THE FUTURE OF HOUSING FINANCE—A REVIEW OF PROPOSALS TO ADDRESS MARKET STRUCTURE AND TRANSITION

HEARING

BEFORE THE

COMMITTEE ON FINANCIAL SERVICES

U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED ELEVENTH CONGRESS

SECOND SESSION

SEPTEMBER 29, 2010

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THE FUTURE OF HOUSING FINANCE—A REVIEW OF PROPOSALS TO ADDRESS MARKET STRUCTURE AND TRANSITION

Wednesday, September 29, 2010

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The committee met, pursuant to notice, at 10:01 a.m., in room 2128, Rayburn House Office Building, Hon. Barney Frank [chairman of the committee] presiding.

Members present: Representatives Frank, Kanjorski, Waters, Watt, Sherman, Moore of Kansas, Baca, Miller of North Carolina, Scott, Green, Cleaver, Ellison, Foster, Carson, Speier; Bachus, Castle, Royce, Capito, Garrett, Neugebauer, Posey, Jenkins, Paulsen, and Lance.

The CHAIRMAN. The hearing will come to order. I will begin with some explanation, where we're not going to be able to do some of the things we thought. When we scheduled this hearing in consultation, both sides, we had assumed that we would have 7 days of legislating left after today.

That is, the original schedule was that we would meet until the 7th or 8th of October. It now looks as if today will be the last day of this session, although there will be a reconvening in November. That probably depends on the negotiations with the Senate on the CR.

Given that I had said that, I had hoped we would be actually dealing with a piece of legislation, but there's no point in rushing that pace. So we're 7 days shorter than we were. I do think it is important for there to be pieces of legislation embodying somewhat different views, although there's a common core of agreement in some areas. But that's not going to be possible, I note, until November, when we come back, because we lost the 7 days.

I will also apologize to the witnesses, and I am very pleased that we have a very broad-ranging group. We will be voting a lot today, but we do have at least a couple of hours to get started, so we're going to get into it as quickly as we can. We have 20 minutes of opening statements, and then we will hear your statements.

And, as I said, originally this was going to be a fairly calm day with 2 more days this week and 5 days next week. It is now the helter and skelter last day, and I apologize, but that's the best we can do. And with that, I will now begin, and I'm going to recognize the chairman of the Capital Markets Subcommittee, the gentleman from Pennsylvania, Mr. Kanjorski, for 3 minutes.

Mr. KANJORSKI. Thank you, Mr. Chairman.

Mr. Chairman, at the most recent Capital Markets hearing on the future of our Nation's housing finance system, we explored taxpayer protection issues. We need to continue working to minimize the Treasury Department's purchases of more senior preferred stock at Fannie Mae and Freddie Mac, and the Administration must work to hold accountable those entities that contributed to or exacerbated the housing crisis.

We must also focus more and more on what the new architecture for housing finance should look like and consider how we should transition to this new system. We must additionally work carefully to avoid repeating past mistakes and doing harm. Today's conversations will assist us in these important endeavors.

Some of the pending reform proposals suggest completely privatizing the housing and finance market, while others suggest imposing some form of explicit government guarantee. Regardless of one's views, we can all agree that we must do something to change the status quo in reestablishing a healthy, stable housing finance system. We need a thoughtful and deliberative discussion about what we ought to do. We should also have some goals. We need to limit taxpayer costs and risks.

We additionally need to ensure that the credit unions and community banks continue to have the ability to compete and offer affordable mortgages. We should further have sufficient players in the marketplace in order to protect against "too-big-to-fail" scenarios.

The Dodd-Frank Wall Street Reform and Consumer Protection Act has already helped to advance the debate on the future of housing finance by changing the rules for mortgage organizations, risk retention, appraisal practices, and credit ratings. With these process reforms in place, we have laid a strong foundation upon which to determine what to do with the institutions that securitize the mortgages of responsible, creditworthy, middle class American families.

As we consider transition issues today, we also need to remember that Fannie Mae and Freddie Mac now help to support just over 70 percent of their mortgages. A prudent evolution to a new housing finance system was therefore aimed to proceed smoothly and avoid unnecessary market disruptions. Moreover, we cannot replace something with nothing, as several of my colleagues on the other side of the aisle have proposed.

In studying transition issues, we should further look to past precedents, like Sallie Mae's graduation from government sponsorship more than a decade ago. We can use the lessons learned, both good and bad, from our work on Sallie Mae's privatization to help guide us as we take on the difficult task of reconstructing a new housing finance system. In sum, Mr. Chairman, I appreciate your efforts in convening this hearing and I look forward to discussing the proposals offered by our witnesses.

The CHAIRMAN. The gentleman from Texas is recognized for 1 minute.

Mr. NEUGEBAUER. Thank you, Mr. Chairman.

I appreciate the proposals that the witnesses have prepared for us today and I look forward to our discussion. The question of

whether we can have a robust, private, mortgage-financed securitization without the Federal Government backing it, I think, is the real question that is before this group today.

It's important that we have a very robust financing mechanism in place, but it's also important that we not have one that's depending on the American taxpayers to bail it out in case it fails. So I look at other ways we finance and other kinds of financing that are done, for example, automobile financing and others out there. And we don't put the taxpayers on the hook for that kind of financing.

We had a mechanism in place where the taxpayers weren't on the hook, we thought, but in many cases that didn't work out. So as we move forward, I think it's important that we make sure that we have a system in place that works, the housing industry and the industries that the mortgage finance business helps finance to provide the capital for is very important to our country, very important to our economy.

But it's also important that we not have one that's reliant on the taxpayers in an eventual bailout for that activity. With that, Mr. Chairman, I look forward to our discussion today.

The CHAIRMAN. The gentleman from Kansas, the chairman of the Oversight Subcommittee, for 1½ minutes.

Mr. MOORE OF KANSAS. Thank you, Mr. Chairman.

Just like most issues in Congress, reforming Fannie Mae and Freddie Mac should not be about Republicans and Democrats. It ought to be about doing the right thing for our constituents and our country. I am disappointed that our friends across the aisle forgot that when they controlled Congress for 12 years, and they did not enact meaningful reform with Fannie and Freddie.

In 2008, the former chairman of this committee, Mike Oxley, said, "We missed a golden opportunity that would have avoided a lot of problems we're facing now, if we hadn't had such a firm, ideological position at the White House and the Treasury and the Fed." Last year, I was disappointed to learn of large salaries for Fannie and Freddie executives. I wrote their CEOs about this last March, and after receiving an unsatisfactory response from FHFA, I joined Chairman Frank and others to vote for H.R. 1664 to stop those unfair pay practices at Fannie and Freddie.

Protecting taxpayers should not be a partisan issue. So I was disappointed that some of our friends didn't join us to support that commonsense measure. I sincerely hope we can come together this time, Republicans and Democrats, to explore good policy options to deal with Fannie and Freddie, and create a stronger, safer, housing finance system next year.

I yield back, Mr. Chairman. Thank you.

The CHAIRMAN. The gentlewoman from West Virginia for 2 minutes.

Mrs. CAPITO. Thank you, Mr. Chairman.

I would like to thank you for holding this hearing today, and it is my hope that we will move forward in this debate on the future of the GSEs, Fannie and Freddie. I was disappointed that the Dodd-Frank reform bill failed to address the reform of the GSEs. I think we have made that point pretty repeatedly in the conference, considering their large role in the financial downturn.

As we hear the testimony from experts today on how best to restructure the housing finance system, we must consider solutions to this challenge in a way that does not further subject the American taxpayer to undue risk or cost. The previous business model of private gains and public losses was an injustice to the American taxpayers and allowed the GSEs to take on far too much risk, resulting in a government rescue at the taxpayer's expense.

It is my hope that we could find a road back to private markets as quickly as possible where mortgages can be priced according to risk, and do away, once and for all, with the GSEs as they currently exist today. I look forward to hearing from our panel of experts on how we can wind down the GSEs in order to prevent the taxpayers from further losses and future bailouts, how we promote a healthy and sustainable private sector, mortgage finance system, and how we address the lax underwriting standards that helped cause the collapse of the housing market.

Again, I thank you for the hearing and I yield back.

The CHAIRMAN. The gentleman from North Carolina, Mr. Miller, for 3 minutes.

Mr. MILLER OF NORTH CAROLINA. Thank you, Mr. Chairman. This hearing is about the future of housing finance, which is an enormous issues facing all of us, but I suspect we will have another installment of the revisionist history of the financial crisis from the Republican Ministry of Information. They now remember that they warned us all along that subprime mortgage lending was the road to ruin. I was here.

I know who said what, and when they said it. Republicans at the time celebrated subprime lending as the triumph of the innovation that comes from unfettered capitalism, and homeownership was becoming possible now for people who never would have had it under the stultifying rules of traditional mortgage lending. It was all outside of government regulation; and, in fact, government hardly even breathed on it.

There were mortgage brokers who were almost entirely unregulated, who originated loans for mortgage lenders that were not depository institutions, were almost entirely outside of government regulations. It sold the mortgages to investment banks that were almost entirely outside of government regulation.

They created securities that had none of the disclosure required for equity securities and risk assessment, and that were entirely outside of government regulation. Risk assessment was done by rating agencies that were almost entirely outside of government regulation. And this triumph of unfettered capitalism was causing us to have homeownership at the highest levels ever, and it was something that should be celebrated. And in fact, it showed the complete uselessness of government policy.

The Cato Institute, one of the organs of the Republican Ministry of Information, published an article that said the Community Reinvestment Act, the CRA, should stand for the "Community Redundancy Act," because it had nothing to do with subprime lending. And there were criticisms from Republicans at Fannie and Freddie, but their criticisms were that they weren't doing nearly enough to make homeownership available, to make affordable homeownership

available, that the private system that I just described was running rings around Fannie and Freddie.

And that was their criticism of Fannie and Freddie, not that they were making loans or somehow making lenders make loans that made no sense, that could not be paid back. We do need to reinvent our housing finance system, but what we do not need to conclude from the last decade and all the mischief, all the foolishness of the last decade, is that homeownership for working and middle-class families should not be a goal. It is a wholesome goal.

It is a good thing for working and middle-class families. It allows them to build worth. It makes neighborhoods more secure, more stable. That should not be the lesson we draw from the last decade.

I yield back.

The CHAIRMAN. The gentleman from New Jersey for 2 minutes.

Mr. GARRETT. I thank the chairman, the ranking member, and all the members of the panel.

It has been over 2 years now since the collapse of the housing market and Fannie and Freddie were placed into conservatorship. Now it has been hundreds of billions of dollars later. This committee is finally becoming serious and starting to debate and consider new structure of our housing finance system.

One thing I continue to hear from all the interested parties and everyone across the political spectrum was the desire to get more private capital back in the market. Fortunately, based on many of the actions I have seen so far, I think it's all a lot of lip service from some folks, because today, as part of the continuing resolution that we'll have, Congress is extending the higher loan limits on the GSEs and FHA for yet another year. To be able to afford a $729,000 house with its higher loan limits, a borrower must make roughly a quarter of a million dollars.

These are the same people that our Administration says that a majority of Democrats say are rich and they want to raise taxes on, so I'm having a little bit of trouble understanding why you want to raise taxes on them and then we want the taxpayers then to turn around and help the so-called rich buy rich houses. Why don't we just not raise their taxes on them in the first place?

One of the most fundamental questions we have to ask ourselves is how much government subsidy wound up in our housing market, especially if much of that subsidy doesn't go to the borrower in the form of lowered cost, and when much of that past subsidy in government policies led to the creation of the housing bubble and the collapse of the economy.

Some are already attempting to score political points and say that without a U.S. Government subsidy or rep, borrowers won't be able to have attained a 30-year fixed-rate mortgage, but I'm skeptical of that too, and such statements, considering borrowers can get 30-year fixed-rate mortgages on jumbo loans, and they have been able to throughout the crisis. Also, numerous studies exist that indicate that the more the government subsidizes housing, the more unaffordable and expensive that housing becomes.

Mr. Chairman, this debate we are finally having over this issue is truly, extremely important, and one that we really must get right. And so I do appreciate this whole list of witnesses for ap-

pearing today, and I look forward to each and every one of your testimony.

The CHAIRMAN. To even out the time, the gentleman from California, Mr. Royce, for 2 minutes.

Mr. ROYCE. Thank you, Mr. Chairman.

The Federal Government spends roughly $300 billion on subsidizing homeownership every year here in the United States, and we are the only developed nation in the world that provides government-backed mortgage insurance, provides government-backed mortgage insurance guarantees, and has Government-Sponsored Enterprises.

We have all three in this country, and this level of government involvement in the mortgage sector paired with the negative, real interest rates from the Fed between 2002 and 2006 facilitated the housing bubble here in the United States. While we have not heard much from the Administration on the subject, I think they would be well-served to listen to some of the warnings issued by FHFA Director DeMarco on some of the proposals that have surfaced. And a week or so ago, Mr. DeMarco shared these thoughts with us.

Replacing the GSE's implicit guarantee with an explicit one, he says, does not resolve the problems and inherent conflicts in the model. He said that it will produce its own problems, maybe make the situation worse. He says if the government continues to provide a guarantee for the vast majority of mortgages in this country, policymakers will yet again want to say as to the allocation and pricing of mortgage credit for particular groups in geographic areas, and that is problematic in terms of what this will lead to.

The mortgage finance system of tomorrow should be based, the lion's share of it for the most part of it—on private capital, on private investment. And considering the current state of the economy and the mortgage market, I think it's understood that it will take time, quite some considerable time, to get to that point, but that should be our end goal, to try to evolve the market back into a position. This was not the first housing bubble to develop in our Nation's history, and if we repeat the mistakes of the past, it certainly won't be the last.

Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from North Carolina, Mr. Watt, for 2½ minutes.

Mr. WATT. Thank you, Mr. Chairman and members.

If you detect a little edge in the comments of Representative Miller and I, it's because we have been working on the problem of predatory lending since 2004 when we introduced our first bill. And there's a little uneasiness on our part when we hear stories about how we are somehow responsible for the meltdown in this industry.

So I want to remind folks that the Republicans controlled the House, the Senate, and the White House from January 2001 to January 2007, during which time the subprime lending exploded and the housing bubble became fully inflated. And while we were introducing our anti-predatory lending bill in 2002, President George Bush announced a new initiative to create 5.5 million new homeowners by 2010, said that anybody who wants to own a home has a shot at doing so.

We ought to break down these barriers to homeownership, and while we were fighting to stop predatory lending, he went on in 2004 to continue efforts to increase the U.S. homeownership rate and FHA announced a new proposal all for subzero downpayment mortgages. And while we were still introducing our anti-predatory lending bill, some of the members of this committee, who now claim that we are responsible, didn't know anything about what was going on in the market.

They were still saying it was the private market that should be controlling this and we ought to get out of the way. Our own colleague from Texas, Mr. Neugebauer, said we have a very efficient mortgage system today. It's the envy of the world. It has brought record homeownership. A lot of people have benefitted from our mortgage industry and the sophistication and creativity that has come from it.

And Mr. Garrett said to build this anti-predatory lending bill that Mr. Miller and I were pushing, bill may well limit the products available to subprime borrowers, particularly minority borrowers and will deprive many of those consumers from owning or maintaining the home, as if he was—

Mr. GARRETT. Mr. Chairman, does the gentleman yield, since he mentioned my name?

The CHAIRMAN. The gentleman's time has expired.

Mr. GARRETT. Unanimous consent for another 15 seconds or 20 seconds, just to respond?

The CHAIRMAN. Unanimous consent for 15 seconds, and will the gentleman from North Carolina yield to the gentleman from New Jersey?

Mr. WATT. No. I won't yield, but I'll use the 15 seconds if he wants me to finish my sentence and tell him how it was him who—

Mr. GARRETT. No, I was just asking for your time.

Mr. WATT. Okay.

The CHAIRMAN. We have, I guess, unanimous consent. I apologize to you both and we'll continue this later.

The gentleman from Alabama.

Mr. BACHUS. Thank you, Mr. Chairman. Mr. Chairman, members of the committee, as you all know, I offered a subprime bill in 2005, which was the North Carolina bill with the New Jersey securitization. But I don't think it's very helpful to play the blame game, because the American people really don't care, at this point, whether it was Democrats or Republicans—what I would like to say is that all of us were guilty.

The Administrations were guilty. The regulators were guilty. The Congress was guilty. I at least admit that and think we all ought to come to our senses and admit that and admit where the mistake was. And part of that mistake was that we tried to take economics and turn it into social policy, and we tried to promote affordable housing to the point where we required no downpayment.

We had high loan-to-value mortgages and we gave loans to people with questionable credit. Any time you do that, you're going to have losses, whether you're the government or whether you're a private enterprises. But the point now, I think, has gotten down to whether we're going to continue to have a government role or

whether we're going to go to, as Mr. Miller says, capitalism. I view capitalism a little more favorably than he does.

