredited too much by the subprime debacle? Over the last two decades securitization transformed financial intermediation. Advocates of efficiency gains from securitization point to the flexibility of securitization structures in carving up and distributing risk to meet different investors' preferences for duration, default risk, interest rate risk, and prepayment risk. Securitization also can efficiently reduce the equity capital needed to absorb the risk of the assets being intermediated. Securitization mechanisms can perform that function by promoting learning about securitized assets over time (which reduces adverse selection costs), or by employing subtle contractual devices that improve the incentives of sponsors to manage risk (Calomiris and Mason 2004a).

Critics see securitization as a means of promoting too much systemic risk by allowing banks to maintain inadequate minimum capital requirements, while retaining most or all of the risk of the assets being securitized. The absorption of much of the loss by sponsors of conduits has left many observers questioning whether securitization really does reallocate risk, and whether it does so in a transparent fashion. The lack of reliability of the risk modeling for subprime MBS and CDOs has undermined confidence in the apparatus for engineering conduits and measuring the risks of their debt issues.

Securitization of subprime and CDO conduits have given securitization a bad name and the long-term future of securitization remains uncertain. But already we are seeing that the negative impact on securitization depends on the product line. For example, on the one hand, credit card securitizations seem to holding their own. They have been around for decades, have operated through

several business cycles, and have a well-understood track record. The master trusts under which debts are issued have evolved over time, and their complex structures (including early amortization structures that protect issuers and debtholders) have stood the test of time well. Deal flow in credit card securitizations remains high, and one could even argue that credit card securitization will benefit from the demise of subprime and other housing related products. On the other hand, more recent and exotic products, especially related to the residential or commercial mortgage sector, have been severely affected over the past year. Commercial MBS debt tranches with low loan-to-value ratios (e.g., 70% LTV tranches that are rated A) have seen yields in the high teens or even higher, and deal flow has been substantially reduced.

Financial institutions are seeking to find a substitute mechanism in product areas where the market is less receptive to securitization. Covered bonds provide one possible solution. Indeed, one could argue that covered bonds are a more transparent version of the financial arrangements that previously characterized securitized assets. They similarly allow sponsors to carve up and redistribute risk, and permit separate categories of assets to serve as the bases for funding financial intermediation (rather than lumping everything together on the bank's balance sheet and raising funds for the bank as a whole).

Covered bonds are obligations of the issuing bank that issues them, but they are also linked directly to a set of assets that provide the first line of defense for repaying the cash flows promised to bondholders. This permits covered bond issuers to be rewarded for the performance of the asset pools on which the bonds are issued, as in a securitization, and it allows complex carving up of risks and targeting of risks to different (relatively junior and senior) bondholders. But debt service on covered bonds is a claim on the cash flows of the financial institution that issues them, not just the cash flows from the assets earmarked to support them, and covered bonds also are backed by the net worth of the issuing financial institution. While securitized assets enjoy the implicit backing of the sponsor's

holding company, this was conditional in the sense that there was no legal requirement by the sponsor to provide backing. Covered bonds entail a greater, more explicit and unconditional commitment for protection, and thus are quite different from securitization (Calomiris and Mason 2004a, Higgins and Mason 2004).

That difference raises a concern for prudential regulation, namely cash flow and asset “stripping” – the possibility that the a bank’s commitment to its covered bond holders could cause a depletion of cash flow and assets that would otherwise support the institution as a whole (Eisenbeis 2008). So long as prudential regulation is effective, bank capital will be sufficient to provide protection against losses to other bank liabilities notwithstanding the use of covered bonds, but given the concerns noted above about the effectiveness of prudential regulation, it is worth recognizing that the use of covered bonds further reinforces the need for deep reforms of prudential regulation.

*Will Stand-Alone Investment Banks Disappear?*

Deregulation, culminating in the Gramm-Leach-Bliley Act of 1999, allowed commercial banks (i.e., those issuing deposits) to engage in a wide range of financial services. Why would a wholesale bank choose to remain as an investment bank after the deregulation of commercial banks’ powers? The primary advantage was avoiding the prudential regulations that applied to commercial banks. Although investment banks could not issue deposits, they could fund themselves with repurchase agreements (largely overnight), which substituted for short-term, low-interest rate deposits.

The subprime crisis dramatically changed the perceived costs and benefits of remaining a stand-alone investment bank, as indicated by the disappearance of Lehman, the decisions by Morgan Stanley and Goldman Sachs to become bank holding companies, and the acquisitions of Bear Stearns and Merrill Lynch by JP Morgan Chase and Bank of America, respectively. It now seems likely that

stand-alone investment banking will become the domain of small, niche players in the financial system.

Obviously, the giant stand-alone investment banks didn't want it to come to this. Why did they resist it for some long, and what does this tell us about the downside of their capitulation for the structure and efficiency of the American financial system going forward?

The investment banks' resistance until now largely reflected the regulatory costs and risk "culture" changes that come with regulated depository banking. Virtually all of the franchise value of Goldman and Morgan is human capital. These folk are the most innovative product developers, and the most skilled risk managers, that the world has ever seen. Depository bank regulation, supervision, and examination prizes stability and predictability over innovativeness, and banks bear a great compliance burden associated not only with their financial condition, but also their "processes" related to both prudential regulatory compliance and consumer protection. None of that is conducive to innovation and nimble risk taking.

Goldman's and Morgan's moves, therefore, could have a big cost in trimming their upside potential and reducing the value of their human capital for developing new products and proprietary trading strategies. What about the benefits? First and foremost, they will be able to use reliable, low-cost deposit financing as a substitute for the shrinking collateralized repo market and other high-priced market-based debt instruments. Second, they will be able to preserve their client advisory business, and perhaps even compete better in underwriting activities. Stand-alone investment banks have lost market share in underwriting to universal banks over the past two decades because underwriting and lending businesses are linked, and non-depository institutions suffer a comparative disadvantage in funding their lending (see Calomiris and Pomrojnangkool 2008).

In this sense, the capitulation of the stand-alones marks the final stage in the victory of the relationship banking/universal banking model. Those of us who argued in the 1980s that nationwide

branching would allow commercial banks to serve as platforms for universal banks with large relationship economies of scope can now say that we told you so. Bank of America, JP Morgan Chase, and Citibank have all weathered the financial storm and are not under immediate threat of failure precisely because their geographical and product diversification has kept them resilient, and even permitted them to engage in acquisitions and new stock offerings during the worst shock in postwar financial history.

But it is not progress, in my mind, to move toward a one-size-fits-all financial system based entirely on behemoth universal depository banks. Just as community banks still play an important role in small business finance (owing to their local knowledge and flat organizational structures), we need nimble, innovative risk takers like Goldman and Morgan in the system.

Still, I am not too worried about the lost long-run innovative capacity of American and global finance, for a simple reason: Ultimately, people are the innovators, not institutions; smart, innovative people can (and many will) find homes elsewhere. The financial landscape will shift, giving rise to new franchises and new structures (perhaps even spinoffs from the current investment banks) that combine the features of the old franchises that don't fit comfortably under the Fed's umbrella. Global competition, as always, will be a reliable driver of financial efficiency.

The structure of U.S. financial intermediation will probably undergo significant changes over the next few years, many of which are hard to predict. History does not give a precise guide to those changes, but one pattern is likely to repeat: Financial sector problems breed new opportunities alongside losses. The American financial system, if it remains true to its history, will adapt and innovate its way back to profitability and high stock prices sooner than is suggested by the dire predictions that fill today's newspapers.

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Table 1  
 Illustrating the Diversity of U.S. Financial Shocks

| Financial Shock                   | Banking Problem? | Real Estate Related? | Importance of Asymmetric Information in Relevant Market | Severity of Financial Shock (relative to size of overall economy) |
|-----------------------------------|------------------|----------------------|---|---|
| Panic of 1893                     | Yes              | Partly               | High  | Low   |
| Panic of 1907                     | Yes              | No                   | High  | Low   |
| Agriculture Distress 1920-1930    | Yes              | Yes                  | Low   | High  |
| Crash of 1929                     | No               | No                   | Low   | High  |
| Banking Distress 1931-1933        | Yes              | Partly               | Occasional, mainly regional                             | High  |
| Penn Central 1970                 | No               | No                   | High  | Low   |
| Agricultural Distress Early 1980s | Yes              | Yes                  | Low   | Moderate  |
| Bank and S&L Distress 1980-1991   | Yes              | Yes                  | Varied  | High  |
| Crash of 1987                     | No               | No                   | Low   | High  |
| Dot Com Crash of 2001             | No               | No                   | Low   | High  |
| Subprime Shock                    | Yes              | Yes                  | High  | High  |

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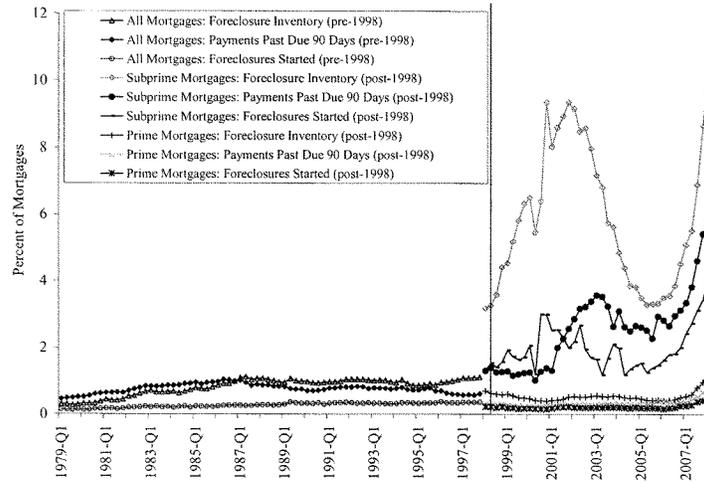
Table 2

Mortgage Originations  
By Product and By Originator  
(Billions of Dollars)

|                           | 2007        | 2006        | 2005        | 2004        | 2003        | 2002        | 2001        |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                           | (6 mo)      |             |             |             |             |             |             |
| FHA/VA                    | 42          | 80          | 90          | 130         | 220         | 176         | 175         |
| Conv/Conf                 | 570         | 990         | 1090        | 1210        | 2460        | 1706        | 1265        |
| Jumbo                     | 242         | 480         | 570         | 510         | 650         | 571         | 445         |
| <b>Subprime</b>           | <b>151</b>  | <b>600</b>  | <b>625</b>  | <b>530</b>  | <b>310</b>  | <b>200</b>  | <b>160</b>  |
| <b>AltA</b>               | <b>205</b>  | <b>400</b>  | <b>380</b>  | <b>185</b>  | <b>85</b>   | <b>67</b>   | <b>55</b>   |
| HELOC                     | 200         | 430         | 365         | 355         | 220         | 165         | 115         |
| <b>TOTAL</b>              | <b>1410</b> | <b>2980</b> | <b>3120</b> | <b>2920</b> | <b>3945</b> | <b>2885</b> | <b>2215</b> |
| ARMs                      | 460         | 1340        | 1490        | 1464        | 1034        | 679         | 355         |
| Refis                     | 765         | 1460        | 1572        | 1510        | 2839        | 1821        | 1298        |
| <u>Top 10 Originators</u> |             |             |             |             |             |             |             |
| Countrywide (CA)          | 245         |             |             |             |             |             |             |
| Wells Fargo (IA)          | 148         |             |             |             |             |             |             |
| Citi (MO)                 | 116         |             |             |             |             |             |             |
| Chase (NJ)                | 109         |             |             |             |             |             |             |
| B of A (NC)               | 96          |             |             |             |             |             |             |
| WaMu (WA)                 | 83          |             |             |             |             |             |             |
| Resid. Cap. (NY)          | 58          |             |             |             |             |             |             |
| Wachovia (NC)             | 55          |             |             |             |             |             |             |
| IndyMac (CA)              | 48          |             |             |             |             |             |             |
| Am Home Mort (NY)         | 35          |             |             |             |             |             |             |
| TOTAL for Top 10          | 993         |             |             |             |             |             |             |
| TOTAL for Market          | 1410        |             |             |             |             |             |             |

Source: Originations data are from "Current Mortgage Market Conditions," Housing Data Users Group, September 26, 2007.