I see our panel. We have eight panelists. Six of them want a government guarantee, and two of them don't. And I think that the thing we all ought to admit to ourselves is if you have a government guarantee, you may have the taxpayers liable. And there is a subsidy. There is a subsidy there, and whether it's worth it or not is what this Congress has to decide, whether we're going to obligate the taxpayers.

Paul Volcker said, and I agree with him, and I saw Mr. Pinto—I stole this from your opening statement, but I think it's very appropriate. Some have argued that Federal intervention and guarantees are inevitable. I think most of my colleagues in the Majority have said that. Beware of such advice. The failures caused by past interventions are evidence that such interventions do not work.

They will say, but this time will be different. It will not be. As he said, Chairman Volcker said, any explicit government guarantee of private mortgages will once again privatize profits and socialize the inevitable losses. So, let me conclude by saying this. I know the industry is here, and they're saying we need a government guaranty.

Let me tell you this. If I were in the industry, I would be doing the same thing, because I would love to make loans. And if they fail, let the taxpayers pick up the loss. That's a pretty sweet deal, but Americans all throughout this country have started saying "Don't obligate us."

THE CHAIRMAN.Now, we will begin the testimony. Before that, I ask unanimous consent to insert into the record a statement from Louis Ranieri, Ranieri Partners, on his rent-to-own approach, and a statement from the vice chairman of Essent Guaranty, Adolfo Marzol. If there is no objection, they will be put into the record.

As to the witnesses, we will listen to your oral testimony and anything you want to insert in the record in addition to that. Without objection, you have consented to it, so you won't have to ask for permission to do it. Just feel free to supplement your oral testimony with any documentation you would like, including further parts of the statement.

And with that, I'm going to begin. I never know who decides this order. I'm just handing it by someone from on-high, and we'll begin with Michael Heid, who is the co-president of Wells Fargo Home Mortgage and chairman of the Housing Policy Council of the Financial Services Roundtable.

STATEMENT OF MICHAEL J. HEID, CO-PRESIDENT, WELLS FARGO HOME MORTGAGE, AND CHAIRMAN, HOUSING POLICY COUNCIL OF THE FINANCIAL SERVICES ROUNDTABLE

Mr. HEID. Chairman Frank, Ranking Member Bachus, and members of the committee, thank you for inviting me here today.

I am Mike Heid, co-president of Wells Fargo Home Mortgage and the current chair of the Housing Policy Council of the Financial Services Roundtable. In considering housing finance reform, we need a solution that works for every part of the housing market, and that has the ability to attract the necessary capital to provide affordable mortgage financing.

The Dodd-Frank Act already has laid much of the necessary groundwork for GSE reform by aligning the interests of consumers, lenders, and investors. It has set the stage for the maintenance of sound and prudent lending practices. If properly implemented with consistent regulation and consistent enforcement for all mortgage market participants, many of the underlying problems in the market itself will have been addressed.

However, even with financial reform, history has shown that capital markets are inevitably subject to periodic shocks. It has also shown that a government guarantee carefully constructed and strictly limited is required to ensure a reliable and sustainable system of housing finance to help shield the broader economy from the effects of these temporary disruptions.

One of the major challenges we face in GSE reform is how to deliver a guarantee in a way that maximizes the use of private capital, minimizes moral hazard, encourages competition and innovation, and ensures that no institution is "too-big-to-fail." The Housing Policy Council has suggested an approach that I believe will meet these basic objectives and capitalizes on the industry's existing infrastructure. It involves privately capitalized competing conduits, a Federal wrap guarantee on the mortgage-backed securities but not on the conduit's debt, an FDIC-like insurance fund, and the adoption of a common security.

To be clear, we do not see this as a request for government subsidy. Rather, the conduits would pay a guarantee fee that would be properly priced to reflect the underlying risk to the Federal Government and protect taxpayers from potential loss. Unlike the old GSE model, the guarantee would not be used to subsidize the conduits or their shareholders.

Some have proposed that the GSE's bureau placed with the government agency or merged with FHA and Ginnie Mae; however, even ignoring the resulting impact on the Federal budget, we believe that nationalization of the GSEs is not the solution. Others have called for the creation of a single utility or industry cooperative. While these proposals have some merit, we question whether either structure would produce the innovation required to support a variety of financing needs, including those of non-traditional borrowers or the cost-effectiveness required to provide financing to qualified borrowers at the lowest possible cost.

A single utility or industry co-op also would inevitably produce an institution that is by its very design "too-big-to-fail." As a result, we have proposed creating a number of federally chartered, privately capitalized conduits that would compete with one another on a level playing field. To reduce barriers to entry, we also have called for the creation of a single, standardized form of security, similar in concept to Ginnie Mae, that would have a single, legal framework, uniform loan eligibility standards, and consistent Administration practices. This security would serve a number of important purposes.

First, it will enable newly formed mortgage conduits to compete against the exiting GSEs. Without a single security, start-ups would find it difficult, if not impossible, to match the liquidity of the Fannie Mae and Freddie Mac MBS, and one would be left with an altered version of today's status quo.

Second, a single security will reduce the moral hazard that would otherwise be associated with access to a government guarantee. Since the security would not be issued in the conduit's name, the conduit would be allowed to fail without jeopardizing the market value of the security, just as it is for Ginnie Mae issuers today.

And, third, a single security will lead to a more efficient secondary mortgage market and will provide the broadest liquidity at the lowest possible cost for the American consumer.

Finally, we recommend replacing the GSE's affordable housing goals with a fee on future MBS issuances. Research has shown these goals have been largely ineffective, and many believe they contributed to the GSE's eventual downfall. The revenue stream that would result from the fee, which could be administered by a housing trust fund or redirected to State and local housing agencies, would make a significant and lasting contribution to affordable housing.

We believe this overall approach provides the cornerstone for meaningful reform. While some customization would likely be required, we believe these concepts could apply to both residential and multi-family housing. As such, the needs of homeowners and renters would be addressed, resulting in an approach that preserves what is good about our current system and fixes what is not.

Thank you for the opportunity to share our views today. I look forward to the discussion that follows.

[The prepared statement of Mr. Heid can be found on page 125 of the appendix.]

The CHAIRMAN. Thank you. And I note this is to some extent a former Member's day, since Mr. Heid was testifying on behalf of an organization whose executive is a former member of this committee from Texas. And now we have another Texas former member of the committee, Mr. Bentsen, and he and I were talking.

I think had he made different career choices, he might have been sitting next to Mr. Watt. So Mr. Bentsen was a very valued member of the committee and we're glad to have him testify in his capacity as executive vice president for public policy and advocacy for SIFMA.

STATEMENT OF THE HONORABLE KENNETH E. BENTSEN, JR., EXECUTIVE VICE PRESIDENT, PUBLIC POLICY AND ADVOCACY, SECURITIES INDUSTRY AND FINANCIAL MARKETS ASSOCIATION (SIFMA)

Mr. BENTSEN. Thank you, Mr. Chairman, Ranking Member Bachus, and members of the committee.

On reform of the housing finance system, and related provisions in the Dodd-Frank Act, in late 2009, SIFMA formed a GSE reform task force, comprised of members involved in all aspects of mortgage finance from originators to investors, and the market makers that create liquidity between them to develop views on what are the most critical aspects of GSE and housing finance reform.

The Dodd-Frank Act contains a number of provisions that will impact the securitization process. The most commonly cited provision of the Dodd-Frank Act relates to the risk retention for asset-backed securities. Dodd-Frank appropriately calls for regulators to apply retention in a tailored manner with levels and forms of re-

tention designed specifically for the distinct risk profiles of different asset classes.

While the 5 percent threshold is established in law, it is important that regulators conduct meaningful econometric analysis of the appropriate level and form of retention required in a given situation. Furthermore, the Dodd-Frank Act creates a carve-out for certain types of low credit risk mortgages or qualified mortgages, which may be accepted from risk retention provisions due to the limited credit risk they are likely to present.

Congress appropriately directed regulators to work jointly to implement the provisions of risk retention. This is to ensure that all securitizers, regardless of their corporate form or regulator, will face the same rules. SIFMA is concerned, however, that actions by regulators may inadvertently conflict with Congress' intent, and regulators should consider revisions to comport with the Act.

For instance, the FDIC recently finalized rules regarding the securitization safe harbor, which include risk retention provisions that materially differ from those under Dodd-Frank. Other requirements in Dodd-Frank, including those related to credit rating agencies, also have the potential to impact the securitization market's ability to fund originations of consumer credit.

With regard to GSEs, SIFMA believes there is no easy solution to the question of how to resolve the conservatorships of the GSEs and define the future infrastructure for mortgage finance in the United States. Policymakers faced with a series of difficult choices, each with its own costs and benefits, which will shape the future of housing finance and ultimately affect consumers in the general economy.

Only Congress can define what the goals of national housing finance policy should be. Accordingly, policymakers need to determine what they want from the mortgage markets before they can address what to do with the GSEs or the broader infrastructure, mortgage finance.

That said, SIFMA believes that without the benefit of some form of government support for the conventional mortgage market, mortgage credit would be less available, mortgage markets more volatile, and interest rates on loans higher, because fewer investors would be willing to absorb both the credit and interest rate risk. In short, investors would not support mortgage credit equivalent to the historic norms, thus affecting the supplied stability of such credit.

The issues for policymakers to consider are how liquid secondary markets for loans and mortgage-backed securities should be about the products that would be offered to consumers, the capacity of lenders to extend credit, whether national lending markets could be sustained, or if regional pricing differentials would reappear, and ultimately the cost and affordability of credit to consumers.

The GSEs for all their faults have conferred significant benefits on the U.S. mortgage markets. It is indisputable that these faults need to be rectified. One of the most important was fostering the development of a liquid forward market for mortgage-backed securities known as the To Be Announced market or TBA market, which allows lenders to hedge risk, attract private capital, and reduce the cost of mortgage lending.

In this time of distress, the importance of the TBA market is heightened, and it is difficult to exaggerate the consequences from a loss of confidence and liquidity in this market. Our members believe that some form of explicit government guarantee on the conventional loan, mortgage-backed security market will be required to maintain the liquidity of the TBA market.

The implicit guarantee of the GSE MBS historically reduce the issuance costs of these bonds, because it attracted a number of important class investors and provided for the development of a large, extremely liquid secondary market. SIFMA believes that in the future, these investors will not accept an implicit or non-guaranteed MBS product at levels sufficient to support historic norms.

SIFMA believes portfolios will be required if for nothing else but to facilitate securitization and standard maintenance of securities issuance programs, such as providing a holding facility for loans that are repurchased from securitized pools. Further, GSE portfolios from multi-family mortgage-backed securities provide necessary liquidity for this important market.

If portfolio activities were restricted to serving a limited role, they could be capped at levels significantly lower than their current size. The resolution of conservatorships of the current GSEs will clearly be a challenge. SIFMA believes that the government must clearly state intentions with respect to legacy GSE issues. Bifurcation of markets into pre- and post-reform markets should be avoided. The alternative, essentially abandoning an existing market, would have serious and long-term consequences for the global flow of capital in the United States.

We appreciate the opportunity to testify and look forward to continuing to work with the committee on these important issues, and we would be pleased to answer any questions the committee members have.

[The prepared statement of Mr. Bentsen can be found on page 45 of the appendix.]

The CHAIRMAN. Next, is Phillip Swagel from the McDonough School of Business at Georgetown.

STATEMENT OF THE HONORABLE PHILLIP L. SWAGEL, MCDONOUGH SCHOOL OF BUSINESS, GEORGETOWN UNIVERSITY

Mr. SWAGEL. Thank you, Chairman Frank, Ranking Member Bachus, and members of the committee. Thank you for the opportunity to testify today.

I'm now a professor at Georgetown, but I was previously the Assistant Secretary for Economic Policy at the Treasury from December of 2006 to January 2009, so chief economist during the financial crisis.

My testimony discusses a proposal for GSE reform I put forward with Donald Marron, Jr., and I will very briefly summarize this. I start from the observation that in the next financial crisis, whenever that occurs, the government will step in to ensure that mortgages are available. Market participants will expect a government backstop and act like it.

I see this not as a problem that can be solved, but unfortunately as a fact of life. So, given that, it would be better to make the

terms of the government support limited and transparent, but explicit and priced rather than implicit and free. So our proposal starts here. It centers on competition and this limited role for the government.

The Federal Government would sell a secondary guarantee to firms that securitize mortgage-backed securities made up of high-quality conforming loans. Fannie and Freddie would be privatized and focus on securitization, but would compete with other private firms that are allowed to also securitize conforming loans. There would be no more GSE bailouts. There would be no retained portfolios, no bondholders requiring a bailout, and shareholders would be wiped out before the government pays anything.

Allowing new firms to compete is crucial. The history of government insurance is that the premiums are inevitably underpriced, and this gives rise to a subsidy. So taxpayers will be subsidizing housing, and the question is, who gets the subsidy? Competition will drive the subsidy to families rather than having it accrue to shareholders and management as in the old GSE system.

With competition, a GSE could fail without it being a catastrophic event. Our plan, described in detail in my written statement, maintains beneficial features of the current system, notably the TBA structure in securitization. This proposal, any proposal with a guarantee, puts a lot of stress on the definition of a conforming loan, since firms will naturally look to put their riskiest loans into government insurance.

At least regulators will be aware of this and can shine a spotlight on conforming loans. Regulators must also ensure that firms purchasing this backstop guarantee maintain considerable private capital to take losses in front of taxpayers. Part of the insurance premiums collected by the government would support affordable housing activities, but the GSEs and other firms purchasing the government backstop should not have affordable housing goals that distort the market and are not effective ways to support the very important functions and purposes of affordable housing. These are activities that should be done by the government, and I start from the observation that Congress should vote on all uses of public resources.

Part of the hard work in moving toward a new structure for housing reform will be to limit government involvement and to focus official support on American families most in need. I would say a place to start is to allow the conforming loan limit to return to a level that's consonant with support for American families most in need, rather than dissipating public resources and fostering continued reliance of the housing market on government assistance. GSE reform will require choices. It seems to me that the conforming loan limit is a good place to start.

Chairman Frank and Ranking Member Bachus, thank you again for the opportunity to testify today. I will be pleased to answer any questions.

[The prepared statement of Mr. Swagel can be found on page 163 of the appendix.]

The CHAIRMAN. The next witness is Michael Bodaken, who is the president of the National Housing Trust.

STATEMENT OF MICHAEL BODAKEN, PRESIDENT, NATIONAL HOUSING TRUST

Mr. BODAKEN. Thank you, Chairman Frank, Ranking Member Bachus, and members of the committee.

I am Michael Bodaken. I am with the National Housing Trust and I am more or less the odd man out today. I am representing America's renters and their role in the housing finance system. Often in these discussions, we think about homeownership as the housing finance system, but one-third of us actually rent in this country, and the robust housing finance system must take into account both homeownership and rental housing. And I hope to demonstrate today the importance of the housing finance system for America's renters.

According to the joint center at Harvard, 45 percent of America's renters now pay more than 50 percent of their income for housing, and any solution to the housing finance system must take these people into account. It's fair to say that renters constitute policemen, janitors, service workers, people on our economy, and we need to figure out a solution that embraces both homeownership and rental housing.

There are three simple things that can be done for rental housing that should be part and parcel of your consideration. The first is a well-functioning, liquid, secondary mortgage market that will be able to function in times of crisis. While it's tempting to think about housing crises as affecting all housing, the fact of the matter is that the GSE's underwriting of rental housing performed remarkably well during the past crisis.

If one compares the single family underwriting of the GSEs between 2006 and 2009, you'll see a rise in delinquencies from 3 to 11.5 percent. During that same timeframe, the delinquencies in the family market of all the GSEs remained under 1 percent. It remains under 1 percent today.

The second is a government-supported secondary market that will provide liquidity and countercyclicality in times of crisis. During the 2006 and 2009 timeframe, and especially in 2008 and 2009, private lenders suffered significant losses in the multi-family mortgage market; not so with the GSEs. Again, taking a look at the mortgage lending and the GSEs in multi-family housing alone, they occupied 84 percent of rental housing mortgages during that timeframe, effectively acting as liquidity, as countercyclicality during a time of crisis in our Nation's mortgage finance system.

And, finally, a majority of these loans can and should be made to low-income households renting in the market. People think that the GSEs are only renting to people who are well off. The fact of the matter in the multi-family space, 62 percent of the GSE's loans served households who are learning less than 80 percent of median income. I'll repeat that: 62 percent over a 4-year timeframe were serving households earning less than 80 percent of median income. And so in the rental housing finance market—and this was profitable by the way—this was not unprofitable. It was not a bailout.

The bailout that was provided was not for the multi-family housing finance system. We need to find some way to make sure that they don't throw the baby out with the bathwater when considering how to deal with mortgage finance for rental housing.

There is a consonant, something happening right now in the market with respect to HUD-financed housing, Section 8 contracts—800,000 of those apartments will expire during the next 5 years, and in my prepared remarks I suggest a number of ways in which the GSEs or whatever is coming to the GSEs can help Congress deal with this oncoming expiration of very low-income housing.

Time doesn't allow me to provide all the recommendations, but suffice it to say that there is a way for you to solve both problems without putting the taxpayer at risk. Again, the taxpayer was not put at risk in the last crisis under rental housing. Fixing the existing housing finance system is a complicated endeavor, one that requires careful consideration of taxpayer loss and the importance of housing to our national economy.

We know that the performance of the present GSEs in multi-family housing was prudent. It was profitable, and it served households at less than 80 percent of median income. These Enterprises provided the essential countercyclicality for multi-family housing that was required during times of stress. These are a good basis upon which to build whatever we decide to do with the next generation of housing finance intermediaries.

I'll be happy to answer questions at the conclusion of the panel. Thank you.

[The prepared statement of Mr. Bodaken can be found on page 74 of the appendix.]

The CHAIRMAN. Now, Mr. Christopher Papagianis, who is the managing director of Economics 21.

STATEMENT OF CHRISTOPHER PAPAGIANIS, MANAGING DIRECTOR & POLICY DIRECTOR, ECONOMICS21

Mr. PAPAGIANIS. Chairman Frank, Ranking Member Bachus, and members of the committee, thank you for the opportunity to testify.

I am the managing director of the nonprofit think tank E21, economic policies for the 21st Century. Drawing on the expertise of practitioners and academics, our mission at Economics21 is to foster a spirited debate about the way forward on issues like housing finance.

Over the past year, a consensus has emerged that the main goal in addressing housing finance reform is to promote the efficient allocation of credit to finance single-family and multi-family housing. Fundamental to this objective is the restructuring of our system, which includes not only resolving the GSE conservatorships, but also rationalizing all the other ways the government subsidizes housing.

Until recently, the largest Federal subsidy for homeownership was through tax expenditures, in other words, by lowering a homeowner's tax liability. Over the next 5 years, tax expenditures are projected to reduce Federal revenues by roughly $1 trillion. One of the underappreciated consequences of all the recent actions to backstop housing is that the government now provides roughly the same amount of support for homeownership through spending programs.

A bipartisan goal moving forward should be to ensure that the dozens of spending programs have discrete objectives and are clear-

ly and accurately accounted for in the budget. Unlike fairly straightforward tax accounting, it is difficult to compare the cost effectiveness of spending programs, especially loan guarantees or contingent liabilities.

Fannie and Freddie are unfortunate examples of this principle. CBO estimates that Fannie and Freddie cost taxpayers $291 billion last year, and will cost an additional $90 billion over the next 5 years. At the end of the day, the GSEs will likely be this crisis' most expensive bailouts, many times larger than AIG or Citi Group, or even the entire and much maligned TARP.

As policymakers consider new alternatives, they must be careful to make clear the risks and costs of subsidizing housing investment. Government loan guarantees can appear to be low cost initially, since they pay out only if a borrower defaults in the future. But we have learned that such guarantees are contingent on an accurate assessment of all the various risks, and the guarantees can be extremely expensive if the original assessments are wrong, or if the defaults all happen to occur at the same time.

It is also important for policymakers to recognize that bailouts in the housing sector are inevitable regardless of the system's structure if the key institutions involved do not set aside sufficient capital. By most accounts, we are still in the early innings of this reform debate, and I applaud this committee for investigating bold new plans.

In my view, policymakers should pay particular attention to those that would more directly deliver subsidies to their targeted beneficiaries, individuals and families. In the end, the overarching goal should be to make taxpayers—and by that I mean current homeowners, prospective homeowners and renters too—better off through more efficient subsidy delivery and budgetary transparency.

Thank you.

[The prepared statement of Mr. Papagianis can be found on page 141 of the appendix.]

The CHAIRMAN. The next witness is Mr. Michael Farrell, who is the chairman and chief executive officer and president of Annaly Capital Management. He is here on behalf of the National Association of Real Estate Investment Trusts.

STATEMENT OF MICHAEL A.J. FARRELL, CHAIRMAN, CEO, AND PRESIDENT, ANNALY CAPITAL MANAGEMENT, INC., ON BEHALF OF ANNALY CAPITAL MANAGEMENT AND THE NATIONAL ASSOCIATION OF REAL ESTATE INVESTMENT TRUSTS' MORTGAGE REIT COUNCIL

Mr. FARRELL. Chairman Frank, Ranking Member Bachus, and members of the committee, thank you for the opportunity to speak today on the future of housing finance, a subject that virtually affects every American and not just homeowners.

My name is Mike Farrell, and I run Annaly Capital Management. Annaly is the largest listed residential mortgage REIT on the New York Stock Exchange with a capitalization of over $11 billion.

Annaly, together with our subsidiaries and affiliates, owns or manages over $90 billion of primarily agency and private label

mortgage-backed securities. Additionally, we are deeply involved in mortgage markets through our securitization structuring, financing, pricing and advisory activities.

I am here today representing the secondary market investors who have historically provided the majority of the capital to the $11 trillion mortgage market, and my remarks are focused from that perspective.

Debate over housing finance reform has largely been about the government's role in it, and rightly so, given that Fannie and Freddie's government-sponsored hybrid charter was ultimately disastrous for taxpayers.

However, there are certain activities that these agencies performed that are important to the pricing and liquidity of the housing and mortgage market.

The current housing financing system, certainly the one that prevailed until housing standards started to slip around 2004, is the most efficient credit delivery system the world has ever seen.

There are important elements of the existing system that are worth keeping. First, securitization, where fully documented borrowers with similar creditworthiness using similar mortgage products are pooled and receive the benefits of scale and pricing.

Second, the government guarantee to make timely payments of interest and principal MBS that scales the process even further by making the securities more homogenous.

Third, the TBA market, which is what Fannie, Freddie, and Ginnie facilitated. It is through the TBA market that most residential mortgages are pooled and sold and enables originators and investors to hedge themselves.

I believe that the market will adapt to whatever changes occur in these new items in the housing finance system. However, the market will adapt to the new structure by re-pricing it.

If the new system has significantly different risks, uncertainty and friction than the housing finance system we have now, the consequences may be that our housing finance system is smaller with lower housing values and less flexibility and reduced mobility for borrowers.

This can have an ongoing and broad consequence for economic growth.

If mortgage rates and house prices were not an issue, the government would not have been involved in housing finance. These are important issues. Therefore, I believe the housing finance system that utilizes a government guarantee on well-underwritten mortgage securities would maintain the significant size and liquidity of the market as well as continue to provide for relatively lower costs to the borrower.

Going forward, however, the portfolio activities of Fannie and Freddie should be eliminated. The private market would expand its investment activity to fill this role, much like Annaly and its brethren and competitors do now.

It is important for the committee to understand that the majority of agency MBS investors finance their positions using financing that is available and priced where it is because of the government guarantee on the assets.

Fannie and Freddie financed their portfolio purchases through the capital provided by the debt markets. This is an essential component of housing finance.

In any transition, Congress must consider the potential size of the market in the system to which we are transitioning because about $8 trillion of the $11 trillion in home mortgage debt is funded by investors in both agency and private label mortgage-backed securities. Of that $8 trillion, some 70 percent is held by investors in rate sensitive agency mortgage-backed securities with the balance in credit sensitive private label MBS.

There is not enough capital in the universe of credit sensitive private label MBS investors to supplant the installed base of rates buyers, at least not at the current price.

Without the support of mortgage values and home prices that are provided by the government guarantee, the funding goal of $8 trillion will get smaller only by shrinking the value of the housing collateral and the mortgages needed to finance them.

At its essence, any transition to a new housing finance system has to factor in the speed at which these values will change.

In conclusion, I believe that Fannie and Freddie should continue to operate in conservatorship with the goal of winding down their retained portfolio's over a set period of time and honoring the guarantees of the agencies.

For simplicity sake and for the markets' certainty and simplicity, going forward, Congress should consider delivering explicit government guarantees on MBS in a manner similar to Ginnie Mae.

This would enable it to continue to serve as the portal between the borrower and the secondary market through securitization and the TBA mechanism, but most importantly enforce underwriting standards for mortgages carrying the government guarantee.

I thank you again for the opportunity to testify today, and I look forward to answering your questions.

[The prepared statement of Mr. Farrell can be found on page 108 of the appendix.]

The CHAIRMAN. Next, is Susan Wachter, who is the Richard B. Worley Professor of Financial Management at The Wharton School, University of Pennsylvania.

STATEMENT OF THE HONORABLE SUSAN M. WACHTER, RICHARD B. WORLEY PROFESSOR OF FINANCIAL MANAGEMENT, THE WHARTON SCHOOL, UNIVERSITY OF PENNSYLVANIA

Ms. WACHTER. Chairman Frank, Ranking Member Bachus, and members of the committee, thank you for the invitation to testify.

The U.S. housing finance system suffers from market failure that requires reform. In research with colleagues, we show that the explosive growth of private label securitization in non-standard mortgages was a market driven phenomenon.

It was securitizers' appetite for private label mortgage-backed securities that drove a race to the bottom in lending standards, risk creation, and competition for market share. This was the primary cause of the housing bubble.

The proof is the declining spread of mortgage-backed securities over Treasuries in parallel with the rise in non-standard mortgages and private label securitization, even as risk grew.

If possible, I request that the papers referred to be entered into the record.

The CHAIRMAN. We gave consent for that to be done.

Ms. WACHTER. Thank you. The Dodd-Frank Act attempts to remedy some of the problems caused by the former system of securitization. It requires a securitizer to retain at least 5 percent of the default risk of the underlying assets, but it exempts qualified residential mortgages from this regulation.

This is a potential loophole, but even mortgages that do not meet the standard put the system at risk. Five percent risk retention is not a panacea. Many of the most fragile banks retained far more than 5 percent of the default risk, but this did not stop them from leading the race towards the bottom.

A sustainable solution will be to require the market to move to transparency and information standardization. These considerations are imperative to the transition from the current conservatorship of Fannie and Freddie to any new arrangement.

For the time being, we must ensure that the GSEs remain in their conservatorship until the housing market stabilizes. They guarantee more than half of the mortgage market, $5 trillion, and they support almost all new transactions.

Without conservatorship, housing prices would have fallen farther and faster and would be falling farther and faster now.

However, reform of the GSEs is also imperative. It must go hand-in-hand with strict regulation of private label securitization.

When the government designates qualified residential mortgages, investors will expect these products to be safe and will be less likely to investigate the risk profile.

Securitization offers a benefit to securitizers. It increases liquidity and profitability of the underlying assets. Therefore, securitization should only be available to products whose risks can be analyzed. Securitization of non-standard mortgages and the opacity this creates increases systemic risk.

The resulting risk is owned by the taxpayer and the taxpayer will bail out the system with foreclosures driving towards a recession or even depression.

Regulators must adopt stricter standards about information that must accompany the issuance of private label mortgage-backed securities.

Without government support, the long-term fixed-rate mortgage would not be the dominant form of housing finance in the United States. As the experience of other countries confirms, we must not lose this centerpiece.

One solution that has been suggested today is for the government to sell an insurance wrap to licensed mortgage insurers that guarantees the underlying mortgage for standard mortgage-backed securities with private capital in the first loss position.

Another option is to group mortgage originators into cooperatives that purchase and securitize the mortgages of the respective members.

In truth, however, both these options are open to crowding out by poorly underwritten and growing in risk private label security mortgages that spelled the GSEs' demise.

If private label securitizers can be more profitable in the short run generating fees and generating seemingly more "affordable" mortgages, then originators will flock to the private securitizers, leaving the government wrap or coop's in the dust and making them fail.

These options have great promise but they all will require significant regulation of private activity to succeed.

Thank you.

[The prepared statement of Professor Wachter can be found on page 170 of the appendix.]

The CHAIRMAN. Mr. Ed Pinto, a real estate financial services consultant is next.

STATEMENT OF EDWARD J. PINTO, REAL ESTATE FINANCIAL SERVICES CONSULTANT

Mr. PINTO. Thank you, Mr. Chairman, and Ranking Member Bachus. Thank you for the opportunity to testify today.

My purpose in testifying is to provide both words of caution and advice. John Adams observed 240 years ago that facts are stubborn things, and whatever may be our wishes or inclinations or the dictates of passion, it cannot alter the state of facts and evidence.

Here are the stubborn facts that should demonstrate the dangers posed by repeating past government housing policy mistakes.

Numerous proposals have been put forth today and over the past year that call for ongoing government support of private mortgages. Most say it is inevitable.

You have already heard about Paul Volcker's advice and Ed DeMarco's advice. The bottom line is a government guarantee always ends up with the privatization of profits and socialization of losses, period.

If you go back to 1992 when this Congress passed the Safety and Soundness Act that regulated Fannie Mae and Freddie Mac, what was the avowed purpose? It was to reduce the risk of failure by the GSEs and protect the taxpayers from ever having to bail them out. This was just a mere 3 years after the bail out of the thrift crisis. That was the origin of the 1992 Act.

I would ask that again you look at what past history has shown and where you are going today with these requests to provide an ongoing government guarantee that is now explicit.

Secondly, a housing finance system designed around flexible and innovative underwriting standards in the pursuit of affordable housing goals presents a systemic risk to all homeowners and to our economy.

Consider the advice of FDIC Chairman Sheila Bair. We must recognize that the financial crisis was triggered by a reckless departure from the tried and true commonsense underwriting practices, traditional mortgage lending that worked so well in the past, because lenders required sizable downpayments, solid borrower credit histories, proper income documentation, and sufficient income to make regular payments.

We had such commonsense practices in the early 1990's. They were slowly destroyed as a result of the 1992 GSE Act along with other policy initiatives.

Third, our housing policies have been deeply flawed. Again, Chairman Sheila Bair described it well. For 25 years, Federal policy has been primarily focused on promoting homeownership and promoting the availability of credit to home buyers.

In Appendix A, I provide a list of 16 procyclical policies that created the long and unsustainable boom in house prices and housing finance. No other developed nations went to such policy excesses and none have experienced our default levels.

I would add that we had no countercyclical policies in place during that time, not one.

These policies boomeranged upon the very homeowners you were attempting to help.

It is now clear that this interference has been both a failure and unnecessary.

How to get our housing finance system off life support. First, have faith in the free market. Consider how the free market provides an abundance of other necessities of life, namely food and clothing, like shelter, you cannot live without.

Second, one cannot justify a continuation of flawed policies of government interference just because rates may go up. Rates go up and down all the time. Over my career, mortgage rates have gone from 9 percent in 1974 to 18 percent in 1981 to 4 percent today. This has had much less impact than the congressionally-mandated abandonment of underwriting standards that took place starting in 1992.

Without the distortions created by government intervention, the market will price for credit risk, adequate downpayments, and capital requirements would assure sound underwriting, and bad business decisions would not be bailed out by the taxpayers.

Other developed countries do this without such government guarantees.

Any return to a privatized housing finance system must be based on the following principles: We must withdraw the government from having any role in the financing of prime mortgages and return to a system based on private capital.

It is time to end the government's affordable housing mandates and to allow the private sector to return to commonsense underwriting standards. It is time to return to an emphasis on thrift, and it is time to return FHA to its former role of serving a low-income market in a responsible way.

I have outlined in my written testimony some opportunities for the private sector to do this. I have also addressed how Fannie and Freddie could be wound down, and I have also addressed how FHA should be returned to its original goals of serving low-income homeowners, and that be their mission and make it transparent.

With that, I thank you for the opportunity to testify.

[The prepared statement of Mr. Pinto can be found on page 153 of the appendix.]

The CHAIRMAN. Finally, Mr. Tom Deutsch, executive director, American Securitization Forum.

STATEMENT OF TOM DEUTSCH, EXECUTIVE DIRECTOR, AMERICAN SECURITIZATION FORUM

Mr. DEUTSCH. Chairman Frank, Ranking Member Bachus, and distinguished members of the committee, my name is Tom Deutsch.

As the executive director of the American Securitization Forum, I very much appreciate the opportunity to testify here on behalf of the 330 member institutions of the ASF who originate, structure, trade, and invest in a preponderance of mortgage-backed securities created in the United States, including those backed entirely by private capital, as well as those guaranteed by public entities such as Fannie Mae, Freddie Mac, and Ginnie Mae.

Let me begin my remarks by stating what I believe to be a near unanimous or consensus position, that there is a very strong political and economic will in the United States today to decrease the overall level of Federal involvement in housing finance and have more private capital eventually replace many of the risks and rewards of that involvement.

Given that 89 percent of mortgage loans made in America in the first half of 2010 were guaranteed by the GSEs and ultimately the U.S. taxpayer, there is not a shortage of opportunity to achieve this goal.

There is one key area that I would like to emphasize in the debate regarding the transition and future architecture of the GSEs, and that is there should not be any underestimation of the critical importance of maintaining through any transition period the so-called To Be Announced or TBA market.