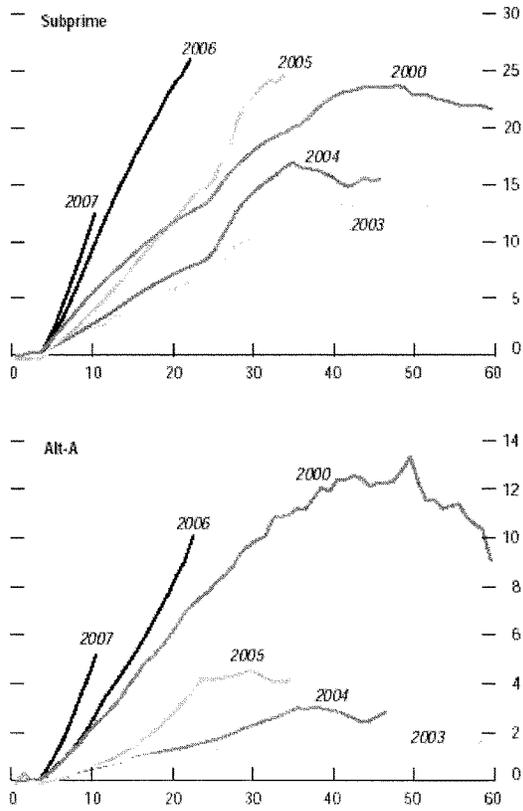
Figure 1: Foreclosure and Delinquency Rates



Source: Mortgage Bankers Association, National Delinquency Survey. FHA and VA mortgages, and jumbo mortgages, are included in the pre-1998 aggregate data, but VA and FHA mortgages are not included in the post-1998 samples of prime and subprime mortgages; jumbo mortgages are included in those samples.

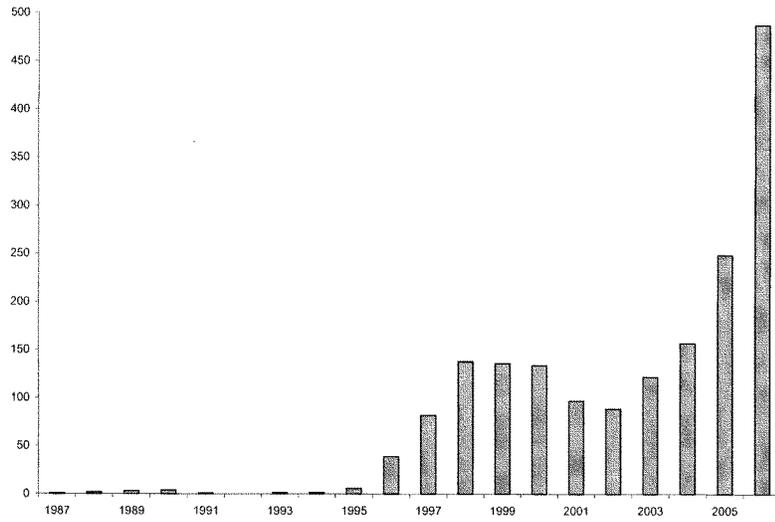
Figure 2: Default Paths of Different Mortgage Cohorts

(60+ day delinquencies, in percent of balance)



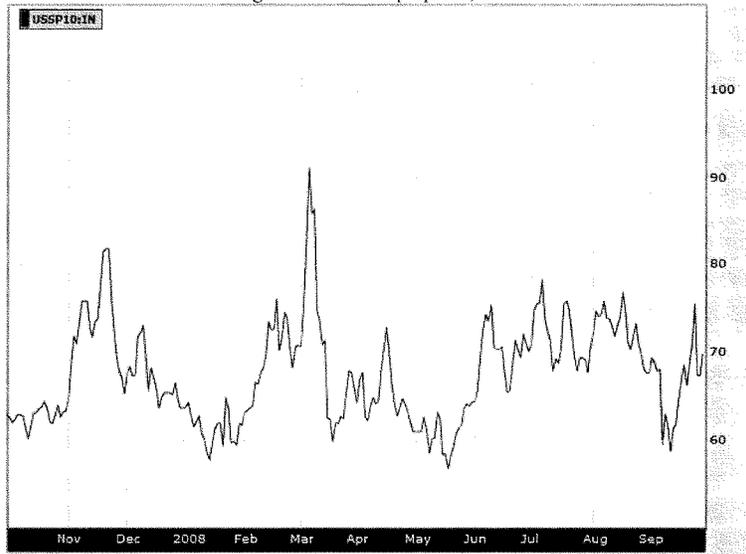
Source: IMF Global Financial Stability Report, April 2008, p. 6.

Figure 3: Annual Cash CDO Issuance



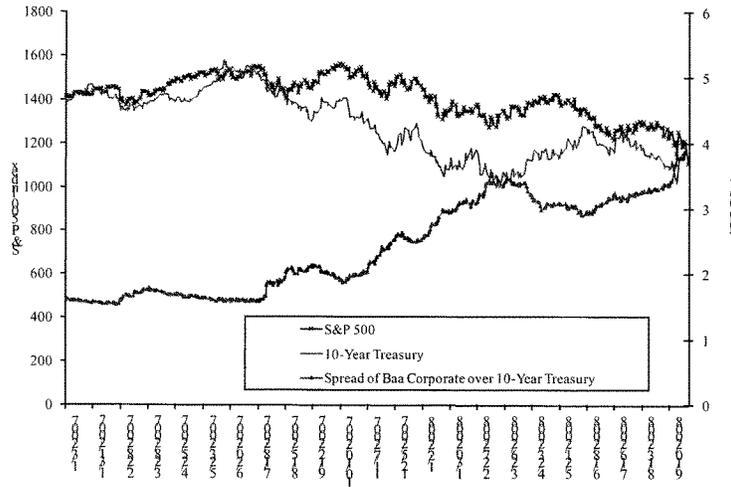
Sources: Mason and Rosner (2007), derived from Lucas, Goodman and Fabozzi (2006).

Figure 4: CDS Swap Spread, 10-Yr



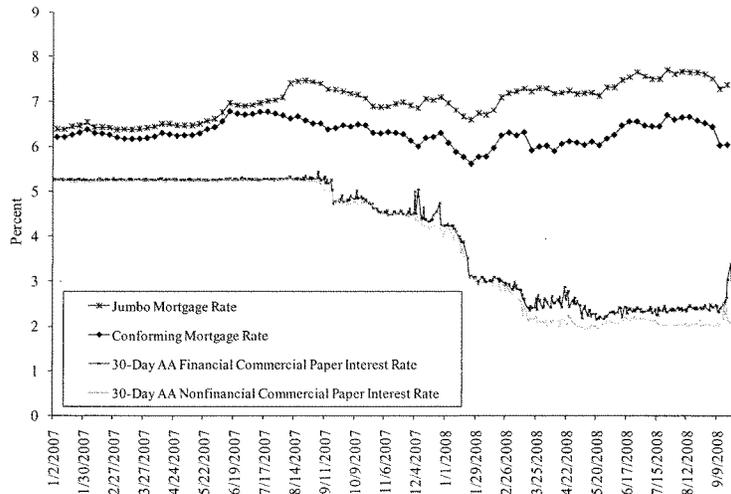
Source: Bloomberg.

Figure 5: S&P 500 vs. 10-Year Treasury Yields vs. Spread Between Moody's Seasoned Baa Corporate Bonds and 10-Year Treasury Yields



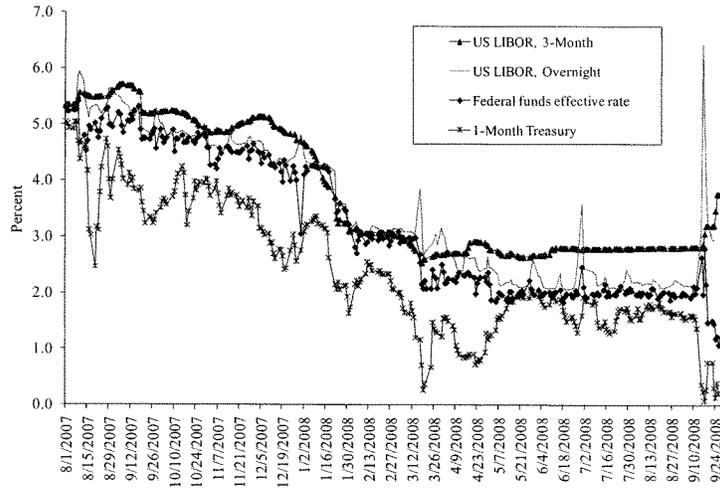
Sources: Yahoo! Finance (<http://finance.yahoo.com>); Federal Reserve Statistical Release H.15.

Figure 6: Commercial Paper Rates, LIBOR, and Mortgage Rates



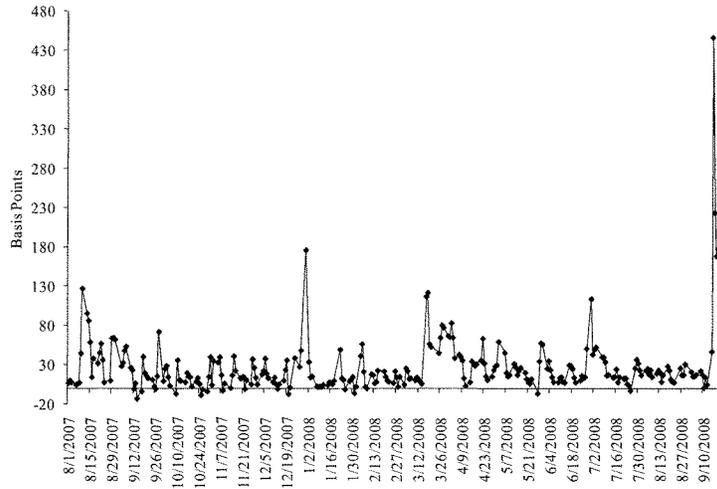
Sources: Federal Reserve (<http://www.federalreserve.gov/DataDownload/Choose.aspx?rel=CP>); HSH Associates, [www.hsh.com](http://www.hsh.com).

Figure 7: LIBOR, Treasury Bill, and Fed Funds Rates



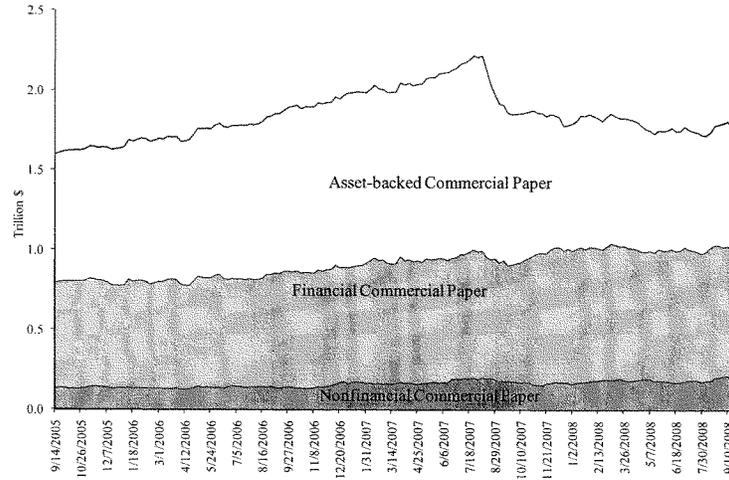
Sources: Federal Reserve Statistical Release H.15; British Bankers Association, Historic BBA LIBOR Rates (<http://www.bba.org.uk/bba/jsp/polopoly.jsp?d=141&a=627>).

Figure 8: Overnight Libor-Fed Funds Spread



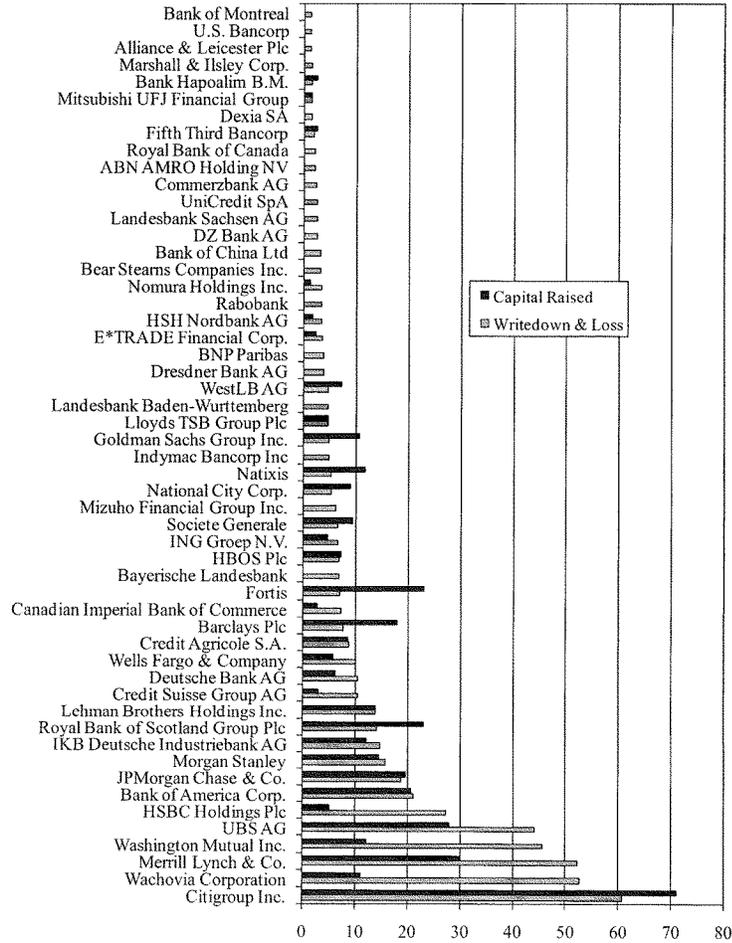
Sources: Federal Reserve Statistical Release H.15; British Bankers Association, Historic BBA LIBOR Rates (<http://www.bba.org.uk/bba/jsp/polopoly.jsp?d=141&a=627>).

Figure 9: Commercial Paper Outstanding (Weekly, Seasonally Adjusted)



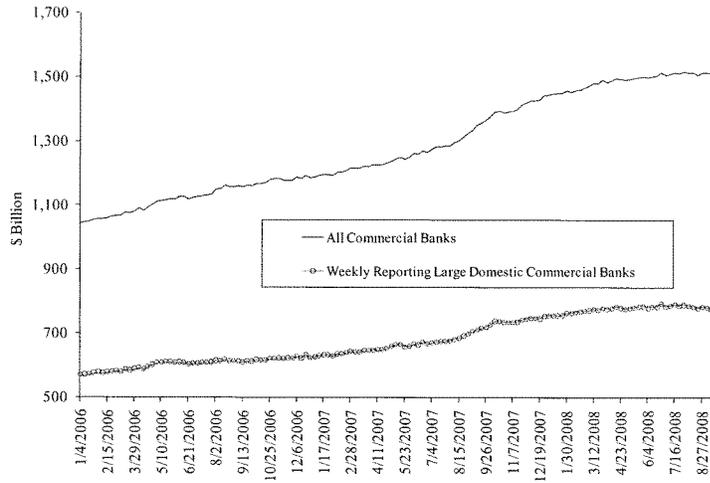
Source: Federal Reserve (<http://www.federalreserve.gov/DataDownload/Choose.aspx?rel=CP>)

Figure 10: The Distribution of Total Writedowns (\$590.8 billion) and Capital Raising (\$434.2 billion) by Institution (\$ Billions)



Source: Yalman Onaran & Dave Pierson, *Banks' Subprime-Related Losses Surge to \$591 Billion: Table*, BLOOMBERG, Sep. 29, 2008.

Figure 11: Commercial and Industrial Loans



Note: Data are seasonally adjusted.

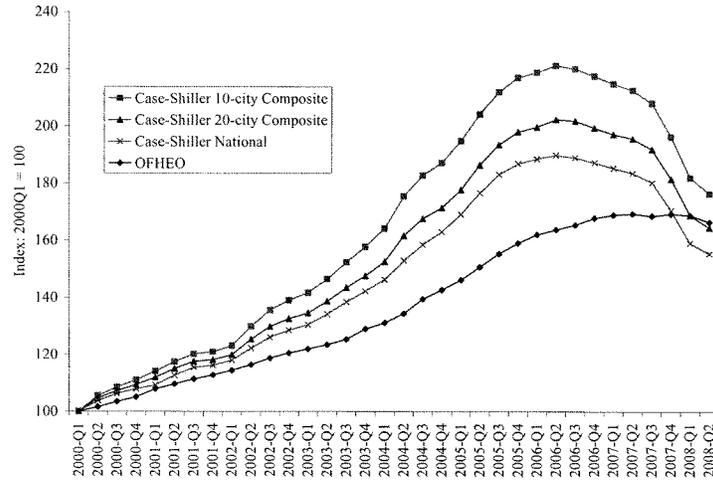
Source: Federal Reserve Statistical Release H.8 (<http://www.federalreserve.gov/releases/h8/data.htm>).

Figure 12: Cleveland Fed 10-Year TIPS-Derived Expected Inflation

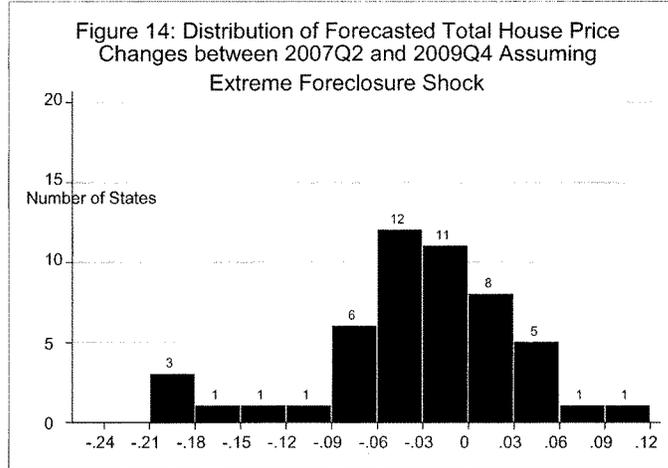


Source: Federal Reserve Bank of Cleveland, TIPS Expected Inflation Estimates (<http://www.clevelandfed.org/research/data/tips/index.cfm>).

Figure 13: U.S. Home Price Appreciation



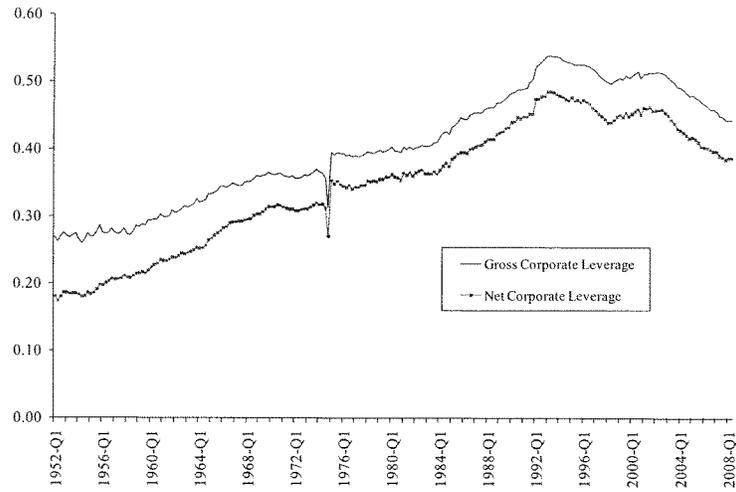
Sources: S&P/Case-Shiller Home Price Indices ([http://www2.standardandpoors.com/portal/site/sp/en/us/page.topic/indices\\_csmahp/0,0,0,0,0,0,0,0,0,0,1,1,0,0,0,0,0.html](http://www2.standardandpoors.com/portal/site/sp/en/us/page.topic/indices_csmahp/0,0,0,0,0,0,0,0,0,0,1,1,0,0,0,0,0.html)); OFHEO, House Price Index ([http://www.ofheo.gov/hpi\\_download.aspx](http://www.ofheo.gov/hpi_download.aspx)).



Note: Alaska and New Hampshire are not included because of data limitations; the District of Columbia is included.

Source: Calomiris, Longhofer and Miles (2008)

Figure 15: Corporate Leverage



*Note:* Gross corporate leverage is defined as liabilities divided by assets. Net corporate leverage is defined as liabilities, less cash, divided by assets. Cash is defined as total financial assets, less trade receivables, consumer credit, and miscellaneous assets.

*Sources:* Federal Reserve Statistical Release Z.1, Table B.102  
(<http://www.federalreserve.gov/releases/z1/Current/data.htm>)

Mr. ISSA. Thank you.

Mr. CALOMIRIS. Now I will read the replacement text.

Tables one and two show that, for each category of mortgages with subprime characteristics, most of the portfolio of loans with those characteristics were acquired from 2005 to 2007. For example, 83.8 percent of Fannie's and 90 percent of Freddie's interest-only loans as of September 2008 were acquired from 2005 to 2007. And 57.5 percent of Fannie's and 61 percent of Freddie's loans with FICO scores of less than 620 as of September 2008 were acquired from 2005 to 2007.

That completes the correction, Mr. Chairman.

None of the rest of the article requires any correction. This apparently—I had not seen the final edits on this article. Apparently, someone was confused and made some word changes that didn't make sense. I apologize for that. I also have to apologize to Mr. Garrett because as I was listening to his questions, I think—earlier, I think he actually was relying on that exact paragraph. And so my apologies to the committee for that mistake.

Given the time constraint of my oral testimony, I will summarize my written testimony by posing and answering a short list of questions: Did Fannie and Freddie play an important role in the subprime crisis? Yes. As Ed Pinto has shown, they ended up holding about 1.6 trillion or roughly half of the total non-FHA exposure on subprime losses. And through their role as standard setters in the industry, they played a leading role in relaxing underwriting standards and promoting no-docs lending.

Was their involvement in subprime simply bad luck, or did it reflect purposeful willingness to undertake risks that they recognized as dangerous and that they recognized were arguably not in the interest of subprime borrowers? Yes. They were experienced in this area. They knew the dangers of no-docs lending, and they did it anyway. Their risk manager saw the losses coming. The risk managers also saw the potential human costs of no-docs lending coming and warned senior management about it in advance.

Was the GSE's willingness to undertake these uniquely large risk exposures through relaxed underwriting standards on subprime loans related to their GSE status and their affordable housing mandate? Yes. The GSE charters and the political deal between the GSEs and the government, which was understood in the marketplace, was that there was a clear quid pro quo connecting the implicit government guarantee of GSE's debts and other favorable treatment of GSEs with the GSE's willingness to expand their funding of affordable housing, and subprime with Alt-A was the means they chose to do it.

And, as the internal e-mails of Freddie Mac clearly show, although management recognized the dangers of subprime losses because of the crucial need to preserve government support, at least in their minds, affordable housing goals, "tipped the balance," in 2004 in deciding to relax underwriting standards.

Would the subprime crisis have been different if the GSEs had not decided to enter subprime and Alt-A lending so aggressively in 2004? Yes. The GSEs were the dominant players in the mortgage market and also played crucial roles as standard setters. They recognized their, "market-making," role, and knew that, in the past,

their decision to discontinue no-docs lending had led to the disappearance of the product in the market.

Furthermore, the timing of entry by the GSEs was important. They came into the subprime and Alt-A market as it was ramping up in 2004, and their entry was associated with the rapid escalation of lending in 2004 and 2005. Lending nearly tripled. Subprime lending nearly tripled in Alt-A from 2003 to 2005.

Finally, unlike some other market participants, they continued to buy long after clear signs of trouble had emerged in mid-2006 in the housing market, which meant that their market-making role grew over time, particularly so in late 2006 and 2007, when origination volumes remained very high despite the impending problems that were already visible in the housing market.

I conclude that, counterfactually, the crisis would have been less than half as large as the actual crisis if the GSEs had stuck to their traditional roles as prime lenders. I would also note that the reason people like me didn't complain about this in 2005 and 2006 was that they had adopted accounting practices that masked these by the way they defined subprime and Alt-A lending.

Finally, my last comment is, it is worthwhile to promote home ownership in the United States. This should be done, in my view, not through the GSEs. Their assets, their charters should be fully and credibly privatized. It should be done by the government on budget, in a transparent manner, befitting our democracy, and through direct subsidies, like down payment assistance, rather than in a way that encourages borrowers and lenders to increase leverage imprudently and therefore, promote unwarranted foreclosure risk.

Thank you, Mr. Chairman.

Mr. TOWNS. Thank you very much, Dr. Calomiris.

Mr. Stanton.

#### **STATEMENT OF THOMAS STANTON**

Mr. STANTON. Mr. Chairman, I would ask that my written statement and two attachments be included for the record.

Mr. TOWNS. Without objection.

Mr. STANTON. Mr. Chairman, Ranking Member Issa, members of the distinguished committee, in 1991, I wrote a book called, "A State of Risk: Will Government-Sponsored Enterprises Be the Next Financial Crisis?" I then worked with a small group of reformers, including Congressman Jake Pickle of the House Ways and Means Committee, Democrat of Texas, and Representative Bill Gradison of Ohio, Republican. We tried to improve Federal regulation of Fannie Mae and Freddie Mac and their safety and soundness, but because of very strong lobbying by those two organizations, the regulator was created without adequate authority.

In my testimony today, I would like to make three basic points. One, while Fannie Mae and Freddie Mac did not cause the mortgage credit debacle, they did engage in risky practices that turned them into sources of vulnerability, rather than strength, for the mortgage market and the larger economy.