Although not well understood outside the housing finance industry, the TBA market makes it possible for borrowers to have the peace of mind of locking in favorable mortgage rates and originators immediate and liquid sale into the capital markets.

Ultimately, any new structure of the U.S. mortgage finance system must have a TBA style structure for plain vanilla conforming loans.

Second, the role of any guarantee, if there is to be a guarantee, should be catastrophic or 100-year flood in nature that allows the maximum use of private capital to limit the government's potential liability, while in the interest of investor confidence, provide a critical risk backstop for unforeseeable macroeconomic risks.

Reducing dependence on public guarantees for new mortgage origination necessarily implies that private capital investment in mortgage originations will have to be reinvigorated, although large and small bank portfolios have continued to help fund some level of mortgage origination outside the GSE business and in the credit crisis, that level has not been sufficient to meet overall consumer demand and reinvigorate the housing market.

As regulatory capital levels will rise through various policy initiatives such as Basel III and FAS–166 and 167, the balance sheets of large banks and small banks will be further constrained over time from extending additional mortgage credit.

Although key bipartisan legislative initiatives such as the legislation offered by Representatives Garrett and Kanjorski may help create additional funding sources from the secondary market for banks to fund additional mortgages, there will still be outer limits

of bank risk and capital that severely constrain the availability of mortgage credit unless or until private capital begins flowing again through mortgage-backed securities.

As debate moves forward on the elimination or transformation of the GSEs, I want to encourage a debate of equivalent strength on how to reinvigorate the private label RMBS market without overburdening that market with regulation or regulatory uncertainty.

On Monday of this week, the FDIC unilaterally formalized broad revisions to the securitization safe harbor rules that would radically change the nature and structure of RMBS transactions, and most particularly how RMBS will be treated in the case of a bank issuer's insolvency.

ASF investor members in particular are quite concerned that their confidence in bank-issued private mortgage transactions will be significantly reduced rather than enhanced by these new rules because the FDIC as of January 1, 2011, will now be able to disregard the "true sale" nature of the securitizations and repudiate the underlying contracts.

This is in direct contrast to the previous FDIC safe harbor.

The net effect of these new FDIC powers is to create a significant market risk for investors in private label securitizations, for 100-year-flood type events. This is in direct contrast to ASF's earlier recommendation and many other recommendations from this panel here today that investors need to be protected from the 100-year-flood event rather than be subjected to additional uncertainty in case of that event.

Although the securitization market has been deeply engaged in its own reform efforts and in support of some of the appropriate legislative changes in the Dodd-Frank Act, now there are a myriad of proposed and enacted regulations that have created an extraordinary burden for the market to understand and comply with in a short period of time.

While many of these proposed initiatives have merit in isolation, there does not seem to be a robust macro prudential oversight or rationalization for the potential cumulative consequences of these changes.

As we reconcile each of these changes over time, we need to carefully consider how all these pieces moving simultaneously will ultimately impact the mortgage market.

I thank you again for the opportunity to testify here and I am looking forward to any questions you may have.

[The prepared statement of Mr. Deutsch can be found on page 82 of the appendix.]

The CHAIRMAN. Thank you. I appreciate the reference to the multi-family market, and that has been very important. I think sorting out multi-family and single family is an important piece of this.

Let me go back to our first witness and others. One of the obvious things that is clearly acknowledged as a mistake was setting up what were in some ways private corporations, Fannie Mae and Freddie Mac, but infusing into their business decisions a social component, so that because of the goals, you could never be sure of what the basis was.

The alternative is what I think Mr. Heid was talking about, and it is a model that the Federal Home Loan Bank followed since Henry Gonzalez put through the affordable housing program, in which the entities involved, the private entities, made business decisions based on profitability and a certain fixed percentage decided by public policy of the revenue generated from that, the profit, presumably, is dedicated to subsidizing housing, and in my view, they should be primarily rental housing, and we would hope to find entities, housing financing entities or others, who could be trusted with that.

That is essentially the model you are talking about. Let me ask Mr. Bodaken. Would that solve the problem or respond to the needs you talked about?

Mr. BODAKEN. Yes. I think that it's important to note that, without subsidy whatsoever, the GSEs are able to serve low-income households. When you get down to very low-income households, we have an intractable problem. Anything below 50 percent of median income, as I mentioned, is a problem.

Through either some kind of a millage, or some kind of a profitability standard, you are going to need to set aside some form of subsidy, whatever you call it, where the private market simply can't provide rental housing that is affordable to very low-income households.

But the vast majority of the activities of the progenitors of whatever you're calling the GSEs can be limited to low-income households without significant taxpayer subsidy. That's the proof in the pudding of comparing the multi-family versus the—

The CHAIRMAN. But they're not going to be—if you're talking about something—I would be opposed to any mandate to them.

Mr. BODAKEN. Yes.

The CHAIRMAN. They will be making a business decision, if they can make the money. But to the extent that we—and, for me, that is particularly relevant in the rental field.

Mr. BODAKEN. And, indeed, that has been the history. They were profitable—

The CHAIRMAN. We are not going to talk about history. But the point I would make is this. When you are talking—particularly, I think, when you start subsidizing homeownership, you're getting into trouble.

Mr. BODAKEN. Yes.

The CHAIRMAN. People can't clearly afford it, then you are imposing on them an obligation, going forward, that was shaky from the beginning, which you don't have when you are talking about rental housing. And that's why I would feel strongly about it.

Mr. Papagianis, there is just one thing I noticed in your piece—one of the things this committee had talked about and had passed some legislation on was covered bonds. You expressed some skepticism about the viability. Would you expand on that?

Mr. PAPAGIANIS. First off, let me just say that I support covered bonds, and I think that the committee should consider setting in place, working with the FDIC and others, a legal structure—

The CHAIRMAN. We have already done that.

Mr. PAPAGIANIS. Okay.

The CHAIRMAN. I was interested in your skepticism about their viability.

Mr. PAPAGIANIS. But the viability issue is really in regards to the FHLBs, the Federal Home Loan Banks. The Federal Home Loan Banks borrow at sub-market rates. And the function of the FHLBs is very similar to what the covered bond market would actually do.

And so, the question is, if you're a bank and you're looking for "capital relief," in essence to free up capital to do more business, is it—are you going to get a better price through the Federal Home Loan Banks, or are you going to get a better price through covered bonds? And I—

The CHAIRMAN. Even if we—even having moved to set it up, they may just be out—undersold by the Home Loan Banks.

Mr. PAPAGIANIS. But again, the same concern with Fannie and Freddie exists, where they're able to borrow at sub-market rates, that obviously led to moral hazard. And I think that there is potential for moral hazard with the Federal Home Loan Banks.

The CHAIRMAN. Thank you. That is—I just want to make one notation. I notice, actually the ranking member said it and somebody else—the ranking member said he was skeptical of this system whereby the government guarantees that loans will be paid off, and the private entity gets the benefit from making those loans which the government has guaranteed to be paid off. And I agree with that, and that's why I voted for the change in student loans.

That model that we talk about, of one entity making the loans but the Federal Government guaranteeing they be paid off, I think was a good rationale for changing that, as well.

The gentleman from Alabama.

Mr. BACHUS. I thank the chairman. And I think I have enjoyed all your testimony. I think it does move us forward. And Mr. Bodaken, I agree with much of what you said about the rental market, and I had noted some months ago with some amazement that there had not been losses there.

We don't need to do anything to further sort of disadvantage people who choose to rent, particularly in that I think the worst victims are people who took out mortgages that they couldn't afford. Whether it was their own involvement—but obviously, the worst thing you can do to a family is to put them in a house they can't afford, because it's really a traumatic experience that they go through, both economically and, I think, emotionally. And one way to avoid that is renting.

I noticed, Mr. Swagel and Mr. Farrell—or Professor Swagel—I would agree—I think I would agree on one thing. And I don't commit any of my colleagues, but if we're going to have a guarantee, it needs to be explicit. I think we all agree on that. This implicit guarantee is—you can't be half pregnant, you know. There either is a guarantee or there isn't. We didn't know for years. But if there is going to be a guarantee, it needs to be explicit.

Now, Mr. Papagianis, you mentioned on budget. Now, if you're going to have an explicit guarantee—and I think one reason it was implicit is no one wanted to put it on budget. But do you put it on budget?

And how do you calculate the tail risk—which it is, a tail risk. I think if there is a guarantee by—down the line, it is a tail risk.

A tail risk, by definition, is something that you don't foresee. So how do you calculate that tail risk? And should it be on budget? I will just ask all of you. Any ideas there?

Mr. HEID. The work we have done so far on this would say that there is a way to structure this in such a way that if the guarantee is paid for adequately, it can be held off balance sheet, not unlike some of the Ginnie Mae markets that exist today.

Mr. BACHUS. But off budget?

Mr. HEID. Off budget. And then what we would suggest is, relative to any housing subsidies, make those on budget, very explicit, and make it a policy choice, in terms of whether or not to provide true subsidization of housing as its own separate and independent decision.

Mr. BACHUS. All right. Mr. Pinto?

Mr. PINTO. I think, when you look at this tail risk question, we have an excellent example, and it's called the deposit insurance. And we have had failures there. We had a $150 billion failure in the late 1980's with the FISLC, and it's no more. Fortunately, I guess, at that time there was another agency called the FDIC that came in.

When we had the problem this time, there wasn't any agency to take its place, so they had to come up with TARP. And TARP, effectively, bailed out the FDIC. And the FDIC, in the mid-1990's, made their premium zero, effectively. They went to a fixed amount of a few thousand dollars, regardless of the size of the bank, because their losses were so low they just assumed there weren't going to be any.

And these are the kinds of problems you get into when you start having the government take on these risks. You start doing things because it looks like everything is going great, and it is, in fact, the tail risk that you can't anticipate. And then it hits the taxpayers.

Mr. BACHUS. Sure, and I want to recognize Professor Wachter, or Dr. Wachter. But before I do, some other examples are the National Flood Insurance Program, where the government is required to statutorily have sound actuarial premiums. Of course, we now find out that they're $20 billion in debt, and taxpayers will probably have to make repayment.

The Pension Benefit Guarantee Corporation, we now look at $168 billion worth of losses, even though it's "self-funding," which is the same recommendation here. The FHA mortgage insurance program, the FDIC-administered Deposit Insurance Fund, there are already people beginning to say taxpayers ultimately are going to have to pick up those losses if they continue.

Professor Wachter?

Ms. WACHTER. Thank you, Congressman. You asked the absolutely key question, which is, how do you price this risk?

It's one thing to price a risk with you can have idiosyncratic failures, so that if a system like the FDIC, when you have always some banks failing because of their individual practice. It is another thing to attempt to price systemic risk. And this is nearly impossible. As a finance theorist would tell you, this is nearly impossible.

And, indeed, it doesn't matter whether the systemic risk is coming from the private sector or the public sector. The private sector

generates systemic risk too. In other countries, such as the U.K., they stepped in to rescue a private sector failure, because the alternative would have been a depression. So we are faced with that. The answer has to be strict regulation and information that is real-time, so that the risk is monitored and tracked, and is not allowed to grow. That is not impossible.

The CHAIRMAN. Thank you. The gentleman from Pennsylvania.

Mr. KANJORSKI. Thank you very much, Mr. Chairman. First of all, let me compliment the panel. Although you have different philosophical positions, I think you have really—in a broad sense, if we could only put you together in a room somewhere, I think we could come up with a consensus of what we should do, which could be helpful.

But I hear in the two extremes one group of the panel favoring the private sector solution—particularly you, Mr. Pinto. And I am sympathetic to that, except what do you do about the fact that the real estate market represents 15 percent of our economy, and it's in the tank?

And if we take a radical position right now to cut it free from any government subsidy, and allow the marketplace to give the response, we probably will take a much longer period of time to get out of the recession, we run the risk of getting into a depression, and the price to be paid on all segments of the economy could be horrific. What's your response to that?

Mr. PINTO. My response to that is what I have suggested, and what some others have suggested, is a very explicit wind-down of Fannie and Freddie over time. Their portfolios can be sold off, or allowed to run off, which solves one of the big problems. The losses are the losses. They are already there.

And secondly, by reducing their mortgage limits on a schedule or by a specific plan, sunsetting them so that the market knows they are going to be gone in 10 years and it's going to take an act of Congress to continue them, so that there is some feet to the fire, if you go through all of those things, you can wind—you can back out of this process.

Mr. KANJORSKI. I take it, then, that you do not agree with our friends on the other side of the aisle with the McCain amendment that was offered during conference on the regulatory reform bill to immediately close down Fannie and Freddie. That would not be a rationale decision, would it?

Mr. PINTO. Closing down Fannie and Freddie, how that's done, I think we have to look at how quickly the private sector moves into the breach.

The clear—I have to—I was very disappointed with Dodd-Frank, in the fact that the definition of "qualified residential mortgage" did not provide for prudent underwriting standards, a minimum downpayment, and a credit history.

Mr. KANJORSKI. Will you—

Mr. PINTO. The fact—if that message was given to the marketplace, and if the affordable housing was moved off the table, and the private sector was allowed to come back into the market, I think you would be amazed at how quickly it would happen.

Mr. KANJORSKI. You believe, then—I'm trying to get you to say yes or no, in terms of do you agree that we can close down Fannie

and Freddie today by the action of the Congress, or do we have to take a longer view, attend to the portfolio that's out there, and come up with an actionable or replaceable alternative for the marketplace, considering the fact that we're dealing with 15 percent of the American economy?

Mr. PINTO. My only concern about not doing it immediately—and there is some appeal to that—is how to hold Congress' feet to the fire so they don't backtrack.

Mr. KANJORSKI. Okay, I—

Mr. PINTO. That's my only concern. If we could come up with a way of making sure you couldn't backtrack, and they would actually go out of business, then I think we're fine. If you won't do that, then I think they have to be killed immediately.

Mr. KANJORSKI. Right. So you're saying a good, prudent decision would be not running ahead and closing down Fannie and Freddie immediately, because it could be injurious to the economy, as a whole. But you may concede to do that and go to pure market circumstances, because you don't trust—as the American people obviously have a low trust—of the Congress acting responsibly. Is that—

Mr. PINTO. I think that's a fair statement.

Mr. KANJORSKI. Okay. And it is reflective. The fact that in 2001 we changed the responsibility of balancing a budget by cutting taxes—I remember, what was the cry, "It's your money, you're entitled to it?"

It turned out it wasn't your money, it was the Chinese money, and the people who were willing to fund this terrible debt that has taken us from $5 trillion to $12 trillion, because we could not rely on honest, rational sense, reasonable sense by the Congress to apply what was good economics. They opted for—and probably will in the future opt for—political consideration over good economics. Is that correct?

Mr. PINTO. I didn't follow the beginning part of that, it's a little out of my area. But all I know about the Chinese is nobody held a gun to our head to take the money. I look at what drove that—

Mr. KANJORSKI. We are doing that today, aren't we? Don't we have a cry in the Congress today about the tax cut, in terms of you should just give that tax cut, even though it cost $700 billion more in debt?

The CHAIRMAN. The gentleman's time has expired.

Mr. KANJORSKI. That's a rhetorical question.

The CHAIRMAN. The gentleman from Delaware.

Mr. CASTLE. Thank you, Mr. Chairman. Mr. Pinto, I am sort of interested in your testimony and where we might end up. Let's—if you could just extract this out, say, 10 years from now. And let's say that we had done something about Fannie Mae and Freddie Mac and whatever dissolution or whatever has to happen there. What is your plan, or what is your thinking about where we would be and what we would have then?

And I ask that question because you have indicated a private secondary market or whatever. Or is a private secondary market even necessary? I think that question needs to be raised.

And I'm just curious as to where you think this might be, if we were to actually go through a dissolution of Fannie Mae and

Freddie Mac, and where would this country be, and where should we be?

Mr. PINTO. That's a legitimate question. And my answer would be, first of all, we had a working, workable underwriting structure in place in 1990. I have documented this in a chronology that I have written, which shows that the LTVs, the credit, all of the things—FHA was really the high-risk part of the market.

People forget that subprime market in 1990, if you had a FICO score—it would be the equivalent, they didn't have FICOs in use back then—below 620, you would need 25 percent down. I was listening to CNBC the other day, and they were lamenting the fact that today, somebody with below a 620 FICO with 15 to 20 percent down couldn't get a loan. That's the way the market was when it was being operated by the private sector. There was this certain responsibility, in terms of downpayment. We need to go back to that commonsense underwriting, which we haven't had for a very long time.

I have written publicly, or stated publicly, that it will probably take 10 to 15 years to get back to a system that is pretty well privatized and operating on a sound basis. I believe, because I believe in the free market, that the free market will come in and fill as the government recedes, will come in and backfill that with responsible lending, if they're not forced to meet artificial, affordable housing goals, and if they're allowed to offer a variety of instruments, including things like pre-payment penalties.