Two, as it becomes clearer that Fannie Mae and Freddie Mac in fact are insolvent, it would help to place them into receivership and thereby remove private shareholders from the two failed compa-

nies. Once shareholders are clearly gone, the next administration can use the two companies to provide much needed support and reform, including consumer protections for the home mortgage market. If the companies remain in conservatorship rather than receivership, then government will face conflicting objectives about the role of the two companies in serving urgent public purposes versus serving financial interests of the companies and their shareholders.

Three, Fannie Mae and Freddie Mac should not be restored to their previous status as privately owned organizations that operate with pervasive Federal backing. The two companies and their powerful constituencies have consistently fought for higher leverage and against effective accountability. Even if a strong regulator were created initially, and somebody mentioned the concept of public utility regulation, the political power of the two companies can be expected to weaken accountability over time and restore the companies to their dominant market positions, high leverage and financial vulnerability.

Let me briefly talk about the first point and leave the rest for discussion.

Fannie Mae and Freddie Mac committed serious misjudgments that helped to bring about their insolvency. The most serious of these misjudgments involved the company's resistance to accepting more effective supervision and capital standards. For years, the two companies exerted their influence to fend off capital standards that would have reduced their excessive leverage and absorbed potential losses. The two companies compounded the problem by taking on excessive risk just at the point that housing prices were peaking. Among other losing assets, the two companies held over \$2 billion of private-label mortgage related securities backed by Alt-A or subprime mortgages in 2007.

In making these mistakes, Fannie Mae and Freddie Mac revealed the inherent vulnerabilities of government-sponsored enterprise [GSE], as an organizational model. First, the GSE can live or die according to its charter and other laws that determine the condition under which it operates. That means that GSEs select their chief officers in good part based on ability to manage political risk, as we saw in the first panel today, rather than on their ability to manage two of the largest financial institutions in the world.

Second, GSEs combine private ownership with government backing in a way that creates a virtually unstoppable political force. Because of their government backing and low capital requirements, Fannie Mae and Freddie Mac gained immense market power. They doubled in size every 5 years or so until this year the two companies funded over \$5 trillion of mortgages, about 40 percent of the mortgage market. Their market power gave them political power, which is seen in the fact that the new regulator created by the Housing and Economic Recovery Act of 2008, enacted late July just before the companies collapsed, still failed to give the new regulator the full mandate, authority, or discretion over safety and soundness and systemic risk that is available to the Federal bank regulators. And if there is a question on this, I would be delighted to submit documentation to the record.

In short, the mix of private incentives and government backing created a dynamic that led not only to the hubris that brought

about the meltdown of internal controls of both Fannie Mae and Freddie Mac several years ago, but also their insolvency in 2008.

But, Fannie Mae and Freddie Mac by themselves did not cause the housing bubble or the proliferation of subprime and other mortgages that borrowers could not afford to repay. In analyzing the two companies, I discovered a phenomenon can be called Stanton's law: Risk will migrate to the place where government is least equipped to deal with it. So, the capital markets arbitrated across regulatory requirements and ultimately sent trillions of dollars of mortgages to Fannie Mae and Freddie Mac where capital requirements were low and Federal supervision was weak. But, the capital markets also found other places where government could not manage the risk and also sent huge volumes of subprime, Alt-A, interest-only, and other toxic mortgages to structured investment vehicles of commercial banks, private securitization conduits, and collateralized debt obligations that were virtually unsupervised.

Mr. Chairman, I would like to end on a note about the human costs of Fannie Mae and Freddie Mac. Their actions led to hundreds of thousands of American families, and possibly more than a million, facing delinquency and default on their mortgages and potential foreclosure of their homes.

They funded the overbuilding of hundreds of thousands of homes that will be vacant or boarded up because no one wants to live there. The cost to the American taxpayer will run potentially to hundreds of billions of dollars. All of this harm occurred on the watch of the four men on the first panel. It could have been avoided with prudent lending, prudent capital, and prudent management.

So, thank you again for holding this important hearing on two financial institutions that used their high leverage and insatiable appetites to grow to an unmanageable size before they failed. I would be pleased to respond to any questions.

[The prepared statement of Mr. Stanton follows:]

**Fannie Mae and Freddie Mac:  
What Happened and Where do We Go From Here?**

Presented to the  
Committee on Oversight and Government Reform  
U.S. House of Representatives

December 9, 2008

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Chairman Waxman, Ranking Member Davis, and members of this distinguished committee:

Thank you for the opportunity to testify at this hearing today on the insolvency of Fannie Mae and Freddie Mac, their takeover by the federal government, and their role in the ongoing financial crisis. I am Thomas H. Stanton, a Fellow of the Center for the Study of American Government at Johns Hopkins University. I am also a Fellow of the National Academy of Public Administration and consult to government agencies and other entities to improve the design of organizations and programs.

In 1991 I wrote a book called *A State of Risk: Will Government-Sponsored Enterprises be the Next Financial Crisis?* and worked with a small band of reformers led by Representatives J.J. Pickle (D-TX) and Bill Gradison (R-OH) of the House Ways and Means Committee to try to improve federal supervision of safety and soundness of Fannie Mae and Freddie Mac. These efforts led to creation of a new regulator, the Office of Federal Housing Enterprises Oversight (OFHEO), in 1992. Strenuous lobbying by Fannie Mae and Freddie Mac assured that the new regulator lacked the authority needed to do its job.

In my view, the 1992 legislation provided the last clear chance to create a system of accountability that might have helped to protect the two companies from the high leverage and lax practices that allowed them to expand to unmanageable size and then brought them down this year. Since 1992 and until enactment of the Housing and Economic Recovery Act of 2008 (HERA) the two companies, which gained strength as they grew, were able to block even modest pieces of regulatory reform legislation.<sup>1</sup>

In my testimony today I would like to make several basic points:

1. While Fannie Mae and Freddie Mac did not cause the mortgage credit debacle, they did engage in risky practices that turned them into sources of vulnerability rather than strength for the mortgage market and larger economy.
2. As it becomes clear that Fannie Mae and Freddie Mac in fact are insolvent, it would be helpful to place them into receivership and thereby remove private shareholders from the two failed companies. Once the shareholders are clearly gone, the next Administration can use the two companies to provide much needed support and reform of the home

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<sup>1</sup> Major bills in these years were H.R. 3703, Housing Finance Regulatory Improvement Act, 2000; H.R. 1409, Secondary Mortgage Market Enterprises Regulatory Improvement Act, 2001; H.R. 2575, Secondary Mortgage Market Enterprises Regulatory Improvement Act of 2003; S. 1656, Federal Housing Enterprise Oversight Modernization Act of 2003; H.R. 2022, Leave No Securities Behind Act, 2003; H.R. 2803, Housing Finance Regulatory Restructuring Act of 2003; S. 190, Federal Housing Enterprise Regulatory Reform Act of 2005; Federal Housing Finance Reform Act of 2005 (This bill passed the House on October 26, 2005); H.R. 1427, Federal Housing Finance Reform Act of 2007 (This bill passed the House on May 22, 2007); S. 1100, Federal Housing Enterprise Regulatory Reform Act of 2007; and H.R. 3221, American Housing Rescue and Foreclosure Prevention Act of 2008, which was signed into law as part of the Housing And Economic Recovery Act of 2008 (HERA) after undergoing numerous iterations in House and Senate.

mortgage market. If the companies remain in conservatorship rather than receivership, then government will face conflicting objectives about the role of the two companies in serving urgent public purposes versus serving financial interests of the companies and their shareholders.

3. Fannie Mae and Freddie Mac should not be restored to their previous status as privately owned organizations that operate with pervasive federal backing. The two companies and their powerful constituencies have consistently fought for high leverage and against an effective accountability structure. Even if a regulator were created with the appropriate mandate, discretion, and authority, the political power of the two companies can be expected to weaken that accountability structure over time and thereby restore the companies to their dominant market positions, high leverage, and financial vulnerability.

#### **I. Fannie Mae and Freddie Mac Engaged in Risky Practices that Helped Lead to Their Failure and Greatly Increase Likely Taxpayer Costs**

Fannie Mae and Freddie Mac committed serious misjudgments that helped to bring about their insolvency. The most serious misjudgments involved the companies' resistance to accepting more effective supervision and capital standards. For years, starting with their successful efforts to weaken the legislation that established OFHEO,<sup>2</sup> the two companies managed to fend off capital standards that would have reduced their excessive leverage and provided a cushion to absorb potential losses. In 2007 Freddie Mac concluded a stock buyback program that further weakened the company's ability to withstand a financial shock. As late as this March Freddie Mac defied calls to increase its capital cushion.<sup>3</sup> As late as this summer Fannie Mae continued to object to giving a federal regulator the discretion to set higher capital standards.<sup>4</sup>

The companies fought for high leverage because this benefited their shareholders, at least until the companies failed. Freddie Mac reported returns on equity of over 20 percent for most years since it became an investor-owned company in 1989, reaching highs of 47.2 percent in 2002 and 39.0 percent in 2000. Fannie Mae reported earnings of almost as much, reaching a high of 39.8 percent in 2001. The two companies fought higher capital requirements because more capital would have diluted those returns to shareholders.

<sup>2</sup> Among the many reports documenting the successful efforts of Fannie Mae and Freddie Mac at weakening the regulator and their capital standards, see, e.g., Carol Matlack, *Getting Their Way*, *National Journal*, October 27, 1990, pp. 2584-2588; Jill Zuckman, "Bills To Increase GSE Oversight Move Ahead in House, Senate," *CQ Weekly*, August 3, 1991; Stephen Labaton, "Power of the Mortgage Twins: Fannie and Freddie Guard Autonomy," *New York Times*, November 12, 1991, p. D1; Kenneth H. Bacon, "Privileged Position: Fannie Mae Expected to Escape Attempt at Tighter Regulation," *Wall Street Journal*, June 19, 1992, p. A1.

<sup>3</sup> David S. Hilzenrath, "Chief Says Freddie Won't Raise Capital; Mortgage Financier Cites Responsibility to Shareholders, Won't Increase Loan Capacity," *Washington Post*, March 13, 2008, p. D4.

<sup>4</sup> Steven Sloan, "Fannie CEO Details Issues with GSE Bill," *American Banker*, June 5, 2008.

The two companies compounded the problem of their self-inflicted structural vulnerabilities with a series of misjudgments that involved taking on excessive risk just at the point that housing prices were peaking. According to press reports, the chief executives of both Fannie Mae and Freddie Mac disregarded warnings from their risk officers and sought to catch up with the market by greatly increasing their purchases of risky loans.<sup>5</sup>

Freddie Mac reported in its 2007 Annual Report that,

“The proportion of higher risk mortgage loans that were originated in the market during the last four years increased significantly. We have increased our securitization volume of non-traditional mortgage products, such as interest-only loans and loans originated with less documentation in the last two years in response to the prevalence of these products within the origination market. Total non-traditional mortgage products, including those designated as Alt-A and interest-only loans, made up approximately 30% and 24% of our single-family mortgage purchase volume in the years ended December 31, 2007 and 2006, respectively.”<sup>6</sup>

Fannie Mae’s 2007 Annual Report states:

“We are experiencing high serious delinquency rates and credit losses across our conventional single-family mortgage credit book of business, especially for loans to borrowers with low credit scores and loans with high loan-to-value (“LTV”) ratios. In addition, in 2007 we experienced particularly rapid increases in serious delinquency rates and credit losses in some higher risk loan categories, such as Alt-A loans, adjustable-rate loans, interest-only loans, negative amortization loans, loans made for the purchase of condominiums and loans with second liens. Many of these higher risk loans were originated in 2006 and the first half of 2007.”<sup>7</sup>

Fannie Mae reported that purchases of interest-only and negative amortizing ARMs amounted to 7% of its business volume in 2007 and 12% in each of 2006 and 2005. Moreover, Alt-A mortgage loans “represented approximately 16% of our single-family business volume in 2007, compared with approximately 22% and 16% in 2006 and 2005, respectively.”<sup>8</sup> Both companies also invested in highly rated private-label mortgage-related securities that were backed by Alt-A

<sup>5</sup> David S. Hilzenrath, “Fannie’s Perilous Pursuit of Subprime Loans: As It Tried to Increase Its Business, Company Gave Risks Short Shrift, Documents Show,” *Washington Post*, August 19, 2008, p. D01; Charles Duhigg, “At Freddie Mac, Chief Discarded Warning Signs,” *New York Times*, August 5, 2008; Charles Duhigg, “The Reckoning: Pressured To Take More Risk, Fannie Reached Tipping Point,” *New York Times*, October 5, 2008.

<sup>6</sup> Freddie Mac, *Annual Report*, 2007, p. 13.

<sup>7</sup> Fannie Mae, *Annual Report*, 2007, p. 24.

<sup>8</sup> *Ibid.*, pp. 128-9.

or subprime mortgage loans, amounting to total holdings by the two companies of over \$ 200 billion in 2007.<sup>9</sup>

In making these mistakes, Fannie Mae and Freddie Mac revealed the inherent vulnerabilities of the government-sponsored enterprise (GSE) as an organizational model.<sup>10</sup> First, the GSE lives or dies according to its charter and other laws that determine the conditions under which it operates. That means that GSEs select their chief officers in good part based on ability to manage political risk rather than on their ability to manage two of the largest financial institutions in the world.

Second, the GSE combines private ownership with government backing in a way that creates a virtually unstoppable political force. Because of their government backing and low capital requirements in their charters, a risky form of subsidy as we have found out, Fannie Mae and Freddie Mac gained immense market power. They doubled in size every five years or so until this year the two companies funded over \$ 5 trillion of mortgages, about 40 percent of the mortgage market.

Their market power gave them political power. Whenever someone would urge regulatory reform, such as higher capital standards to reduce the GSEs' dangerous leverage, huge numbers of constituents could be expected to flood Capitol Hill.<sup>11</sup> That political power in turn entrenched the GSEs' market power.

The political power of the two companies is seen in the fact that the regulatory reforms of the Housing and Economic Recovery Act of 2008 (HERA) still fail to give the new regulator, the Federal Housing Finance Agency, the full mandate, authority, or discretion over safety and soundness and systemic risk that is available to the federal bank regulators.

For example, the bill requires the new regulator to conduct an estimated 25-30 rulemakings to implement key provisions of the act, including any increases in capital requirements, in addition to trying to establish itself and increase capacity to oversee the two huge and troubled GSEs. Given their market power, the GSEs have tended to dominate such rulemakings by mobilizing their constituents. HERA seeks to offset this somewhat by requiring the new regulator to consult with and take account of the views of the Federal Reserve Board Chairman on capital, prudential

<sup>9</sup> Fannie Mae, *Annual Report*, 2007, p. 93; Freddie Mac, *Annual Report*, 2007, p. 94.

<sup>10</sup> A government-sponsored enterprise is a government chartered, privately owned and privately controlled institution that, while lacking an express government guarantee, benefits from the perception that the government stands behind its financial obligations. See, Ronald C. Moe and Thomas H. Stanton, "Government Sponsored Enterprises as Federal Instrumentalities: Reconciling Private Management with Public Accountability," *Public Administration Review*, July/August 1989. This definition is consistent with the definition Congress enacted in amendments to the Congressional Budget Act of 1974, codified at 2 U.S.C. Section 622 (8).

<sup>11</sup> Observers have long noted this pattern. "Builders, real estate brokers and bankers across the country rely so heavily on Fannie Mae for mortgage funds that they live in fear of offending the firm and routinely defend it in Washington." David A. Vise, "The Money Machine: How Fannie Mae Wields Power," *Washington Post*, January 16, 1995, p. A14.

management and operations standards, and other matters relating to safety and soundness, but sunsets this provision on December 31, 2009.

Third, the pressure of meeting quarterly expectations of investors meant that the two companies sacrificed the long-term well being of the mortgage market for their own short-term goals of maximizing returns on equity.

In short, the mix of private incentives and government backing created a dynamic that led not only to the hubris that brought about the meltdown of internal controls at both Fannie Mae and Freddie Mac a few years ago,<sup>12</sup> but also to their insolvency in 2008.

That said, it is useful to note that Fannie Mae and Freddie Mac did not cause the housing bubble or the proliferation of subprime and other mortgages that borrowers could not afford to repay. In analyzing the dynamics of Fannie Mae and Freddie Mac I discovered a phenomenon that can be called Stanton's Law: *risk will migrate to the place where government is least equipped to deal with it.*<sup>13</sup> Thus, the capital markets arbitrated across regulatory requirements and ultimately sent literally trillions of dollars of mortgages to Fannie Mae and Freddie Mac, where capital requirements were low and federal supervision was weak.

However, the capital markets also found other places where government could not manage the risk, including structured investment vehicles of commercial banks, private securitization conduits, and collateralized debt obligations that were virtually unregulated except by the vagaries of the rating agencies and exuberance of the market during the housing bubble. Huge volumes of subprime, alt-A, interest-only, and other toxic mortgages went to these parts of the market. As the bubble reached its limits and began to deflate the GSEs tried to catch up and regain the market share that they had lost to the new competition.

One other issue deserves mention in connection with the insolvency of Fannie Mae and Freddie Mac. That is the suggestion that is sometimes made that Fannie Mae and Freddie Mac failed because of the affordable housing goals that were imposed on them by the Department of Housing and Urban Development (HUD). In fact, the affordable housing goals are not designed to cause losses to the companies. It appears that the GSEs became insolvent because of their own misjudgments and especially their eagerness to jump into the market for "nontraditional" mortgages, rather than because of anything that HUD did.

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<sup>12</sup> Thomas H. Stanton, "The Life Cycle of the Government-Sponsored Enterprise: Lessons for Design and Accountability," *Public Administration Review*, September/October 2007

<sup>13</sup> This dynamic was first presented in my testimony before the Senate Banking Committee in a hearing on *The Safety and Soundness of Government Sponsored Enterprises*, October 31, 1989, p. 41, pointing out that increases in stringency of capital requirements and government supervision for thrift institutions after the savings and loan debacle would drive many billions of dollars of mortgages from the portfolios of savings and loan associations to Fannie Mae and Freddie Mac because their capital standards and government oversight were much weaker.

Understanding the legal context helps to show the limited nature of HUD's authority to impose affordable housing goals. The charter acts of both Fannie Mae and Freddie Mac prescribe that the companies shall serve four purposes. The third of those purposes is to:

“...provide ongoing assistance to the secondary market for residential mortgages (*including activities relating to mortgages on housing for low- and moderate-income families involving a reasonable economic return that may be less than the return earned on other activities*) by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for residential mortgage financing;...”<sup>14</sup>

The part of the 1992 Act that authorizes HUD to impose housing goals on the two companies states that implementation of those goals shall be consistent with these sections of the two companies' charter acts.<sup>15</sup> In other words, the law prevents HUD from imposing affordable housing goals that would be unprofitable for the two companies, even though the profits may be less than the companies would earn on other mortgages. If HUD sought to impose noneconomic goals upon the two companies, they could simply have refused to comply, secure in the knowledge that HUD's authority would not stand up in litigation. In fact, in 2007 Freddie Mac did decline to comply with some aspects of the housing goals.

Thus, the problem of the purchase of risky loans to nontraditional borrowers is more subtle than a legal mandate. Part of the purchase of nontraditional loans likely involves a desire of Fannie Mae and Freddie Mac to curry favor with policymakers to achieve other political objectives. Another part, such as the purchase by the two companies of over \$ 200 billion of private label securities backed by subprime and Alt-A mortgages, did not involve service to the cause of affordable housing as much as a desire to gain yield on the basis of imprudent investments. Although these securities were given high ratings by the rating agencies, one would expect a company that funded trillions of dollars of mortgages to undertake its own due diligence and assessment of credit quality of those assets.

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<sup>14</sup> (Emphasis added). Codified at 12 U.S.C. Sec. 1716(3) [Section 301(3) of the Fannie Mae Charter Act] and 12 U.S.C. Note to Sec. 1451 [Section 301(b)(3) of the Freddie Mac Charter Act].

<sup>15</sup> Subsection 1331(a) states that, “The Secretary shall implement this subpart in a manner consistent with section 301(3) of the Federal National Mortgage Association Act and section 301(b)(3) of the Federal Home Loan Mortgage Corporation Act.” Codified at 12 U.S.C. Sec. 4561(a). HERA replaced this provision with a comparable provision in Section 1334(b) of the 1992 Act, as amended.

**II. The Government Should Place Fannie Mae and Freddie Mac into Receivership and Allow Them to Function Essentially as Wholly Owned Government Corporations to Support the Mortgage Market.**

The government placed Fannie Mae and Freddie Mac into conservatorship rather than receivership. Unlike receivership, the voluntary acceptance of conservatorship by Fannie Mae or Freddie Mac was not subject to legal challenge, which could have further roiled the financial markets.

Placing a failed financial institution directly into conservatorship violates the customary practice of the federal bank and thrift regulators who first place an institution into receivership, then separate the assets into a “good-bank/bad-bank” structure and send the good bank, cleaned out of troubled assets, into conservatorship or bridge-bank status. Placing an institution into receivership removes the shareholders of the defunct institution. Thus, when IndyMac failed, it was placed into receivership. The receiver then transferred the deposits and most of the assets to a newly chartered thrift, IndyMac Federal Bank. The FDIC then placed itself as conservator of the new IndyMac Federal Bank.

It now appears, as past losses materialize and are recognized by Fannie Mae and Freddie Mac, that both institutions have lost their entire net worth. Freddie Mac has already reported a negative net worth of \$ 13.8 billion and requested government funds to make up the shortfall. It is time to place both companies into receivership.

Placing both companies into receivership will help to remove an inherent conflict in the government’s position. Technically, conservatorship means that the government is working to restore the companies to financial health. Thus far the government has preserved the shareholders in the two companies and allowed their stock to trade freely. This is inconsistent in key aspects with the government’s need to use the two companies to support the mortgage market. Until shareholders are removed from the equation, officers and directors of the two companies will face conflict as to their fiduciary responsibilities. Do they price mortgage purchases low to support the market or do they price higher to replenish the companies’ shareholder value? As the companies themselves point out in their most recent quarterly filings with the SEC, they face conflicts among multiple objectives that “create conflicts in strategic and day-to-day decision making that will likely lead to less than optimal outcomes for one or more, or possibly all, of these objectives.”<sup>16</sup>

With shareholders still in the equation government must try to cobble unwieldy forms of support such as recent reports of plans to use the Federal Reserve to buy mortgage-backed securities of the two companies in return for lowering mortgage rates.

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<sup>16</sup> Fannie Mae Form 10Q filing for the quarterly period ended September 30, 2008, p. 7; Freddie Mac Form 10Q filing for the quarterly period ended September 30, 2008, p.5.

If the government placed both companies into receivership, then we could use Fannie Mae and Freddie Mac as agents of reform for the mortgage market. The benefits could be enormous:

- They could fund mortgages in a manner targeted to meet pressing public purposes as the new Administration defines them.
- They could begin to provide essential consumer protections for borrowers, such as Alex Pollock's ingenious one-page mortgage disclosure form, borrower counseling, and increased pre-foreclosure loss mitigation services.<sup>17</sup>
- They could begin to devise and impose requirements that primary lenders and other participants in the mortgage process have appropriate financial strength and capability and accountability and engage in appropriate risk-sharing before they are allowed to do business with the two companies. (Implementation of some of these requirements may need to be deferred until when the housing and mortgage markets return to some semblance of stability).
- They could help to adapt their Automated Underwriting Systems, and perhaps other systems and capabilities, for use by other federal agencies, starting with the FHA and perhaps Ginnie Mae and the direct loan program for homeowners (part of the disaster loan program) of the Small Business Administration.

In short, the government could turn the insolvency of Fannie Mae and Freddie Mac into an opportunity to begin to upgrade the quality of federal support for delivery of credit by federal agencies. The benefits for the mortgage market could be considerable as the companies, once they are charged with serving public purposes rather than a mix of public and private objectives, provide support to the housing market and fashion important consumer protections and rules of conduct for the various participants in that market.

The Congress also would be well advised to place a sunset provision of perhaps five years into each company charter. As the sunset approaches, and the mortgage debacle hopefully is behind us, policymakers can decide whether further support for the mortgage market is required, and the organizational form that is most suitable.

### **III. Fannie Mae and Freddie Mac Should not be Restored to Their Previous Status as Privately Owned Organizations that Operate with Extensive Federal Backing.**

The experience of Fannie Mae and Freddie Mac as privately owned institutions with extensive government backing shows the shortcomings of the government-sponsored enterprise as an organizational model. However sound the accountability structure may be when the organization begins, the incentive to satisfy private owners will lead a GSE to try to weaken safety and soundness oversight and lower capital standards. Both Fannie Mae and Freddie Mac arguably had stronger accountability structures when they were chartered as GSEs than when they were

<sup>17</sup> Alex Pollock's one page mortgage form can be found at <http://www.aei.org/scholars/scholarID.88/scholar.asp>

supervised by OFHEO. Between 1968 and 1992, when OFHEO was established, both companies had successfully removed government controls that they considered unacceptable.