I know people hate pre-payment penalties, but there is a marketplace for them because we can't have a system—if you start with, "You have to have a 30-year mortgage and no pre-payment penalty," yes, you probably need to have a government guarantee, and FHA insuring many, many of the loans. But if you start backing away from that, and looking at what other countries have done, and how they have some variety and things, you don't end up in that spot. And so, if you start with defining things a certain way, you're going to get a certain answer.

So, again, I think we need to let the government back out of this in a reasonable, responsible way. But it has to be very deliberate, and it has to hold Congress' feet to the fire, so that they can't undo it.

Mr. CASTLE. Is it your belief—I think you stated this, I'm not certain I followed this as carefully as I should—but that there would end up being a private secondary market when this is all said and done? Or would this—

Mr. PINTO. There would be—as I indicated in my testimony, there would be portfolio lenders, there would be, potentially, covered bonds. There is a Danish system out there that could be emulated. There would be private mortgage-backed securities. All of those things could develop to take the place of Fannie and Freddie. And FHA would go back to its, roughly, original role.

I would see private mortgage insurers—which are the only entities so far in this crisis that are actually raising capital, in terms of the mortgage space itself—I would see them participating, as they have in the past. And so those are the things that I would see.

One of the problems I think you're facing is you have so nationalized this process—if you were running the food chain in this coun-

try, and you ran all the supermarkets, you would be—and they all looked like the post office, you would be hard-pressed to figure out how to bring Giant and Safeway into being. But the fact of the matter is, Giant and Safeway came about not because the government designed them; they came about because the private sector designed them. We need to let the private sector get back into this process, and fill the vacuum as the government recedes.

Right now—and again, I think if you look at the private sector and the free market, they don't like to go up against a brick wall. And you have heard a lot of testimony here that 90-plus percent of all the financing is guaranteed by the government. That's the equivalent of a brick wall for the private sector. They can't compete against that. If that wall starts receding, you will start seeing the private sector grow into it.

The CHAIRMAN. The gentlewoman from California.

Ms. WATERS. Thank you very much. Mr. Bodaken, I have observed redlining when certain communities could not get a mortgage. And, literally, a line was draw around those communities.

Mr. BODAKEN. Yes.

Ms. WATERS. And I have observed what has happened in housing from that point in time to the subprime market and the securitization of these loans that were packaged by small banks and others. And I am trying to figure out, without government support—

Mr. BODAKEN. Right.

Ms. WATERS. —how can, say, a family of four—two adults, two children—earning about $45,000 a year, how would they be able to afford a home if, in fact, we remove government support?

Perhaps there should be some changes in the way Fannie and Freddie works, or something else to take its place, but could you help me to understand what your thinking is about he we can preserve the opportunity for both rental housing and for residential family homes?

Mr. BODAKEN. Yes. Very briefly, I am not an expert in single-family housing finance. What I know about the crisis is that the single-family market was the one that really brought us to the precipice of, and the problems that we had to bail out both Fannie and Freddie.

I think one thought about government support, either in rental housing or homeownership, is that it has to be carefully thought out, as the chairman mentioned, as to how it could be both profitable, and how—there are certain targeted populations where there needs to be explicit subsidies to make sure that people have shelter. The private market—no one on this panel would disagree—cannot effectively serve people who are in less than 30 percent or 40 percent of median income. It's just the statistics are undeniable.

However, for 90 percent of the American public, the government-supported system in the rental housing market worked very well. It works very well for low-income households.

Now, in Los Angeles, where you're from, low income might mean people earning up to $50,000 or $60,000, because of the high concentration of—the high cost of housing and high cost of living there. But it is difficult, I think, for us to deny that for people earning $45,000, a family of 4 in Los Angeles County, to get a home,

a reasonably-priced home without some amount of subsidy, I don't see how that would be explicitly possible. Just going—

Ms. WATERS. Thank you very much. If I may, I want to go to Mr. Heid. You are representing the Mortgage Housing Policy Council. I think at one time, Wells Fargo and others in this council were a part of FM Watch, and you were concerned about Freddie and Fannie and the fact that they were expanding their role in the housing market.

But it seems now that, in this proposal that you are bringing us, you are basically saying there has to be some kind of government guarantees. Is that right?

Mr. HEID. Separate issues. In the old days, the—you're right, we were part of those organizations. But our primary focus there was making sure there was adequate oversight and adequate mission and adequate business model to move forward. What we have seen is that has not worked.

What we are suggesting now is, going forward, the government guarantee is necessary, but for a reason we haven't really spent much time on yet today. You think about, especially, 10 years out. It is likely that worldwide capital markets will always be subject to shocks. We saw it a few months ago with Greece's debt crisis. We saw it years ago with the Russian debt crisis. In those situations, having an explicit government guarantee to ensure that there is adequate flows of funds all the time is very necessary.

The Ginnie Mae market has moved forward unstopped. It's the primary homeowner purchasing—or people purchasing homes today, Ginnie Mae is the primary source of that funding. So we are seeing the need for the guarantee to move through those capital market shocks, often times having nothing to do with housing itself.

Ms. WATERS. What's the great difference between Fannie and Freddie and your MSICs?

Mr. HEID. One big difference would be parts of the Fannie-Freddie mission would no longer continue. For example, the explicit liquid support for the entire marketplace, and therefore, the need for significant amounts of debt would be discontinued, and the debt itself would not be guaranteed. Big difference between the confusion around implicit/explicit that existed in today's world.

The other piece that would be very different is the size of the portfolios would be very different than it was in the old days.

And then, a third big difference is the only way to move forward with any of these proposals is to ensure that you have a very tough regulator with adequate powers.

The CHAIRMAN. Let me—we are going to be going to some votes in a little while, and I have consulted with the Minority. We are going to have a set of votes, only three. So I am going to ask the witnesses to stay, and Members can come back. We will then be debating for another hour and 20 minutes or so, and then have another set of votes which will include a recommittal motion, which takes longer.

So, it's my sense that fairness would be we will ask you to stick with us through one set of votes, but not two. So we will go, we will get a couple more sets of questions in. We will come back and

have another hour or so, and then that will be the end of it. And we appreciate your accommodating us on this day.

And I want to echo what the gentleman from Pennsylvania said. I am enormously grateful to you, because every one of you got to the point. And if you haven't sat here year after year, you don't know what a rare pleasure it is to have people get to the point that you want to discuss. So, thank you.

The gentleman from Texas.

Mr. NEUGEBAUER. Thank you, Mr. Chairman. I think one of the things that the chairman just said I think is appropriate, I think we have gotten to some of the main points about where we go from here. And I think several of the witnesses have pointed that out. And basically what we're talking about is, in this structure, what is the risk premium going to be, who is going to receive the risk premium, and who is going to take the risk. And there are a lot of different scenarios that have been put forth out there.

I guess the question that I have is I go back to—and it kind of dates me a little bit—but in the late 1970's and early 1980's, I was in the banking business for a while, and we were making mortgage loans. And we were originating those. We could sell them to Fannie Mae, but we could actually make more money selling those loans to savings and loans and banks and other entities.

And we did that without—there was no Federal guarantee, no Federal backstop. We had PMI insurance on the loans over—and that market went and behaved fairly well, until we reached a point where the savings and loans got in trouble, and obviously, that source of financing went away.

I think that one of the things that Mr. Pinto said, and I think I agree with, is we have so much government intervention into many of these financial markets—and particularly, I think, into the mortgage market—that it's really—there has been an artificial pricing of mortgages. And so that, then, begins to put some pressure, politically, on this body that, if we go down the road of trying to price a risk premium—if, in fact, the decision is made for the government to somehow have some intervention here—is who sets that risk premium?

Mr. Heid, under your proposal then, who will set that premium for the government's role?

Mr. HEID. The way we look at this is there are several pieces to it. Ultimately, there would have to be some organization designated to have the skill and have the ability to actually price that premium itself. That, by itself, is a very difficult thing to do. And for that reason, we wrapped around it a broader series of concepts.

For example, start with the Dodd-Frank requirements. It has a different expectation on lenders today, a consistent regulatory and enforcement mechanism that didn't exist in the old days. That's a positive first step.

If you then layer in a layer of private capital in front of the government—and you see that in the form of the downpayment the consumer makes, we see that in the form of a layer credit enhancement like—mortgage insurance is one example. We also see it as the equity in the conduits themselves that has to be exposed to fail. And then, finally, we see the guarantee fees paid into the government as another layer of protection.

So, the way we're looking at the total package is pricing the premium on the guarantee is a difficult activity, and that's the reason you keep that as your last line of defense, and you put all of the steps in front of it, including private capital fully at risk, to make sure you're insulating the taxpayer in whichever way possible.

Mr. NEUGEBAUER. Yes, I just want to focus back to my question—and it was the last part of your series of proposals there, or layers—is who prices that premium to the government for the government's portion?

Mr. HEID. The agency itself that is taking the risk would be having to have the skill to do that. Ginnie Mae today has a guarantee fee priced for different kinds of securities. There is a designated agency, and it's their obligation to get the skill, and be in a position where they can provide that—calculations effectively.

Mr. NEUGEBAUER. But the Ginnie Mae concept is a little bit different, in that Ginnie Mae is basically guaranteeing mortgages that are backed by the Federal Government already. So I don't know if that's necessarily—pricing the risk on a mortgage that is guaranteed by the Federal Government and pricing one that's not is—the risk premium for that, hopefully, is different.

Mr. HEID. Absolutely. I'm using it as a concept, not an absolute. You have—this is different. There is private capital in place to take that credit risk. The calculations, the skills, the thinking has to be different. But the concept, I think, is very similar, in terms of whoever the organization is—and probably the regulator—would be the one actually pricing that—

Mr. NEUGEBAUER. See, the problem I have with that is I don't have a lot of good vibrations on the history of the government being in the reinsurance business. I think Mr. Bachus mentioned the flood insurance.

I am more interested in the market pricing that risk. And it's going to obviously increase the cost of mortgages for this country. And the reason I don't want the government setting that premium is once the government sets the premium, then that basically takes the market off the hook for the pricing of the risk and the availability.

And what I am afraid of is my colleagues will get a little nervous, from a political process, and will want to keep that risk premium low, and which then distorts the market. And so in some way—and again, not necessarily discarding your program, but that is one of the things that I think we are going to have to—

The CHAIRMAN. The gentleman's time has expired. The gentleman from California.

Mr. BACA. Thank you very much, Mr. Chairman. As our country continues to recover from the collapse—and I state the collapse—of 2008, our housing market continues to struggle. It is clear at this point that the housing market will not lead us out of our economic woes. But our recovery will not be complete until it is stabilized and shows signs of progress.

I appreciate the fact that we're looking at some form of solutions. But yet there are still a lot of problems that we have not even tackled with. And as we look at suggestions for now, Mr. Heid—and I would like to address this to you and Wells Fargo—how does your approach take into account the struggle that we are currently hav-

ing with progress? It seems that it shouldn't take us moving forward until the current foreclosure crisis is fixed. And we have had a lot of problems.

In my district, thousands of homeowners have had problems with HAMP. And the response I have gotten from the servicers of—homeowners often receive different answers. A lot of times—I don't know if you have outsourcing that is being done by those individuals who are doing a lot of the response back to them, because incomplete information, incomplete documents, they are going back and forth, yet the persons are still struggling in completing. And yet we are still trying to come up with additional ideas on how to handle the crisis, but yet Wells Fargo, in its process, have had a lot of problems in documentation, setting that information.

How do we address that, those problems that are currently there, as we look at moving forward? And how should we reform Fannie Mae to take into account the problems that we're having with the service compliance with HAMP?

Mr. HEID. I think there are a couple of ways to answer that. With HAMP itself, what's important to remember is that HAMP is just part of the solution. It's one program. It's the first program offered. In our case, it's about 12 percent of the loan modifications that are getting done. For the 88 percent that are getting done outside of the program, it's because customers don't qualify for that program itself. So when you think about—

Mr. BACA. But you're not responding back in time to the individuals who did qualify at one point or another. And, because of the delays and the lack of documentations, or the lack of explaining to the consumer about what they needed to have completed, those problems exist. Because I have thousands of cases in my district, and the problems that we have had with Wells Fargo.

Mr. HEID. Yes, to that point, on where we have evolved, your criticism is very true, especially a year ago. Things have evolved tremendously. Where we now are, we have added close to—we have over 17,000 people working on this now.

And what we have moved to just a few months ago is a one-to-one service model, so that we have a designated individual on our side working with the customer from start to finish, so documents don't get lost, repetitive conversations don't need to occur. There is a level of accountability on our side in our position now that didn't exist a year back.

Mr. BACA. That's why we need to continue to have—Mr. Pinto indicated that we should move towards a private sector. But accountability and oversight needs to be done. If we don't have the accountability from us, then how can then we deal with the problems of greed that we have had in the past?

That's what led us to a lot of the problems that we had, because there wasn't the accountability, there wasn't the oversight. There was a lot of greed. And you needed government to intervene to make sure that the oversight was done.

And this is a question to all. Given that the market, in a current state of depress, at which point should we begin to transition whatever form GS or the Fannie Mae/Freddie Mac will take in the future?

It seems that with the unemployment at close to 10 percent and the housing market, we'll have a tough time recovering, regardless of the structure of Fannie Mae and Freddie Mac. What economic signs should we look for in order to erase or ensure that it is safe to move forward? And this is a question for all of you. Mr. Pinto?

Mr. PINTO. I would like to make two observations. One is, at least in the 20 years I have been looking at this in terms of Fannie and Freddie, the excuse is it's never a good time to do it. It can be a boom time, it can be a bust time, it can be an in-between time, and it's never a good time.

Secondly, when you're an alcoholic and you're hooked on leverage, which is what this market is hooked on, and what Congress has been pushing for decades, ever higher levels of leverage and lower downpayments, there is no time like now to stop taking that drink.

And so, you have to send a signal to the market that you're serious about this. And, therefore, you have to stop keeping these mortgage limits that you keep rolling forward. You have to start backing away from this and sending a signal that you are going to allow the private sector to reassert itself in this market. And once you do that, I think you will be very pleasantly surprised by what happens.

Now, I know you probably don't have confidence in that, but there is a very different view of how this happened than perhaps—I beg to differ with you as to the view of how this happened.

Mr. BACA. Okay, thank you—

The CHAIRMAN. The gentleman from California—

Mr. BACA. Yes, Ken?

The CHAIRMAN. We don't have time for a new question.

Mr. BACA. He is still responding right now. Ken?

The CHAIRMAN. Very quickly.

Mr. BENTSEN. Yes. All I would say is I don't know that there is a right time, from the terms of the economy, but I think what's important to the market—to investors, in particular—is that there is clarity, and you do this as a full package. And also, you don't ignore the transitional issues or the legacy issues in creating a new system. That will dramatically affect the markets going forward and the economy going forward.

Mr. BACA. Okay, thank you.

The CHAIRMAN. The gentleman from California, Mr. Royce, and then we're going to go to Mr. Miller, and then we're going to break for the vote.

Mr. ROYCE. Yes. I will go to Mr. Pinto, as well, with a question. Because last week, as I mentioned in my opening statement, Mr. DeMarco, who is the GSE regulator, brought up a couple of points, and he said that the GSEs bought up junk mortgages to reach their affordable housing goals, that is what was driving that. And this was something that the former Fed Chairman Greenspan had said. He said that the GSEs did whatever was necessary to reach that goal that Congress had mandated on the GSEs.

And then, even the current Treasury Secretary, when he was testifying, he said the affordable housing goals were used to justify the GSE's purchases of these subprime loans.

So, I was going to ask you, because you worked at Fannie Mae—so being on the inside you have a real perception, in terms of what was going on—to what extent did these goals drive Fannie into the junk bond market, or in the junk market for mortgage-backed securities?

Mr. PINTO. Yes. I left Fannie in 1989, before the goals were implemented under the 1992 Act.

Mr. ROYCE. Yes.

Mr. PINTO. I have researched exhaustively, and I have a paper, it's 181 pages, called "A Forensic Study: Government Housing Policies and the Lead-Up to the Financial Crisis," and I have documented, step by step, what happened with Fannie and Freddie.

What happened, starting right after the Congress passed this in 1992, starting in 1993, Fannie and Freddie—or Fannie, in particular—went into competition with FHA. And that was the goal of the 1992 Act, one of them, that private sector would go into competition and provide the same kind of loans that FHA was doing. Fannie did—started doing that in 1993. Fannie and Freddie offered a 97 percent loan for the first time in the history, starting in 1994, in direct response to the affordable housing goals.

In 1996 they started buying subprime, private mortgage-backed securities, to meet the goals. In the early part of late 1990's, early 2000, they started buying alt-A loans, private mortgage-backed securities, to meet the affordable housing goals. In 2000 they offered a zero downpayment loan in direct response to a major increase in the goals that was announced in 1999.

They were—the way I describe it is it was like a team of mush dogs, and FHA was the lead dog. They were always out in front—and I have documented how they were out in front on all these issues—downpayment, FICO scores, etc.—they were always out in front. Fannie and Freddie were forced to follow. The private sector was forced to compete. And at the end of the day, the private sector came up with a way to compete in 2004.

Mr. ROYCE. I understand that point. But let me ask you another point, because one of the executives at Fannie made this point to me. He said their desire was—at the GSEs, their desire was to send a signal to the market that these were, in fact, safe loans.

So, on top of the moral hazard problem that we had with the perception that the government was behind the GSEs—and that time, they were securitizing most of these loans—you also had this understanding in the market that if the Government-Sponsored Enterprises have looked at this and deemed that Countrywide is safe, or whatever, then we can follow that lead.

And I was going to ask you if you agreed with this statement. I have actually had two executives who were at Fannie at the time share this with me. I was going to ask you for your viewpoint on that.

Mr. PINTO. I do agree with that, and that was actually a policy at Fannie and Freddie to do that. And HUD actually, in 2000, recognized it in their rulemaking, that Fannie and Freddie, once they pulled these loans in, these affordable housing loans in, would be calling them prime loans. And the market would have to try to figure out what they really were, if they could. There is an actual statement by FHA as to that effect.

The other thing—I think it gets back to your initial question—Fannie and Freddie—and, again, I can speak more about Fannie—Fannie, right from the get-go—I have documentation from 1994 through the period that shows that they had to subsidize these loans because they had higher default rates than they expected, going back to 1994, 1995, and because of the initial risk that they were projecting before they actually had higher default rates. And this continued throughout this period.

So, this argument that they were doing this to make money is just completely counterintuitive. They were losing money on these loans, or they were—

Mr. ROYCE. And they were also nervous about the risk. Or at least—

Mr. PINTO. They were very nervous about the risk.

Mr. ROYCE. —the loan officers told me they were, because they would wait until the end of the quarter to make the purchase.

The CHAIRMAN. Time has expired.

Mr. ROYCE. Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from North Carolina, Mr. Miller.

Mr. MILLER OF NORTH CAROLINA. Thank you, Mr. Chairman. Just like Mr. Bachus' insinuation earlier, I do support capitalism, but I don't think support for capitalism requires the idolatry of every predatory business practice. And I think the capitalist economy works better for almost everybody if there are sensible rules.

Despite the obvious failures of our safety and soundness regulation in the last decade, we are much better off with safety and soundness regulation and deposit insurance than we would be with the banking system we had in the 1920's, which led to bank runs, bank failures, and contributed greatly to the Great Depression.

I agree we need to bring back the private securitization market, and the continued lack of life in that market is an enormous burden on our economy, since it was half of lending not long ago. But I have talked to investors, private investors, who are enthusiastic participants in capitalism, but they say that they will not buy mortgage-backed securities again, based upon the lack of rules that existed before. Unless there are sensible rules, they are not going to buy mortgages.

And they won't standardize disclosure. They want rules for mortgage-backed securities or any kind of debt-backed security that is similar to the rules for the issuing of stocks, that there be standardized disclosures, that there be cooling-off periods, waiting periods, that they be allowed to sample the pools, that they be able to do their own due diligence, their own risk assessment, and not rely upon a rating agency, AAA rating, based upon God only knows what.

And unless there are—unless they can do their own due diligence, their own risk assessment, they are not coming back into the market. And they say the SEC rules help, but there is more to be done to bring back the securitization market and to make private investors feel confident that they know what they're buying.

And they say that the sales side, the securitizers, continue to resist those changes and those standardized disclosures. Mr. Bentsen, do you support those kinds of standardized disclosures?

MR. BENTSEN. Absolutely. I think that we all believe that there has to be a very strong regime for the issuance and sale of asset-backed securities, whether it's in the mortgage-backed security area, credit cards, or whatever. And, at the same time, it has to be a workable regime.

I think you are absolutely correct, that investors will—as investors have always been able to do—to really do their own due diligence, and should be doing their own due diligence, in whatever investment product they are going to buy. But we agree there should be a very strong regime. It should be uniform.

And again, that goes back to the comments that we made and our colleagues at the ASF made, with respect to concerns about regulators getting out in front of what you tried to do in Dodd-Frank, in coming up with the FDIC taking action. And, frankly, even with the SEC on reg AB, we believe they're going to have to go back, in the advent of Dodd-Frank, and rethink those rules, and make sure that they're uniform across markets.

Mr. MILLER OF NORTH CAROLINA. They don't agree that they could always do their due diligence. They say that they were pretty much captive to rating agencies' ratings of mortgage-backed securities, which, as we all know, proved to be pretty nearly worthless.

Mr. Deutsch, do you support standardized disclosures? Do you support cooling-off periods? Do you support allowing potential investors to look at individual mortgages, a sample of mortgages in a securitized pool before it's issued?

Mr. DEUTSCH. Absolutely, to each one of those. In 2008, we developed and started a Project Restart, where we developed the loan level standardized disclosures over the course of the past 2 years. But the SEC in their reg AB II proposals actually used, as the basic model, what the ASF had developed for loan-level disclosure, which was a joint working group of investors and originators to develop over 150 fields of loan-level information.

Mr. MILLER OF NORTH CAROLINA. There appear to be some odd alignment of interest, if you have the usual kinds of ideas of what constitutes a conflict of interest. Why should a trustee or a servicer of a securitized pool be an affiliate of the securitizer? That seems an obvious conflict of interest. Mr. Bentsen?

Mr. BENTSEN. I think historically you had a broad array of servicers in the marketplace. I think, through this crisis that we have been through recently we have had consolidation that has occurred in the market. And that has raised a question of whether—and I know you have legislation that's looking at this issue—that has raised a question. I think it's a legitimate question to look at—

The CHAIRMAN. All right, let me say this. We're going to—things have gotten a little hairy over there, so would you—you or anyone else, it's a very important question, and we would ask you to respond in writing. And we will go to Mr. Posey, and then we're going to adjourn the hearing, because there is no—I don't know if we will ever get back. Mr. Posey?

Mr. POSEY. Thank you, Mr. Chairman. I don't have any questions. I wanted to echo your comments to the witnesses. It's nice to have somebody in here who can speak frankly and give us straight answers, and even know or have in their vocabulary the words "yes" and "no." We do appreciate that.

And, Mr. Heid, I wanted to comment. Wells Fargo has been having some mortgage seminars for homeowners who are having problems with their mortgage in central Florida, and I think that's an outstanding idea. I just wanted to pass my compliments on to you and your company. I wish more of them would do that.

Thank you, Mr. Chairman. I yield back.

The CHAIRMAN. I thank the gentleman. The hearing will be adjourned, because there is an extra adjournment vote. It would be unfair to people to keep them here. And we have had a very useful discussion.

I would encourage every one of you—because sometimes we really do have hearings to get information, and this is one of them. I will tell you that a great number of members here know what we shouldn't do and continue to do. There is less certainty about what we should do. I would encourage all of you, please, if you have anything you want to supplement in writing, I guarantee you it won't be wasted effort. It will be looked at. And we will be back here after the election, talking about this. I thank you all very much.

[Whereupon, at 11:57 a.m., the hearing was adjourned.]

A P P E N D I X

September 29, 2010

OPENING STATEMENT OF
CONGRESSMAN PAUL E. KANJORSKI

COMMITTEE ON FINANCIAL SERVICES

HEARING ON THE FUTURE OF HOUSING FINANCE:
A REVIEW OF PROPOSALS TO ADDRESS
MARKET STRUCTURE AND TRANSITION

SEPTEMBER 29, 2010

Mr. Chairman, at the most recent Capital Markets hearing on the future of our nation's housing finance system, we explored taxpayer protection issues. We need to continue working to minimize the Treasury Department's purchases of more senior preferred stock at Fannie Mae and Freddie Mac, and the Administration must work to hold accountable those entities that contributed to or exacerbated the housing crisis.

We must also focus more and more on what the new architecture for housing finance should look like and consider how we should transition to this new system. We must additionally work carefully to avoid repeating past mistakes and doing harm. Today's conversations will assist us in these important endeavors.

Some of the pending reform proposals suggest completely privatizing the housing finance market while others suggest imposing some form of an explicit government guarantee. Regardless of one's views, we can all agree that we must do something to change the status quo.

In reestablishing a healthy, stable housing finance system we need a thoughtful and deliberate discussion about what we ought to do. We should also have some goals. We need to limit taxpayer costs and risks. We additionally need to ensure that credit unions and community banks continue to have the ability to compete and offer affordable mortgages. We should further have sufficient players in this marketplace in order to protect against too-big-to-fail scenarios.

The Dodd-Frank Wall Street Reform and Consumer Protection Act has already helped to advance the debate on the future of housing finance by changing the rules for mortgage originations, risk retention, appraisal practices, and credit ratings. With these process reforms in place, we have laid a strong foundation upon which to determine what to do with the institutions that securitize the mortgages of responsible, creditworthy middle class American families.

As we consider transition issues today, we also need to remember that Fannie Mae and Freddie Mac now help to support just over 70 percent of new mortgages. A prudent evolution to a new housing finance system must therefore aim to proceed smoothly and avoid unnecessary market disruptions. Moreover, we cannot replace something with nothing, as several of my colleagues on the other side of the aisle have proposed.

In studying transition issues, we should further look to past precedents, like Sallie Mae's graduation from government sponsorship more than a decade ago. We can use the lessons learned, both good and bad, from our work with Sallie Mae's privatization to help guide us as we take on the difficult task of constructing a new housing finance system.

In sum, Mr. Chairman, I appreciate your efforts in convening this hearing, and I look forward to discussing the proposals offered by our witnesses.

Statement of Rep. Gwen Moore

September 29, 2010: The Future of Housing Finance –
A Review of Proposals to Address Market Structure and Transition

Thank you, Mr. Chairman.

Policymakers need to think globally about the barriers to homeownership. Two of the primary barriers are: 1) cash needed to close and, 2) monthly carrying cost. In considering how to overcome these obstacles to homeownership, we need to look at what has and has not worked. In particular:

- Congress needs to support the essential role of the state housing finance agencies – HFAs – in the affordable housing sector of the market. At the height of the subprime crisis, the HFAs never allowed "no doc" loans or offered "teaser rates" to lure consumers who could not afford these loans as rates ballooned.
- Congress should recognize that not all high loan-to-value loans – LTV loans – are bad.
- Congress should separate its review of higher balance loans versus loans in the affordable housing sector.

One particular concern is painting high loan-to-value – LTV – loan programs with a broad brush without recognizing that State Housing Finance Agencies – HFAs – have successfully done high-LTV lending for a quarter century in order to serve the affordable housing sector. These are barriers that the State Housing Finance Agencies (HFAs) are chartered to overcome.

Congress, as it sorts out the future of the nation's mortgage finance industry, needs to recognize and take into account the contributions of the HFA sector and the great affordable lending distribution channels that HFAs have built in their states and communities with lenders and counseling agencies. These distribution channels allow the HFAs to effectively overcome the two primary wealth-based barriers to homeownership – down payments and monthly mortgage payments.

HFAs are highly effective in mitigating against foreclosures. For example, in Milwaukee, the Wisconsin Housing and Economic Development Authority's – WHEDA's – portfolio of mortgages in Wisconsin has a foreclosure rate of 1.29% (as of March 31, 2010) compared to 3.51% for all mortgage types in the state. In 2010, less than 5 percent of WHEDA loans in Milwaukee and 4 percent statewide were more than 30 days past due, compared to nearly 13% of FHA loans nationally and 27% of borrowers who took subprime loans.

WHEDA can provide very strong evidence to suggest that borrowers with excellent credit (700+) and no money down actually perform two times better than borrowers with average credit (660-699) and 5% invested into the transaction. Also, since WHEDA has always required excellent credit to obtain a loan with an LTV of 97.01 - 100%, the

HFA's 100% portfolio actually performs better than all LTV loans exceeding 80%. The reason is simple -- borrower credit.

In developing affordable housing lending policy, Congress needs to remember that the HFAs did not contribute to the subprime lending crisis. HFAs protect the interests of first time single family homebuyers by looking at the borrower's credit, which the HFAs view as more important that "skin in the game."

Homeownership is a privilege -- not a right -- but home equity remains the single greatest source of wealth for low- and middle-income households. We, as a nation, need to affirm that homeownership is an important policy objective for creating wealth and we need to rebuild the housing market as a major contributor to jobs, wealth and the economy of the U.S.

SIFMA
Securities Industry and
Financial Markets Association

TESTIMONY OF KENNETH E. BENTSEN, JR.,
EXECUTIVE VICE PRESIDENT, PUBLIC POLICY AND ADVOCACY
SECURITIES INDUSTRY AND FINANCIAL MARKETS ASSOCIATION

BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON FINANCIAL SERVICES

HEARING ON:
THE FUTURE OF HOUSING FINANCE-A REVIEW OF PROPOSALS TO ADDRESS MARKET STRUCTURE AND TRANSITION

SEPTEMBER 29, 2010

I. Introduction

Chairman Frank, Ranking Member Bachus, and members of the Committee:

My name is Ken Bentsen, and I am Executive Vice President for Public Policy and Advocacy at the Securities Industry and Financial Markets Association ("SIFMA")[1]. Thank you for allowing me to submit my full statement for the record.

SIFMA is pleased to testify before the Committee today on reform of the housing finance system. In late 2009 SIFMA formed a GSE Reform Task Force comprised of members of both our Securitization Group and Asset Management Group involved in all aspects of mortgage finance, from originators to investors and the market makers that create liquidity between them, to discuss and develop shared views on what are the most critical aspects of GSE and housing finance reform for secondary mortgage markets. The Task Force developed this response to share its views with policymakers and others concerned about these issues. The Task Force has not proposed any single comprehensive solution to the series of choices policymakers face; rather, we outline a number of factors and considerations that should be used as inputs into the policy development process.

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[1] SIFMA brings together the shared interests of hundreds of securities firms, banks and asset managers. SIFMA's mission is to support a strong financial industry, investor opportunity, capital formation, job creation and economic growth, while building trust and confidence in the financial markets. SIFMA, with offices in New York and Washington D.C., is the U.S. regional member of the Global Financial Markets Association. (More information about SIFMA is available at http://www.sifma.org.)

Dodd-Frank Act

The Dodd-Frank financial reform legislation represents a comprehensive and critically important reformation of many aspects of the financial infrastructure of the United States. It will affect nearly all aspects of banking, capital markets, and consumer interaction with the financial markets. While mortgage finance may seem to be a singular topic of limited and defined scope, one should not underestimate the importance of mortgage finance and all of its ancillary aspects to the U.S. economy.

The Dodd-Frank Act contains a number of provisions that will impact the securitization process, and therefore the mortgage origination process and mortgage finance generally. The most commonly cited provision of Dodd-Frank relates to risk retention for asset-backed securities. The policy view that underlies the implementation of risk retention is that it will cause originators and securitizers to take greater care when structuring and issuing asset-backed securities including mortgage-backed securities (MBS), and better align their interests with those of investors in the transactions, and ultimately, mortgage borrowers. Dodd-Frank appropriately calls on regulators to apply retention in a tailored manner, with levels and forms of retention designed specifically for the distinct risk profiles of different securitization asset classes. This is critical, because a one-size fits all approach to risk retention would likely constrain the supply of credit beyond that which is necessary or appropriate.

The calibration of retention provisions by regulators will be extremely critical, for this same reason. While a 5% threshold has been established in the law, it is important that regulators conduct meaningful econometric analysis of the appropriate level and form of retention required in a given situation. Furthermore, regulators should consciously monitor the impacts of these provisions -- given the lack of experience with legislatively mandated risk retention, it is important that unintended consequences that impact the provision of credit to consumers be ameliorated as quickly as possible. Misapplication of retention provisions could have a significantly negative impact on the ability of securitization to fund sufficient origination of consumer credit.

Furthermore, the Dodd-Frank Act creates a carve out for certain types of low credit risk mortgages or "qualified mortgages", which may be exempted from risk retention provisions due to the presumably limited credit risk they will present. The calibration of this qualified mortgage definition could well prove to be a decisive moment in the future of U.S. mortgage finance. It seems logical that origination of mortgages will flow to the lowest cost funding -- which will be loans that do not require risk retention. Thus the definition of qualified mortgage will play a large part in determining what form of mortgage credit is available, and to whom.

Congress appropriately directed regulators to work jointly to implement the provisions of risk retention. This should ensure that all securitizers, regardless of their corporate form or regulator will face the same rules. This should allow markets to operate most efficiently. It also benefits consumers, investors, and regulators, as a coordinated

approach to regulation will eliminate loopholes and minimize the risk of regulatory arbitrage.