It is particularly instructive to note that Leland Brendsel, then CEO of Freddie Mac, testified before the House Ways and Means Committee in 1989 that he would not allow Freddie Mac to build a large portfolio because of the risks involved. Rather, he said, Freddie Mac could serve the housing market just as well through guaranteeing mortgage-backed securities.<sup>18</sup> When Mr. Brendsel made his commitment to the House Ways and Means Committee, Freddie Mac was governed by a board of directors consisting of three federal officials. Shortly thereafter the law was changed to create a shareholder-controlled board of directors. Mr. Brendsel promptly abandoned his objections to a large portfolio. Freddie Mac's portfolio in recent years has amounted to almost a trillion dollars of mortgages and investment assets.

In short, the drive to satisfy shareholders is intense and easily can overwhelm considerations of what might be best for the financial system or the mortgage market or American taxpayers. The fundamental flaws of the GSE structure are compounded by other features of Fannie Mae, Freddie Mac, and their statutory framework:

1. They are chartered by the Congress rather than by actions of a regulator. This can lead, as in the case of Fannie Mae and Freddie Mac, to immense concentrations of risk in a limited number of institutions that benefit from a favorable legislative charter.
2. They are regulated by a federal agency that has only two or three GSEs to regulate. This makes the process of regulatory capture easier than in the case of federal bank regulators that supervise a variety of institutions, large and small, that may have divergent interests.
3. They benefit from a tailored accountability framework, including preferential capital standards. This contrasts with reform of the savings and loan industry after the S&L debacle, which brought thrifts directly into the statutory framework of banks and the capital standards and supervisory requirements that confer authority on all federal bank regulators.
4. They traditionally have been subject only to the authority of specialized committees or subcommittees that authorize their charters and not to oversight by the taxpayer-conscious House Ways and Means and Senate Finance committees, at least concurrently. Given the public debt implications of government backing for the GSEs, both of these committees, which have jurisdiction over matters relating to the public debt, ought to assert jurisdiction over all GSEs and their issuance of debt obligations and mortgage-backed securities.

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<sup>18</sup> *Government-Sponsored Enterprises*, Hearing before the Subcommittee on Oversight, Committee on Ways and Means, House of Representatives, Serial 101-65, September 28, 1989 (Testimony of Leland Brendsel, CEO of Freddie Mac), at p. 55

There are other important considerations as well. The GSEs have now squandered a policy tool that government had used for decades: the perception of an implicit rather than explicit federal guarantee of their debt obligations. The end of the implicit guarantee means that government would need to provide some form of express guarantee if the GSEs were to be restored. One would hope that in such a case government would provide only a limited guarantee of mortgage-backed securities, rather than debt obligations, in return for fees that would be placed into an insurance fund similar to the BIF and SAIF funds of the FDIC. Of course at that point, why not leave the task of mortgage finance to banks and thrift institutions by allowing them to securitize mortgages in a standardized manner?

Finally, as was true of other institutions chartered by the Congress, the enabling legislation for any surviving GSEs should contain a 10-year sunset provision so that policymakers can periodically revisit questions of their public benefits and public costs in the context of changing markets and public priorities.

#### **IV. Conclusion**

In conclusion let me again thank this committee for holding this important hearing on two financial institutions that used their high leverage and insatiable appetites to grow to an unmanageable size before they failed. I would be pleased to respond to any questions.

Mr. TOWNS. Let me thank you very, very much for your testimony.

You know, I think it would have been wise for us to allow them to go first and then allow the others to stay and to listen and then respond, because I really think, in terms of the testimony and information that they have given us, it has been very, very, very helpful.

Mr. ISSA. Mr. Chairman, I totally agree with you, and, in fact, of all the things that my hope as ranking member and your hope as chairman that I would like to do is to make that reversal whenever possible so that, whether it's administration or other government witnesses, we're able to do just that. I think you're exactly right. It would have been very helpful today.

Mr. TOWNS. Thank you very much for your comment.

Let me move right along. I would like to ask, I guess, let me start with you, Mr. Stanton, and, of course, others to respond. I would like to ask the panel about the affordable housing goal that the Department of Housing and Urban Development set for Fannie Mae and Freddie Mac. And, Mr. Stanton, in your testimony—I think it was page 5 and 6, you explained that when Congress rechartered Fannie and Freddie in 1992, we asked them to devote some of their time and resources to finding ways to help low- and moderate-income Americans buy homes. But, you said that these goals did not lead Fannie and Freddie to invest in risky mortgages. Can you explain to us your conclusion and how you arrive at that?

Mr. STANTON. Yes, sir. I would be delighted.

If you look carefully at the law—and I'm a student of the charters of the two companies and the legal frameworks surrounding them—you find that they are required to undertake activities, "relating to mortgages on housing for low- and moderate-income families involving a reasonable economic return that may be less than the return earned on other activities."

In other words, the law does not require them, they do not receive appropriations to take losses on the affordable housing loans they make. And if you follow that through to the 1992 act, and it follows through to 2008, what you see is that the Department of Housing and Urban Development is not allowed to impose goals that would cause the companies to fall below that standard.

So, in fact, when you look, two things were probably going on. One, it's a more subtle point. These are political companies. Their leaders are retained to manage political risk. So, that means they will engage in affordable housing beyond HUD in order to get favors for other parts of their charter, either to block things they don't want or to gain things they do want.

And, of course, they also had insatiable appetites. When you buy \$200 billion of Triple-A-rated mortgage securities backed by Alt-A and subprime mortgages and you don't ask your own risk analysts to run those mortgages through the filter in order to do due diligence and check on the rating agencies, you're asking for trouble. But you're not doing that to support the affordable housing market. You're doing that because you expect that there are good returns on those investments.

Mr. TOWNS. Other members of the panel agree on that?

Mr. PINTO. I have a little different take on that.

When the original goals were set subsequent to the 1992 legislation, I believe HUD set them in 1993, and they were set a little bit purposely low because they didn't quite know what was going to happen. And Fannie and Freddie sort of jumped over the hurdles very quickly; and that created a backlash that said, wait a minute, HUD, you set them too low. And HUD learned from that, and year after year, they kept ratcheting them up and ratcheting them up.

Fannie and Freddie had to keep—remember, this is a duopoly. They're competing against each other for the same loans. They're also competing with FHA for the same loans. They're all considered goal rich. Ultimately, they were competing with subprime for the same loans. They were considered goal rich, and their regulators called all of these loans goal rich.

By the early part of this decade, you had situations where at the end of the year, if they were a little bit short, a bidding war would break out. In fact, Fannie rented some loans for a while. That was a scandal that developed 5 or 6 years ago where they rented some loans and then returned them later the next year in order to meet their goals.

So, the pressures that were put on them were tremendous. But, I would point out that I believe in the 2007 Freddie Mac document, they concluded that the lowest 10 percent of their business was put on the books at a zero return on equity. That does not meet the standard that was in the charter. A zero return on equity, and that was calculated optimistically. It turns out if you were to do that calculation today, these loans were put on the books at tremendous losses.

Mr. TOWNS. Yes. Dr. Calomiris.

Mr. CALOMIRIS. I just want to add that I think that there are obviously other motivations, too, for getting involved in subprime and the e-mail correspondence that I saw from Freddie Mac indicated that. But, I think that what was interesting is that in all those e-mails, it was also reflected that affordable housing goals in this political sort of strategy that Mr. Stanton referred to were part of the mix and that one of the e-mails specifically said tip the balance when they were considering whether to get into the no docs area and Alt-A and subprime more broadly.

So, I think it's important to mention both that there are multiple influences. Let's face it. There were a lot of managers who weren't JFCs who were pursuing this, too, based on short-term profits for themselves at the expense of their stockholders. I would say that the executives of the GSEs were guilty of that as well, but that I think it's pretty clear from the e-mails that the affordable housing mandate and their, let's say, political manipulation of that was definitely part of the story.

Mr. TOWNS. Thank you.

Mr. STANTON. If I could add something, Mr. Chairman, these are two companies funding \$5 trillion in mortgages. The whole point of trying to underwrite mortgages for people that are nontraditional borrowers is to do it carefully and really work at it, so that you try to, in fact, make people eligible for mortgages. Because the normal FICO score, for example, is based on traditional borrowers, not on affordable housing borrowers. And that isn't what they did. They simply plunged in and bought huge volumes of mortgages without

regard to the welfare of the people they could have underwritten more carefully. So, that is part of the problem, too.

Mr. TOWNS. Mr. Issa.

Mr. ISSA. Thank you, Mr. Chairman.

This is a wonderful panel, and I appreciate your statements, and, obviously, we will be poring over them well into the next Congress.

I'm almost befuddled to try to come up with how many questions we could ask, but let me start with Mr. Pinto. The earlier panel—which I would have liked you first, but I'm also glad you're after—seemed to want to make a distinction between Alt-A and subprime; and even when we started asking about it, we got told, well, some of the Alt-As are subprime, and some are the other. From a standpoint of deviating from sound practices that lead to reasonable default rates, is there any real difference?

Mr. PINTO. No. Alt-A actually stood—one of the meanings of it was Alt Agency. They were things that the agencies would not buy.

How do I know that? Because, in 1985, I was one of the authors of Fannie Mae's revised underwriting requirements; and in that revised underwriting statement, we said we were not going to do the kinds of loans that ended up being high-risk, too high a risk for Fannie Mae to undertake: investor loans, particularly three and four units, excess loans on condos. There were many different types: low start rates on ARMS, neg am ARMS—we called them gyp ARMS—graduated payment ARMS. There were all kinds of loans, and those were the loans that became known as Alt-A.

I was happy to hear CEO Raines say earlier that Fannie actually remembered what had happened in the early 1980's, in the mid 1980's, and it happened in the late 1980's when the no doc, low doc business blew up, that they remembered that, but they did not learn.

Starting in the early 1990's, they came back with a 97 percent mortgage, which they had no basis for figuring out what the risks were. Freddie Mac, I put it in the record, had—showed a 95 percent loan. The default rates on those things were sky high. They just about go off the chart. Yet they were doing 97 percent loans on the basis of no data. And that was the beginning of this process.

So, the Alt-A loans, the subprime loans, I lump them all together.

How did I end up coming up with 1.6 trillion? It's very simple. If you look at the kinds of risks—again, Frank Raines referred to them as what we learned in the 1980's and early 1990's. If you look at the kind of risks that they entered into on the 1.6 trillion, they knew those were risky loans. They performed under stress the same way. They all have incredibly high default rates, and they're performing that way exactly today. So, every category I put on my chart ends up being in that same bucket.

Mr. ISSA. I appreciate that.

And, Mr. Calomiris, I see you're shaking your head yes, so I think we've established today that we're not going to find a difference in spite of the distinction being made by the earlier panel.

I would ask two things. First of all, would all of you be willing to answer additional questions for the record? Because I know I am running out of time, and I very much would like to get them in the record.

With that, I would ask a couple of questions that are not likely to be asked normally and the public has a right to understand.

The vast majority of States, including my own, California, have no recourse loans, meaning that no matter how much funding somebody has in their personal pocket, including that earlier testified roughly 20 percent who were speculators, they're able to get a no-money-down, no-stated-income loan, and they're able to never occupy that home, perhaps hold it for rental, or perhaps just hold it to flip.

At one of the points in this whole debacle, the turning back in or the failure to pay or in some cases—we've had it in California—people bought homes, rented them out, never made the payments, and waited for the foreclosure. They were guaranteed if they put nothing down and rented them out, that they were going to make money because they collected rent and paid nothing out.

And, Mr. Stanton, I know you're smiling, but as you see them, you begin to realize that not everyone is a victim that in fact took out a loan. Should we on this dais look at a recourse structure to government-backed, government-guaranteed, government-underwritten loans, so as to take the speculator, who does have other assets out of the equation of taking this "heads I win, tails the government lose" situation?

Mr. Stanton, you were shaking your head earlier. Would you agree that could be a tool that we would have a right to do since we, the people, we, the representatives of people, are paying out potentially trillions of dollars and, in some cases, the money is because of speculators, who kept their money and, in fact, left us holding the bag?

Mr. STANTON. Absolutely, and that is the logic that led me to recommend these companies be removed from conservatorship now that they have an apparent negative value, put in receivership and used essentially as government corporations.

It was stunning to hear these CEOs say, gee, it would have been nice to have consumer protections. In fact, as a government corporation, without worrying about shareholders, there would be a way then to impose risk-sharing requirements on all the participants up and down the line, to structure much more sound ways of doing business and to add, if I can make a plug for a colleague, Alex Pollock of the American Enterprise Institute, basic consumer protections.

He has a one-page mortgage form; and one of the questions on the one-page mortgage form is what is the highest monthly payment that this mortgage could ever go to? That is a really simple question that reveals what happens when you have these teaser rates. Because a whole bunch of those mortgages' answer might have been infinity; there are no natural limits.