SIFMA is concerned, however, that actions by regulators prior to the passage of Dodd-Frank may inadvertently conflict with Congress's intent and regulators should consider revisions to comport with the Act. For instance, on Monday, the FDIC board finalized rules regarding its "securitization safe harbor" which include risk retention provisions that materially differ from those under Dodd-Frank. For one, they are not the product of a joint rulemaking. Second, they do not reflect the appropriate, granular approach to the differing risks presented by various asset classes, as Dodd-Frank does. The FDIC's rules also contain a number of other provisions that will increase the cost and decrease the efficiency of securitization as a funding tool, such as restrictions on transaction structures. Importantly, these rules will only apply to insured depository institutions. Thus the FDIC has created an unlevel playing field for U.S. insured depository institutions that will increase their funding costs, decrease their ability to compete with non-banks, and ultimately constrain their ability to fund originations of consumer credit. In comments to the FDIC, SIFMA and numerous others urged that the FDIC take a more coordinated approach to this rulemaking.

Other provisions of Dodd-Frank also have the potential to impact the securitization market's ability to fund originations of consumer credit. For example, regulators are required to remove references to credit ratings from their rules. Bank regulators recently issued a proposal regarding the application of this provision to capital rules, while at the same time the Basel Committee issued new capital guidelines which rely heavily on credit ratings. The apparent conflict could result in inefficient or conflicting capital requirements for securitizations, which when combined with risk retention provisions and the impact of FASB's FAS 166 and 167 could greatly increase the cost of securitization and decrease the availability of consumer credit.

Other provisions already have, or will, impact securitization. Immediately after the adoption of Dodd-Frank, the rating agencies lost their exemption from so-called "expert liability" provided by the SEC's rule 436(g), and as a result the rating agencies refused to allow the use of their ratings in securitization transaction documents, which conflicted with requirements of Reg AB mandating their disclosure. For a period of time, it was literally impossible to execute a registered securitization transaction. The SEC, in order to restore the ability of registered securitization markets to function, acted quickly and issued a temporary exception from those requirements of Reg AB. This temporary relief expires in January, and unless the rating agencies consent to the use of their ratings, or the SEC extends its relief or permanently revises Reg AB, we may be faced with the same problem.

Key Considerations for GSE Reform

SIFMA believes there is no single "right answer" or any easy solution to the question of how to resolve the conservatorships of the GSEs and define the future infrastructure for mortgage finance in the U.S. Policymakers are faced with a series of difficult choices,

each with its own costs and benefits, which will shape the future of housing finance and ultimately affect consumers and the general economy.

The first policy question that members of Congress and the Administration face: should the government provide material support to mortgage lending? Only Congress can define what the goals of national housing finance policy should be.

That said, SIFMA believes that without the benefit of some form of government support for the conventional mortgage market, mortgage credit would be less available, mortgage markets more volatile, and interest rates on loans higher because fewer investors would be willing to absorb both the credit and interest rate risk. In short, investors would not support mortgage credit equivalent to historic norms thus affecting the supply and stability of such credit. The exact impact in each of those areas – availability and cost – cannot be determined with precision, as the impact is dependent on a number of economic and other factors, but at a high level, we do not doubt the directional impact of such a course of action.

Secondary mortgage markets will continue to function regardless of what policymakers decide as "there is a price for everything". The price, however, is not always desirable to everyone. The issues for policymakers to consider are: how liquid secondary markets for loans and MBS should be, the breadth of products that would be offered to consumers, the capacity of lenders to extend credit, whether national lending markets could be sustained or if regional pricing differentials would reappear, and, ultimately, the cost and affordability of credit to consumers. Accordingly, policymakers need to determine what they want from the mortgage markets before they can address what to do with the GSEs or the broader infrastructure of mortgage finance.

The GSEs, for all of their faults, have conferred significant benefits on U.S. mortgage markets. It is indisputable that these faults must be rectified and a new structure for the markets designed that will eliminate, or at least substantially mitigate, the source of these faults. We caution that the urge to "slay the dragon" should not cause collateral damage that would eliminate or make impossible the beneficial impacts and legacy of the old system that developed around the GSEs.

One of the most important, if not the most important, was fostering the development of a liquid forward market for mortgage backed securities, known as the "to be announced" market or TBA market, which allows lenders to hedge risk, attract private capital, and reduce the cost of mortgage lending. SIFMA believes that the TBA market is the key to a successful, liquid, affordable, and national mortgage market, as well as ensuring a sufficient level of capital is available to banks to lend. The historically huge and liquid global market for GSE MBS is initiated by the TBA mechanism.

The TBA market is the most liquid, and consequently most important, secondary market for mortgage securities. In this time of distress, the importance of the TBA market is heightened, and it is difficult to exaggerate the consequences from a loss of confidence or liquidity in this market. The effects would be directly and immediately felt by the average mortgage borrower. The impact would include, at a minimum, higher mortgage

rates, as yields required by investors would rise as liquidity falls. It is also likely that credit availability would be constricted. This would occur because secondary market executions for originators would be more expensive and take longer, requiring longer warehousing periods for loans they originate. Balance sheet capacity is currently a scarce commodity for most lenders, and is finite in any case. Furthermore, the ability of borrowers to lock-in rates on mortgage applications would likely be reduced, creating uncertainty for them and likely depressing real estate activity which is an important component of broader economic activity.

Our members believe that some form of an explicit government guarantee on conventional loan MBS will be required to maintain the liquidity of the TBA MBS markets. Purely private sector solutions cannot accomplish this important goal. There are a number of permutations of a guarantee, but ultimately, a government insurance wrap of the MBS that stands behind any private sector insurance or other corporate guarantees, as a catastrophic backstop, may be the most efficient means to achieve this goal.

The implicit guarantee on GSE MBS historically reduced the issuance costs for those bonds because it attracted a number of important classes of investors and provided for the development of a large, extremely liquid secondary market. These investors include pension funds, mutual funds, bank portfolios, insurance companies, and significantly, foreign central banks and other substantial foreign investors. Non-U.S. institutions hold hundreds of billions of dollars of GSE MBS – this represents hundreds of billions of dollars that have been channeled into the hands of U.S. homeowners – and along with banks and the GSEs themselves, foreign investors have been one of the largest buyers of these securities. Prior to the conservatorship, the GSEs began to experience greater difficulty issuing corporate debt, and spreads on MBS products began to widen, in part due to a reduction in foreign investment. SIFMA believes that in the future these investors will not accept an implicit or non-guaranteed MBS product.

These institutions are attracted to the GSE MBS markets for a variety of reasons, but chief among them are the safety of the investments and the liquidity that the market provides. Without this asset class, these investors would struggle to replicate the combination of liquidity and return, and would either move towards lower yielding products such as U.S. Treasury bonds, or into riskier products such as corporate or other sovereign debt. Such shifts in asset allocation would not only reduce the flow of capital to mortgage markets, but it would also have a negative impact on the performance of those investment vehicles.

In terms of whether or not a GSE is needed at all, how many are necessary, and other corporate structure issues, a number of options are available and could be implemented. There are policy choices to be made, and tradeoffs do exist. Regardless of what path is chosen, an eye must be kept toward preserving the simplicity and homogeneity of the GSE MBS market in order to preserve the important liquidity provided by the TBA market.

SIFMA believes that in a scenarios where a GSE-like entity (or entities) succeeds the current housing GSEs, portfolios may be required if for nothing else but to facilitate securitization and standard maintenance of securities issuance programs, such as providing a holding facility for loans that are repurchased from securitized pools. SIFMA believes that one thing that is clear is that inappropriate risk management of the portfolios contributed to the inability of the GSEs to support the housing markets when their support was most needed. Even if the GSEs or successor entity themselves do not issue MBS (i.e., it is issued by a GNMA-like entity), one would assume that the future GSE or successor entity would be the parties responsible for repurchasing delinquent, modified, or otherwise non-qualifying loans from securities. Furthermore, the GSEs currently provide to originators the ability to sell loans on a flow basis, that is, as they are originated, to the GSEs. The GSEs serve as an aggregator, and collect loans until a critical mass is reached and MBS can be issued. Further, portfolios also serve a function of intermediating prepayment risk for smaller institutions that may not have had either the size or ability to economically manage such risks on their own. If GSEs were unable to provide these functions, smaller originators may have problems managing such risk, issuing MBS on their own due to warehousing costs and other issues, and they would be forced to sell their loans to a larger institution (a competitor) that could support a large portfolio of loans. This would likely have a negative impact on the pricing of their lending products to consumers. If portfolio activities were limited to serving this role, they could be capped at levels significantly lower than their current size and significantly mitigate current concerns around systemic risk they present.

The resolution of the conservatorships of the current GSEs will clearly be a challenge. SIFMA believes that the government must clearly state intentions with respect to legacy GSE issues prior to and during any transition. Bifurcation of markets into pre- and post-reform markets should be avoided. In this manner, supporting market and investor expectations through continuity of the existing perception of a guarantee will engender future market stability and resulting investor participation. The alternative – essentially abandoning an existing market – would have serious and long term consequences for the global flow of capital to the United States.

We hope that this testimony and the attached responses to Treasury's request for comment are useful and informative to the Committee as it considers this vitally important public policy issue. SIFMA stands ready to provide any needed information, support, and analysis during this process. We appreciate the opportunity to testify and look forward to continuing to work with the Committee on these important issues.

1. **How should federal housing finance objectives be prioritized in the context of the broader objectives of housing policy?**

    - ***Commentary could address: policy for sustainable homeownership; rental policy; balancing rental and ownership; how to account for regional differences; and affordability goals.***

One important point that should be made before a more detailed discussion of granular issues is that policymakers should determine how they envision the future of mortgage finance, and what goals they have for the U.S. mortgage markets before they delve into the specifics of various forms of corporate organization and other detailed issues related to the GSEs or any other aspect of the housing finance system. Drawing the lens back to a very high level, mortgage markets will continue to function, at some level, regardless of what policymakers decide – to repeat the common phrase, 'there is a price for everything', and markets will always find an equilibrium of supply and demand. The price and terms, however, are not always desirable to everyone. The issues for policymakers to consider are: how liquid the secondary markets for loans and MBS will be, the breadth of products that would be offered to consumers, whether or not 30 year mortgages could continue to be the primary term structure, the capacity of lenders to extend credit, whether national lending markets could be sustained or if regional pricing differences would reappear, and ultimately the cost and affordability of credit to consumers.

Before any other decisions can be seriously contemplated policymakers need to determine what they want from the mortgage markets. Considerations include: are national markets where the cost of a loan in Denton, Texas is similar to the cost of a loan in Portland, Maine desirable? Is there a policy basis for supporting and bolstering the liquidity of the mortgage markets and therefore reducing the cost of credit to consumers? Is the 30 year fixed-rate mortgage something that should be preserved? Is there a policy basis to support the securitization markets and the service they provide by facilitating the flow of capital from investors to homeowners? Should the government play a role in encouraging affordable rental housing funded by multifamily lending? Arguably, all of these things stem from, or have been historically bolstered by, Federal engagement in the mortgage finance system.

Our task force believes the answer to all of these questions is 'yes', and accordingly assumes these goals to be relevant. National mortgage markets should be maintained, and liquid secondary markets are necessary for them to exist. The broader economy is well served when mortgage rates are generally affordable to a large number of appropriately qualified consumers, given the important contribution of housing and all of its ancillary industries to GDP and employment. Therefore, our perspective is that some form of government support for mortgage markets should be provided, either through a GSE, GSE-like entity, government provided insurance, or some other means.

Our task force believes that an enhanced support system for enhanced rental credit underwriting standards looks back to the fundamental precept that individual ownership

of housing, while an elemental social goal, cannot prudently be available to all citizens. In fact, the social goal should be quality housing shelter, whether ownership or rental, appropriately balanced with financial prudence. In this context, rental housing has a major role in the future and presumably a bigger role than it has today.

Affordable housing is a policy goal and we do not comment on whether or not it is an appropriate policy goal. However we believe that any implementation should be expressed transparently. Further, the implementation of affordable housing programs should be accomplished independently of the securitization process, and not buried within securitization structures and processes. Doing so will create distortions and lead to outcomes that are overall less efficient, and at worst, potentially harmful,

2. **What role should the federal government play in supporting a stable, well-functioning housing finance system and what risks, if any, should the federal government bear in meeting its housing finance objectives?**

    - ***Commentary could address: level of government involvement and type of support provided; role of government agencies; role of private vs. public capital; role of any explicit government guarantees; role of direct subsidies and other fiscal support and mechanisms to convey such support; monitoring and management of risks including how to balance the retention and distribution of risk; incentives to encourage appropriate alignment of risk bearing in the private sector; mechanisms for dealing with episodes of market stress; and how to promote market discipline.***

Role of the Federal Government in Housing

Task force members have concluded that some form of explicit government support is needed to attract sufficient investment capital to maintain liquidity and stability in the conventional mortgage market at a level comparable to that created over the last 30 years. Members believe that total privatization of the GSEs and mortgage finance will likely result in greater volatility, increase inefficiency, and ultimately make mortgage loans more expensive for consumers. While this document generally does not address issues of pure public policy, as these are decisions to be made by members of Congress, Task Force members do believe that there should be a role for the government in promoting liquid mortgage markets.

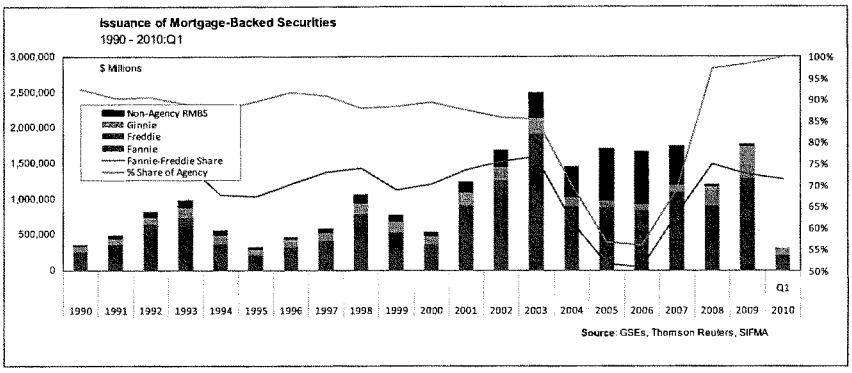
To promote liquid mortgage markets, Task Force members agree that any future form of the GSEs (or other government support) will require some form of an explicit government guarantee on certain MBS issuances. Our Task Force members do not believe that investors will support a return to an implicit guarantee, and also agree that a GSE or successor MBS program without a guarantee (i.e. an explicit non-guarantee) will not allow the GSEs or successor entities to meet any policy objectives. We note that loan level guarantees are not necessary if the security carries a guarantee. This need for an explicit guarantee after the conservatorship concludes applies to both future MBS issuances and currently outstanding MBS and corporate debt.

It is important to note that the GSEs, setting aside their current situation and flaws, were important contributors to many benefits to homeowners and the economy. It can be argued that a 30 year, fixed rate mortgage would not be considered the "standard" mortgage product today but for the GSEs. The GSEs have also driven a great deal of standardization of mortgage loan documentation and other operational processes that make mortgage lending more efficient and cost-effective. Most importantly, the GSEs have fostered, in conjunction with industry participants, the To-Be-Announced (TBA) secondary market for mortgage-backed securities (MBS). This market developed out of the standardization of mortgage products and securitization driven by the GSEs. SIFMA's Task Force believes that this TBA market is the key to a successful, liquid, affordable, and national mortgage market, as well as ensuring a sufficient level of capital is available to banks to lend.

The Conventional Mortgage Market and the Historically Important Role of the Government

Fannie Mae and Freddie Mac alone support approximately 60% of all originations nationally. In the aftermath of the credit crisis, Fannie Mae, Freddie Mac, and Ginnie Mae through their MBS issuances and/or guarantees support over 90% of mortgage originations. At the end of 2009, approximately $5.5 trillion of GSE and Ginnie Mae MBS was outstanding, supporting half of all outstanding first-lien mortgage debt (the other half is retained on bank portfolios or is funded in the non-agency MBS market). Figure 1 (below) illustrates the heightened importance of Federal engagement in mortgage finance. For context, there were about $7 trillion of U.S. Treasury securities outstanding at the same time. These numbers are meant to illustrate the importance, both historically and especially currently, the sheer size and the significance of the conventional and FHA/GNMA mortgage markets. There is one common feature among the FHA/GNMA and GSE programs – government support. This support has provided much benefit to American homeowners – it has expanded the availability of credit, reduced costs through standardization and driven economies of scale.

Figure 1 – Issuance of MBS



It is indisputable that the faults of the current system that are now painfully evident must be rectified, and a new structure for the markets designed that will eliminate, or at least substantially mitigate, the source of these faults. We caution, however, that the urge to "slay the dragon" should not cause collateral damage that would reverse, or make impossible to sustain, the beneficial impacts and legacy of the old system that developed around the GSEs. It is important to note that GSEs have conferred benefits beyond the conventional market. Standardization, discussed below, is one such example. We also note that GSE MBS markets serve as benchmarks and signals to non-GSE markets in terms of pricing. Additionally, a GSE-related concept, that of a "qualified mortgage" as delineated in the recent financial regulatory reform legislation (H.R. 4173, the Dodd-Frank Act), represents in some ways the exportation of GSE-like underwriting criteria to the broader mortgage markets. In other words, the GSE markets serve as both a model and a point of reference for all mortgage markets. Clearly, what was once akin to a gold standard has become significantly tarnished, but that does not mean it needs to be destroyed in its entirety.