So, as a government corporation, we could use both Fannie Mae and Freddie Mac to do the kind of risk sharing you're talking about, impose serious consumer protections, and create serious standards for the market going forward. Thank you.

Mr. Kling.

Mr. KLING. Congressman Issa, I hope that you will keep raising the issue of investor loans and nonowner-occupied loans. Because your colleagues often seem to forget, and they talk about fore-

closure moratoriums and work-outs being a solution for this, but nobody has told me what the percentage of nonowner-occupied loans is. We know that 15 percent of the loans made in 2005 and 2006 were nonowner occupied.

And I would just step back and say, rather than make those recourse loans, ask why are they eligible for any government guarantee at all? If your goal is to promote homeownership, I assume you're not trying to promote home speculating. So, why are they eligible for Freddie Mac, Fannie Mae, or any government guaranty at all?

Mr. ISSA. Thank you. Thank you, Mr. Chairman.

I think with that we will probably realize that home homeownership and being a homeowner and renting out to others is not quite the same thing, and I appreciate it. Homes ownership, as the chairman said.

Mr. TOWNS. Thank you very much.

Congressman Bilbray from California.

Mr. BILBRAY. Thank you very much. And let me thank the panel; and, Mr. Kling, thank you for throwing darts at both sides. It is kind of refreshing in this town.

There is a whole lot of things I would love to jump right into, but when we get into this issue of unsecured, basically, finding ways to be able to qualify people at any cost, I don't know if you guys are aware of it and the ranking member will say—will remember this.

In 2005, in San Diego, there was a big deal about the fact that you not only did not have to be a U.S. citizen, you did not only not have to be legally in the country, you didn't even have to show a viable ID that you were who you said you were to get a loan. And many of those loans were through nonprofits that were getting grants from the Federal Government.

So, this is how deep we got into this issue, and it wasn't just the nonprofits, but it was the for-profits were searching out anybody and everybody that we can figure out how to get them to sign up on this program. Because they were—basically, seems like you create the paper and you have all these foreign investors love to buy sight unseen but to the point of where somebody wasn't even required to prove that they were whoever the name was on the loan, didn't even have to show a U.S. viable ID. They were using consulate cards from another country that is issued based on the honors system.

I only raise this to show you how far this goes. And I will be very interested to see, do we require legal status, viable identification under the REAL ID bill to participate in the bailout that is going on now or the refinancing and everything else? I don't hear anything about that. It's just like, well, anybody and everybody can get into the system. The more the merrier.

You brought up the credit default issue, the swaps. And I know that is not specific to here. But from the testimony we've seen, this is a huge ax hanging over our head right now. Anybody knows where it is? How many trillion—anybody got any idea how many trillions of dollars—what is the number that is floating around now with credit default swaps?

Mr. KLING. Sixty-two trillion or something? Sixty trillion outstanding as of the end of last year gross. It came from nothing 10 years ago.

Mr. BILBRAY. Which was really a product of our regulatory reforms squeezed off one side and left it wide open, and the bulge started coming out there.

And, Mr. Chairman, I think that is one of the things the new Congress really has to look at. Here comes 60 trillion—think about that—is the culture shock we've had with the 1.3 we've issued since March but 60 trillion hanging out there and, basically, Vegas could give better odds. It's a lot of gambling out there.

So, I want to just in this hearing point out, we have this huge, huge threat out there that nobody is really talking about because we're kind of responding to the problems of the past and not seeing this coming down the pike.

Guys, any comments about that? Because you have been frank and open about it, and I think it's important that the—hopefully, the future chairman and ranking member of this committee is here to hear it.

Mr. CALOMIRIS. Yes, I'd just like to say something briefly about that.

On an optimistic note, remember that credit default swaps are a zero net sum game. So, even if there are 60 trillion in nominal exposure, the aggregate exposure in the financial system is always zero.

Now, there is a problem, of course; and we saw that with AIG and its credit default swap position vis-a-vis Goldman Sachs. And that problem is that if somebody is on the brink of failing and they aren't properly collateralized in their positions, which was the case for AIG because it had AAA status, was not the case for Lehman Brothers, by the way, because it didn't have triple A status.

So we did have a problem with AIG because of its AAA status and its lack of collateralization; and so it could have added significantly tens of billions, maybe more, to the cost of a cleanup.

But, more generally, the problem isn't nearly as bad as the sort of headline numbers are indicating; and it was very particularly a problem for AIG precisely because of AIG's AAA status.

Mr. PINTO. And that was demonstrated by Lehman Brothers when they unwound. There was—I believe it was a nothing. It all happened, and everybody yawned, and the reason was exactly what Charlie just said. And they had a lot outstanding.

Mr. KLING. In my written testimony, I spell out what I think are the problems with credit default swaps. I don't think we in the economics and finance profession fully grasp the magnitude of what is going on and the implications of what is going on there. And I think it's quite possible that a lot of the panic deleveraging that is going on and the very strange relationships in security prices that we're seeing today, I strongly suspect that has a lot to do with the way the credit default swap market operates.

Mr. STANTON. I think the issue of credit default swaps has been covered, but I want to point out something else on the horizon that is worth looking at. Particularly since Charles was so optimistic, I can be a bit pessimistic.

We have seen a huge number of defaults now because of bad mortgages, mortgages that never should have been issued in the first place, subprime Alt-A, whatever we want to call them. What we have not seen yet is the full impact of defaults on homes because a recession hits, and that has been the traditional source of defaults on homes. So, we can expect a second wave to be coming in.

And again I reiterate, it's time to take both GSEs in hand as government corporations. Stop this incessant, gee, do we price high? Do we price low? Because we have to satisfy shareholders because it's a conservatorship, not a receivership, versus we've got to support the housing market and start using the GSEs actively to start dealing with what is going to be a much worse problem.

Mr. BILBRAY. Mr. Chairman, I just want to say the three of us up here actually are sons of areas that were red-lined consistently before this; and I think we understand the challenges for the working class neighborhoods because it was our neighborhoods that were red-lined by these institutions before; and we need to address that.

I think we need to recognize, too, that a lot of this that we don't even talk about is that not just homeownership but what was perceived as a minimum homeownership back in the early 1970's, late 1970's, early 1980's. You will remember that homeownership, the first step was usually into an attached condominium, something you could afford, build equity. You build your credit rating. You worked into it.

What we've seen in the last 10 years is don't even think about those things. They're going for the four, five-bedroom detached house and whatever. And I think we have to understand a level of expectation needs to be reflected appropriately, especially for people trying to get out of those neighborhoods that we grew up in or to buy a home in those neighborhoods.

Mr. TOWNS. Thank you very much and thank you.

The gentleman from Idaho, Congressman Sali.

Mr. SALI. Thank you, Mr. Chairman.

Gentlemen, I'm sorry that I was gone for a short while while you were giving your testimony. I had looked at some of the information you had provided earlier, and I guess there are two pieces to the puzzle as Congress wrestles with what to do going forward.

The first one is, if you start today and you're going to make a sound loan, how do you do that? And I think most of your information goes to that.

Mr. Pinto, you have the chart that you talked about I think during your presentation, and I'm looking at the 2007 graph, and it doesn't look very rosy. Those loans already made, how do we get that bleeding stopped? Because this is going to impact—this piece is going to—if we started making good loans today, this piece will still impact things profoundly. What should we do to try and shore that up?

Mr. PINTO. Excellent question.

In my prepared remarks, I proposed two solutions, a short-term and a long-term. The short-term, and I liken it to you're fighting a forest fire, it's very simple. Where did you fight the fire? At the fire line or away from the fire line? If it's out of control, you have

to fight it away from the fire line. You have to build a firebreak. And I have looked at all the different modification programs that are being proposed; and none of them establish a fire line, away from the firebreak, away from the line of fire.

I'm not one who normally espouses that the Federal Government spend a lot of money for something. However, the issue that we've got—it was just touched on by Mr. Stanton, about the second wave that is coming—it's actually a second and third wave. The second wave is, Fannie and Freddie's book of business is new, does things that have been causing the foreclosures to a large extent in the past, that were loans made earlier in this decade, the ones that were made in 2005, 2006 and 2007 are just—you can see it—are just starting to go bad; and the ultimate foreclosure rates are going to be way up here. They're going to be way off the charts. And that is the second wave.

The third wave is what is known as the real economy, the people who actually played by the rules, and now they're losing their job or whatever. And I have estimated that by the end of next year, with the price declines that everyone is agreeing on, 1 percent a month to the end of next year, that there is going to be \$12.2 trillion of mortgage debt outstanding and \$11 trillion of home value. That is a national LTV on people—loan to value—on people that have homes of 111 percent.

That has never happened before, I will say, in the history of United States. I don't think it has ever happened before in the history of the world. In the Depression, it was 30 percent. So, that is what we're looking at.

So, the second and third waves are coming. So, what do you do? You have to identify, and we can identify these loans. Fannie Mae has a great little chart. Freddie Mac has the same chart. Everybody else knows—the New York Fed has all these charts. Everybody knows where all these loans are, ones that are defaulted and not defaulted.

We know what the characteristics of the loans are. We know—I have identified there are \$4.4 trillion of junk loans out there. We have to find a few trillion of those that are owner occupants, and we have to identify them, and we have to put together a program that has the five steps that I listed in my testimony and make an offer to those people to refinance them.

But, you're going to have to bring down the principal amount substantially so that you create equity and create that cushion. You have to create a strong firebreak. But, it's also very important that you don't put 50-year loans—I hear them talking about extending the term to 40 and 50 years. That is crazy. You want equity building back up, not pushing it way out.

You can't be pushing delinquencies on the back end. That doesn't create incentive to stay in these homes. We have to create hope for these people to continue with these loans and continue in their homes, and the way you do that is the proposal that I laid out in my testimony.

The second part, which I will just reference, is we have to deleverage the whole housing system. We have overleveraged the entire system starting with the homeowner, going to the banks, Fannie Mae, which now has no capital, but they were overlever-

aged 75 to 1 all along, and then the mortgage-backed securities which were overleveraged. Congress created a system that overleveraged everything all the way through. We have to deleverage that.

If I would ask the committee to do anything, it is to look at the question of how do you deleverage the financial system of the United States. It used to work when the leverage was 3.7 to 1. We've changed it to 30 to 40 to 1. It's not sustainable.

Mr. SALI. You're suggesting that the mortgage lenders are going to have to take the loss of writing down the principal—

Mr. PINTO. Well, the Federal Government is on the hook for—I hate to tell you this. You already own 77 percent of all the mortgages in the United States, own or on the credit hook for them. Therefore, it comes back to us.

Mr. SALI. Well, we spent a half a trillion dollars in deficit in last year's budget. That doesn't count the 700 billion of bailout, the 85 for AIG, the other 35 for Bear Stearns; and, I mean, that list goes on and on and on. And now we're talking about the automakers. We don't have any money. What are we going to write down against, just more deficit spending? I realize the taxpayers are going to have to be on the hook—

Mr. PINTO. You already own these loans. You're responsible for them. 4.6 trillion of the 12 trillion is Fannie Mae and Freddie Mac. Who owns Fannie Mae and Freddie Mac?

Mr. SALI. But, you're suggesting we can create value out of thin air.

Mr. PINTO. No. No. I'm not creating value out of thin air. You have to write down these mortgages to a level where the people that are in them, the homeowners, have an incentive for staying there. Putting them through the foreclosure process is slow death. It's letting the fire burn out of control. You're going to have 8 million, 8 million foreclosures if you don't get ahead of this rampaging fire. I'm telling you, there are going to be, in the next 4 years, 8 million foreclosures. That is out of 57 million loans that we've already had 2 or 3 million foreclosures. That is 8 million more.

Mr. KLING. I'm going to disagree with that. We've agreed on a lot of stuff so far, but I'm going to disagree. Personally, my instinct is kind of yours, that the government—my concern is that if the government gets involved trying to bail out at the homeowner level, you don't know in Washington which homeowner can follow through with a mark, with a principal write down, which homeowner cannot. You can't manage that from Washington.

The administrative expenses of that are going to be huge, and that is—I think 10 years from now all you're going to have to show for that is lots of administrative expenses, lots of repeat defaults and, worst of all, a housing market that is still out of balance because people don't know where the prices are, where the prices belong in the housing market.

I would say in the end it would be cheaper to take those 8 million people, pay for moving trucks, hold the door for them, get them out or turn them into renters than it will be to try to rework the mortgages. That is my prediction. I hope it's not correct, because I know that you're going to want to rework the mortgages, but that is my fear.

Mr. SALI. Aren't those same 8 million people going to live in those same houses, though? They're just going to trade addresses at the end of the day, aren't they? You're not going to build 8 million more apartments for them to live in.

Mr. KLING. Or they will rent their houses. But, we have to get to a natural market with supply and demand in balance. Because as long as you try to prop up people in houses that they couldn't—that they didn't belong in in the first place, the rest of the market is not going to be cured. That is my fear. My fear is that 10 years from now, we're still going to be arguing how to bail out the housing market because it will still be—the fire will still be raging.

Mr. CALOMIRIS. May I just talk briefly about this? Because I know we have a lot of other questions.

I think there are elements of what both of them said that make sense. First of all, as Ed said, the exit has to be viable; and I think also you know both of them agree on that. That is, you're not going to want to just paper this over without writing down principal substantially.

My own view, though—and here I disagree with Ed. I don't think that the home prices that he is taking for granted, which is I think probably derived from the Case-Schiller Index, I think that is an exaggerated measure of already where we are on the downside; and it's also exaggerated in its projections. So, there are technical issues here. There is a huge uncertainty about what that home equity shortfall is going to be, and I don't agree with the numbers that he quoted.

But, I would agree, though, also with what Dr. Kling said. We don't want to make the solution in Washington. But I think they are pieces of what Ed said that can be done in a decentralized way.

So, here is the answer, basically, in one sentence, according to me. Singling out owner-occupied homes, have a government-loss-sharing arrangement that would incentivize privately servicers or owners of mortgages to write down principal and interest quickly if the taxpayer is sharing some of those losses. So, they did this in Mexico in 1999. It worked very well because the thing had a timeline.

If you want to participate in the loss sharing to mitigate the foreclosures, to avoid the foreclosures, you have to move very quickly. And what you really want to do is on the margin push the lenders with a little bit of money to decide to write down rather than foreclose. Because if they foreclose, they're going to lose a lot, too.

So, you don't have to spend so much. You can get the private sector to spend a lot and let them decide the size of the writedown so long as it leads to a mortgage that is realistic. So, that is my view, and I have written about it.

Mr. STANTON. And if I can supplement that, because my area is design of organizations and programs.

Once again, if Fannie Mae and Freddie Mac were government corporations, they have relations with lenders all over the country. In fact, as we saw in the colloquy between Mr. Issa and Dr. Kling, not all homeowners are alike. Some deserve one treatment. Some deserve another. And it has been suggested that we essentially provide some sort of legal insulation for the servicer of the mortgage and then have a trustee in localities to sit there and work out. And

if a homeowner goes to that trustee, they bind themselves, whatever decision, and the decision can range from pay or be foreclosed on to you get bankruptcy with cramdown features, to we're going to restructure your mortgage. There could be a range of alternatives.

And if I have to think of two institutions that have the connections around the country to administer that kind of program and possibly with what some of the aspects that Charles Calomiris is talking about, Fannie and Freddie would be it. Before we can go there, we need to take those institutions formally into government hands so they're not all worried about, gee, do we have to satisfy those shareholders, that 20 percent of shareholders that are still there that are going to want value in their company in the future.

But, they would be the administrative mechanism, and they would be the people I would consult with first once they were in government hands. How do we make this work?

And I agree with Charles. Housing prices are going to still go down. But, at some point, we can't afford to have 8 million people facing the disruption of their lives in foreclosure. There are cheaper ways to do it and less costly for people, lenders, and the government.

Mr. TOWNS. Let me say to the gentlemen, your time has long expired.

Let me thank all the witnesses. I really appreciate your coming and sharing with us. And, of course, let me also add that we have 7 days for additional comments as well. So, thank you very, very much for your testimony. We look forward to working with you in the days and months ahead. Thank you for coming.

[Whereupon, at 3:38 p.m., the committee was adjourned.]

[Additional information submitted for the hearing record follows:]



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## Memorandum

DRAFT  
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Date June 4, 2007 To Credit Risk Sub-Committee

From Raymond Romano

Subject No Income No Asset (NINA) Documentation Mortgages

**ACTION REQUESTED**

The purpose of this memorandum is to re-visit our decision about Freddie Mac's purchase of NINA mortgages and its investment in Mortgage Asset Backed Securities backed by NINA mortgages. Due to the increased reputation, fraud, predatory lending and credit risks posed by our current programs, the credit risk management team believes we should review our current position. Freddie Mac should choose to either modify our business practices to mitigate risks and continue purchasing NINA mortgages or exit the NINA market entirely. I plan to bring this issue to the June ERMC meeting with your feedback.

**EXECUTIVE SUMMARY**

Three years ago, via CEO Decision, Freddie Mac decided to continue the purchase of NINA mortgages in all business channels with some changes to business practices to help mitigate risk. To date, we have not completely implemented all the changes we desired and have had to retreat from others. Since this time the market has experienced significant changes including:

- Weakening house prices and deteriorating economic conditions
- Increased pressure to loosen underwriting standards resulting in increased purchases of untested mortgage products layered with this documentation type
- Retreat of capital in the subprime market, including numerous counterparties exiting the mortgage business
- Increased regulatory scrutiny of underwriting practices
- Issuance of the Interagency Guidance for the Purchase of Non-Traditional Mortgage Products that, among other things, requires that the analysis of a borrower's repayment capacity include an evaluation of their ability to repay the mortgage debt and to avoid an over-reliance on credit scores as a substitute for income verification.

NINA mortgages create dynamic tension between key corporate goals and objectives: meeting customer needs, market share, shareholder value, mission, managing credit risk, and corporate reputation. NINA

mortgages pose higher risks and can be vulnerable to predatory and/or fraudulent practices and appear to suggest supporting a practice of relying on the disposition of a property as the primary means of satisfying the debt. Previously, there has been vigorous debate within the Corporation on the topic of NINA mortgages. In our recent response on Interagency Guidance, we conveyed to OFHEO that we are reviewing whether we should limit the amount of undisclosed income to ensure there is nominal opportunity to use potentially inflated borrower income for qualification purposes.

After much discussion and debate, I recommend that Freddie Mac discontinue purchasing NINA mortgages within our Flow and Bulk business lines. Securities backed by NINA mortgages should also be discouraged, however I would recommend we delay this portion of the implementation until we hear from the banking regulatory bodies as not to add disruption to this portion of the market.

#### BACKGROUND

The NINA mortgage was created as an additional reduced or streamlined documentation option for consumers who cannot or will not, for whatever reason, provide personal financial information. When first introduced, this product served borrowers with inconsistent income patterns (self employed, etc.) but with strong credit profiles and substantial down payments. Under this mortgage offering, borrowers do not disclose income or assets to the lender – *the borrower's ability to repay the loan is not analyzed or considered.*

Market practices have evolved to liberalize the use of NINA products such as for first time homeowners, or with untested mortgage products such as initial interest and payment capped Option ARMs. With the recent weakening in house prices these offerings with increased layering of risk have come under scrutiny in the market place by regulators, consumers and housing advocates. Many lending partners have begun to limit the use of NINA in combination with these higher risk products by reducing loan-to-values, and increasing required FICO scores.

Understanding the legitimacy in the marketplace for NINA mortgages is difficult, without knowing what the borrower and originator motivations are during origination of the mortgage. Some lenders have a desire for efficiency in origination and processing practices. Others have stated that NINA mortgages provide access to mortgage financing for borrowers who may have difficulty legitimately documenting their income and/or assets and, for whatever reason, do not want to report their income. Lenders examples include:

- Borrowers with non-traditional or cash income
- Borrowers with multiple self-employed income sources
- Retirees with substantial assets
- Borrowers relying on rental income, particularly those who rent a portion of their home
- Borrowers who, for cultural reasons, do not trust financial institutions

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However, as you review the above examples these still not address the legitimate business need for the NINA program that cannot be filled through other more traditional methods including those that are available under the SISA program.

#### DISCUSSION

There are alternative products that Freddie Mac offers in the marketplace today that meet the needs of these non-traditional borrowers while providing Freddie Mac with some indication that the borrower qualifies for the loan they are seeking. Stated Income Stated Asset (SISA) documentation mortgages serve the same needs outlined above -- as an option for borrowers who chose not to, or cannot legitimately, fully document their income and/or assets. SISA differs from NINA in that the borrowers capacity to repay the debt, along with their financial ability to contribute the required equity down payment, can be analyzed as part of the loan origination process.

Moreover, organizationally we were concerned about the legitimacy of the NINA offering at our last review and required additional mitigating actions to address our concerns. These required actions included three conditions that were the basis for the approval:

1. We were to implement a policy, for NINA mortgages and securities backed by NINA mortgages purchased by Freddie Mac, that requires the consistent use of borrower disclosure. This disclosure, to be signed by the borrower and retained in the mortgage file, would include statements that acknowledge that the borrowers have selected a No Income/No Asset mortgage and that they have not been coached or otherwise coerced into this product. The borrower disclosure should have included an acknowledgement that had they provided their income and asset information to their mortgage lender, they may have been eligible for a lower mortgage rate. In addition, the disclosure was to make it clear that because the borrower has not provided income or asset information, the lender cannot determine their capacity to repay the loan and that the borrower must be sure that they have the capacity to repay.

Status: Not implemented as a requirement for our purchase. Some lenders have utilized a disclosure but these disclosures may not have met our stated requirements.

2. Implement, for NINA mortgages purchased, a maximum LTV of 90% and require full appraisals. These requirements will limit layering of additional risks of mortgages purchased. In addition, we need to create a detailed loan offer product code for this product, so that we can more easily identify these mortgages after purchase. We will provide our customers sufficient time (60-90 days) to implement this change.

Status: Implementation of the detailed loan offer code for tracking purposes is considered [complete]. The restrictions on LTV and the need to obtain full appraisal reports appear to be minimal risk offsets for the risk.

3. Freddie Mac will lead a task force comprised of key industry representatives, including the MBA, to discuss, recommend, and document best practices associated with the origination, secondary

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marketing, and servicing of NINA mortgages. This task force, was to evaluate the lending and servicing practices associated with NINA mortgages in order to identify the best practices and additional underwriting guidelines (for example; borrower coaching and leaving the spouse off the note) that can be deployed broadly to mitigate any additional risk. This task force was also asked to understand the borrower and lender/originator demographic associated with this product. An additional focus of this effort was for Freddie Mac to gain industry alignment to condition the market to switch to SISAs, thereby reducing the market demand for NINA.

Status: Not implemented.

Additionally, Freddie Mac's recent subprime announcement stated our intention to cease purchases of NINA mortgages after September 1, 2007. Further, our May 2007 OFHEO response on Interagency Guidance indicated that we would consider limitations of undocumented income in our asset-backed securities subprime purchases. All combined, these actions have conditioned the market for us to take an additional step regarding NINA mortgages in our Prime and Alt A channels as well.

#### DECISION OPTIONS

Freddie Mac continues to have three options:

1. Continue to purchase NINA mortgages without any changes to business practices with the exception of subprime where the decision to not purchase certain NINA mortgages effective September 1, 2007 has already been conveyed to the market.

Risk: this option does not protect Freddie Mac from reputation, fraud, predatory lending and credit risks. Additional negative reaction from housing advocates and regulators may lead to reduced goodwill.

2. Discontinue purchasing NINA mortgages within our Flow and Bulk business lines. Securities backed by NINA mortgages would be delayed until we hear from the banking regulatory bodies as not to add disruption to this portion of the market.

Risk: this option does present risk to market share, customer relationships, mission goals, and PVA. However, given current market sentiment toward NINA mortgages, it is unlikely to have as severe an impact as it may have had in the past when this option was last reviewed. As the market blurs the distinction between prime, Alt A, and subprime, this option aligns with the Interagency Guidance on subprime and non traditional products to verify a borrowers' ability to repay the mortgage debt and provides control against the risk of purchase through another origination channel.

3. Continue purchasing NINA mortgages with changes to business practices to tighten risk parameters and exclude the purchase of NINA mortgages in subprime space where the decision

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to not purchase NINA mortgages effective September 1, 2007 has already been conveyed to the market.

Risk: reputation, fraud, predatory lending, and credit risks remain; but the amount of risk may be reduced by introducing additional eligibility restrictions to the product. Changes in borrower eligibility may include FICO, LTV, and product type restrictions and may vary. Restrictions may vary in the flow purchase path versus the investment path.

**RECOMMENDATION**

I recommend that Freddie Mac discontinue purchasing NINA mortgages within our Flow and Bulk business lines. Securities backed by NINA mortgages should also be discouraged, however I would recommend we delay this portion of the implementation until we hear from the banking regulatory bodies as not to add disruption to this portion of the market. This option positions Freddie Mac as a leader in the market, supports the direction provided in the Interagency Guidance to verify a borrowers' ability to repay the mortgage debt.

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