Standardization has been a key benefit of the GSE model in the conventional market. Due to their size and the scale of their operations, the GSEs have driven standardization of mortgage loan documentation, underwriting, and other items in ways that have created a more efficient origination process. This standardization extends beyond the Agency market, and has driven standardization of lending processes more generally, across product types, and across institutions.

Perhaps more importantly, government engagement combined with the activities of the GSEs have driven the standardization of loan maturities out to 30 years, creating a mortgage product that is affordable to a greater proportion of consumers. Most people take for granted that typical mortgage loans have a 30 year term, but given the nature of

bank funding, this is not a natural outcome. Before the implementation of government programs such as the Homeowners Loan Corporation, FHA, and Fannie Mae in the 1930s, mortgages tended to be short term and require a balloon payment at the end of the term. This was directly related to the short-term nature of bank funding; many institutions derive a majority of funding for lending from customer deposits which are redeemable upon demand. The development of secondary markets for loans and MBS through government initiatives allowed banks to extend loans with longer terms, as banks were able to access a longer-term funding source (in addition to transferring risk, reducing balance sheet utilization, and reducing demands upon limited capital) in the form of loan sales into active secondary markets and ultimately securitization. Without the initiatives undertaken by the government in the 1930s and the continuing support of the GSEs, it is not clear that today's mortgage loan would have a 30 year term.

Benefits of a Guarantee – Liquidity, Stability, and Lower Mortgage Rates through the Attraction of Substantial Domestic and International Investment Capital Flows

The implicit guarantee on GSE MBS historically reduced the issuance costs for those bonds because it attracted a number of important classes of investors and provided for the development of a large, extremely liquid secondary market. These investors include pension funds, mutual funds, bank portfolios, insurance companies, and significantly, foreign central banks and other substantial foreign investors. Non-U.S. institutions hold hundreds of billions of dollars of GSE MBS – this represents hundreds of billions of dollars that have been channeled into the hands of U.S. homeowners – and along with banks and the GSEs themselves, foreign investors have been one of the largest buyers of these securities. Many of these institutions are extremely sensitive to credit risk, and it can be argued that an important part of the rationale for the entry of the GSEs into conservatorship in 2008 was to assuage the concerns of investors that an element of credit risk had been introduced into a market that depends on the absence of such risk. Prior to the conservatorship, the GSEs began to experience greater difficulty issuing corporate debt, and spreads on MBS products began to widen, in part due to a reduction in foreign investment. Task force members agree that in the future these investors will not accept an implicit or non-guaranteed MBS product.

These institutions are attracted to the GSE MBS markets for a variety of reasons, but chief among them are the safety of the investments and the liquidity that the market provides. We earlier detailed the scale of the GSE MBS markets; when this scale is combined with the homogeneity of collateral that backs the securities and securities themselves, the result is a market where investors are able to invest significant sums of money in a timely fashion without creating undue distortions to prices. GSE MBS has become an essential component of many investment fund mandates. For example, many investors benchmark their funds against various indices. In one commonly referenced index, the Barclay's U.S. Aggregate Index, MBS represent over 1/3 of the index. GSE MBS provide a safe, liquid investment product for many 401k plans, pension plans, and insurance companies. Without this asset class, these investors would struggle to replicate the combination of liquidity and return, and would either move towards lower yielding products such as Treasuries, or into riskier products such as corporate or other sovereign

debt. Such shifts in asset allocation would not only reduce the flow of capital to mortgage markets, but it would also have a negative impact on the performance of those investment vehicles.

This liquid market would not have been possible without the implicit guarantee on the debt. It is notable that no other mortgage market or funding system via depositories has ever provided sustained liquidity to the extent that the GSE MBS markets have. It is also notable that each secondary mortgage market that was not the beneficiary of a guarantee collapsed in 2008. The GSE MBS markets are considered "rates" markets, as opposed to "credit" markets, similar to the Treasury market. Investors in these markets do not need to, and do not want to, engage in detailed loan-level credit analyses of the securities they are investing in. Rather, investors look to take positions based on their views of interest rates (and resulting payment speeds of the underlying borrowers) and other macro- and microeconomic factors that drive borrower behavior. Furthermore, many investors in GSE MBS are only investors in these products due to the implicit guarantee. If the guarantee is removed, they will no longer participate in these markets, in some cases regardless of the yields offered on the securities.

SIFMA's Task Force does acknowledge, however, that a substantially larger, government supported mortgage market could potentially impact the Federal Reserve's management the general levels of pricing of credit in the economy, because the supply of credit could be managed through changes to underwriting standards for loans eligible to be insured, which in some cases could act in an opposing direction to changes in general levels of interest rates. The extent of this impact, and its relative significance compared to the benefits such a regime would confer on consumers, are unclear, and ultimately determining these answers is best left to policymakers. It is another factor that should be included in the consideration of the future of the U.S. mortgage finance system.

The Importance of the TBA MBS Markets Cannot Be Overstated

The majority of trading volume in the agency MBS markets today is in the form of "To-Be-Announced" (TBA) trading. For background, a 'TBA' is a contract for the purchase or sale of agency mortgage-backed securities to be delivered at a future agreed-upon date; however, the actual pool identities or the number of pools that will be delivered to fulfill the trade obligation or terms of the contract are unknown at the time of the trade. Actual mortgage pools guaranteed by one of the Agencies are subsequently "allocated" to the TBA transactions to be delivered upon settlement. Settlement dates of transactions are standardized by product type (e.g. 30 year FNMA/Freddie Mac pools, 30 year Ginnie Mae pools, 15-year pools) to occur on four specific days each month. Monthly settlement date calendars for the TBA market are published one year in advance by a SIFMA committee on a rolling 12-month basis. This is done to increase the efficiency of the settlement infrastructure, and facilitate forward trading. Most trades are executed for settlement within one to three months, although some trading may go further forward from time to time.

For example, Investor A would call up Market Maker A on July 1, and order $10 million FNMA 5.5% coupon 30-year MBS, for settlement on August 15. The investor does not specify specific bonds or CUSIP numbers. On August 13, according to market practice, Market Maker A would notify Investor A of the specific identities of the pools that will be delivered on August 15. Most likely, these will be MBS that were just issued at the beginning of August.

Similarly, and importantly, a loan originator can enter into forward TBA sale contracts, allowing them to hedge the risk of their loan origination pipelines. This permits the lenders to lock in a price for the mortgages they are in the process of originating, benefitting the borrower with the ability to lock in mortgage rates earlier in the process. Pricing on loans varies from day to day with fluctuations in the TBA markets, and lenders will often re-price loans for their bankers and correspondent partners on a daily basis. Thus mortgage bankers follow the market in order make decisions on when to lock in a rate for a borrower.

There are currently over $3 trillion in bonds eligible for TBA trading – it is a vast market. It is also extremely liquid – Federal Reserve data shows average daily trading volumes of Agency MBS reported by the Fed's primary dealers as exceeding $300 billion *per day* over each of the last 3 years. Private estimates of daily TBA trading volumes exceed $600 billion (these estimates take in to account trading beyond that of the primary dealers). Liquidity in this market is second only to the market for Treasuries. This liquidity allows investors to buy and sell significant quantities of securities quickly and without disrupting the market. This makes the market very attractive to these investors who have substantial funds to be invested.

As mentioned above, the TBA market is the most liquid, and consequently most important, secondary market for mortgage securities. In this time of distress, the importance of the TBA market is heightened, and it is difficult to exaggerate the consequences from a loss of confidence or liquidity in this market. The effects would be directly and immediately felt by the average mortgage borrower. The impact would include, at a minimum, higher mortgage rates, as yields required by investors would rise as liquidity falls. It is also likely that credit availability would be constricted. This would occur because secondary market executions for originators would be more expensive and take longer, requiring longer warehousing periods for loans they originate. Balance sheet capacity is a currently a scare commodity for most lenders, and is finite in any case. Furthermore, the ability of borrowers to lock-in rates on mortgage applications would likely be reduced, creating uncertainty for them and likely depressing real estate activity which is an important component of broader economic activity.

Ultimately the decision to guarantee or to not guarantee is policy choice for Congress. However, our view is that the choice presented is not one of degrees, but is more akin to a binary choice – the result will either be large, efficient, liquid, national conforming mortgage markets, or it won't be. Task force members believe a liquid TBA market is a required and essential component of the mortgage finance system, currently and in the future, with an importance that cannot be underestimated.

Purely Private Sector Insurance Solutions Will Not Provide Needed Support and Confidence to Support TBA Trading of MBS

Some have suggested various models of private market insurance for future MBS issuances. Our members do not believe these private sector models will attract the necessary investor capital and will not foster the maintenance of extremely liquid markets that a government guarantee will provide, and cannot support markets where securities trade TBA. One reason is that private sector mono-line insurance companies have not fared well in recent times of market stress – and in the most recent crisis this applies to both mortgage insurance companies as well as bond insurers. Many insurers have ceased underwriting new business, have entered a wind-down mode, and/or have ceased paying claims on their insurance policies. Clearly private sector solutions were not, and likely will not be, resilient in times of stress. In any case, it is doubtful that investors will believe them to be, which is the most critical consideration. Given the size of the U.S. mortgage markets, any comprehensive private insurance system would have to be so large, and would require so much capital to withstand the proverbial 100 year storm, that it is hard to see how it could be done in a manner that would provide anything approaching equality in terms of cost, efficiency, stability, or resilience to that provided by the GSEs today, unless the private insurance entities are ultimately backed by the government. If they are backed by the government, it is more efficient and less costly for the government to provide the insurance itself directly to the MBS. Private insurance would introduce an element of credit risk into the analysis of the MBS, which as discussed above would immediately eliminate certain classes of investors and would significantly impair the flows of capital to mortgage markets, resulting in higher rates for mortgage borrowers.

The Explicit Guarantee Can Take A Number Of Forms, But Government Re-Insurance May Be Most Efficient

There are a number of ways that an explicit guarantee on GSE MBS could be structured. The bottom line for a guarantee is that investors must know that they will receive back at least their invested principal.

Currently, both GNMA and GSE MBS also guarantee that investors will receive the scheduled interest payments on a given loan, so long as the loan is outstanding. This means that at times, the GSE or the servicer, depending on the program, must make up what is referred to as a prepayment interest shortfall. For example, a loan might pay off on the 15th of a month, but interest is due to the bondholders for the entire month – the lender, servicer, or sometimes the GSE will make up that shortfall. Some have suggested that the guarantee of payment of all scheduled interest be eliminated as a way to decrease the cost of a guarantee. However it will introduce more volatility into the analysis of prepayments and possibly result in investors demanding higher yields to compensate. Therefore, the optimal outcome for mortgage borrowers, in terms of rates, would require the guarantee of payment of these interest shortfall amounts.

One option is a full faith and credit guarantee where the government backs the timely payment of principal and interest on the entire security, similar to the guarantee on

GNMA securities. It is important to note that in the GNMA context, the loans that underlie the securities are also guaranteed, by the Federal Housing Administration. This underlying guarantee is not required, however, in the context of GSE discussions. This type of security-level guarantee would provide the necessary comfort to investors that they will see the return of their invested principal. However, this is likely the most expensive form of a guarantee from an accounting perspective, as the government is essentially responsible for a guarantee of each dollar of loss on a bond. This may be appropriate in the context of GNMA, but is probably not in the context of a regime where an entity stands between the government guarantee and investors, with the ability to provide its own corporate guarantee.

Government Reinsurance

Thus another logical, and possibly preferable, structure for a guarantee would have the government re-insure a corporate guarantee on the MBS. The MBS issuer (presumably a GSE) would take on the "first loss" position, and the government guarantee would only be triggered in the event that the issuing entity was unable to stand behind its corporate guarantee. The issuing entity would pay a fee for the use of this government guarantee, which would be determined by the government and could be adjusted based on risk, changing market conditions, or other policy considerations that we do not address here. In benign environments, this guarantee fee would be a source of revenue for the government. In stressed environments, the government may or may not have to pay out on claims; this would depend on the capitalization of the issuing entities and the severity of the market distress. A guarantee of this nature would appear to fulfill dual mandates of comforting investors and ensuring stability in mortgage markets, and minimizing the (real and accounting) costs to the government. We do not believe, however, that this government reinsurance can be pegged at any specific level (e.g., government reinsurance only covers 30% of the face value of the bond and the issuing entity is responsible for the other 70%), as this would introduce credit risk into investment considerations and likely result in tiering of the market if there is more than one issuing entity.

We do note that reinsurance programs of a corporate first-loss guarantee would present certain challenges. In a first loss position, the successor entities (and possibly their regulator, depending on the future framework) would be powerful gatekeepers at key policy points in the housing cycle through their management of levels of guarantee fees. Past experience shows that the GSEs were at times reluctant to make major changes in their guarantee fees, possibly due to a concern that they could be construed as regulating the flow of credit. We note that OFHEO was studying whether g-fees were too high in 2007 due to historically low loss experiences. Providing a future private (or semi-private) enterprise (cooperative or otherwise) with this sort of systemic power will present these same issues, and policymakers should be conscious of them.

Secondly, it may be difficult or impossible to empirically determine the appropriate level of first loss cushion. The likely error will be to the high side, over capitalizing/reserving any new entities. The result of this for homeowners would be higher costs than are truly necessary. On the other hand, if an option is presented to somewhat over- or under-

capitalize such an institution, it may be prudent and more politically palatable to err on the side of over-capitalization.

Should the GSEs have Private Ownership?

At this point SIFMA's task force has not focused on specific permutations of corporate structure for the future GSEs or their successor entities, the levels of capital required for each, and the sources and cost of that capital. At a high level, however, SIFMA members do not believe that some form of private ownership interest in the future GSEs is an unreasonable or unwise outcome on its face. However, as mentioned previously, our focus has been on secondary markets and what is required to preserve the liquidity and other benefits the current regime has conferred upon mortgage markets. Our task force members do agree on one high level concept, however: if some form of a GSE exists in the future, it should be established with a limited and specific charter that outlines a limited and specific mission, along with a strong regulator empowered to regulate and manage the activities of the entity in all appropriate ways, but acts in coordination with entities such as the Treasury and Federal Reserve to ensure the safety and soundness of the broader financial system. Changes to this charter and mission should be solely within the purview of Congress.

Can Private Banks, Either Individually or as Consortiums, Replace the GSEs?

If the government is willing to provide reinsurance for a fee, one can argue that GSEs are not needed; rather, that banks could issue their own government reinsured MBS off their own shelves. This presents a number of challenges that would need to be considered to ensure that liquidity and efficiency are preserved. For one, such a system may favor larger lenders over smaller ones, as small lenders could have problems warehousing loans until they reach critical mass that would support an MBS issuance. It could also result in smaller lenders being forced to maintain a relationship with a large bank which would serve as an aggregator, which is a role that was previously filled by the GSEs through their cash windows. Given recent accounting rule changes (SFAS 166 and 167), it is also unclear if banks that issued their own MBS would be able to move the assets off their balance sheet to free up regulatory capital that would support further lending. The outcome would depend on the facts and circumstances surrounding the MBS programs. Currently, the GSEs consolidate MBS on their balance sheets, allowing lenders to recycle scarce capital into new loans, ultimately reducing mortgage rates and increasing credit availability. This is an important consideration for any future system.

A reinsurance model would also support an approach whereby cooperatives would be formed and owned by their member banks, with a special charter, akin to the Federal Home Loan Bank system (but with a different purpose). This approach could avoid some of the challenges discussed above.

What is clear from our discussions is a view that a completely privatized system, with no GSEs and no government guarantee, will not be able to support liquid secondary markets for MBS, and will result in significantly increased borrowing costs and significantly lower lending capacity and credit availability. These costs would be even more

significant during times of economic distress. That being said, policymakers must determine the appropriate public policy goal with respect to mortgage finance and government subsidies to promote greater availability of mortgage credit. There are a number of options between purely private and purely public alternatives that can be considered each with its own costs and benefits, which may differ depending on one's perspective.

Alignment of Interests

SIFMA agrees that a general alignment of interests of securitization transaction participants is important, at a high level. In other words, originators, issuers, sponsors, and cash investors should share an interest in transactions where material terms and risks are properly disclosed, and absent external factors, the assets perform in line with expectations. There are a number of methods through which the incentives of participants may be aligned. Chief among these, especially in the context of GSE-issued MBS, are repurchase rules. Sellers of loans to a securitization are generally contractually obligated to repurchase loans that violate a representation and warranty made at the time of the transfer of the loans. The GSEs have proven especially effective at enforcing these contractual risk retention obligations. Outside of the GSE markets, a number of originators have suffered significant losses, or even gone out of business entirely, because of repurchase requirements based on representation and warranty violations.

The process of working through these contractual claims is not always easy outside of the GSE MBS markets where the GSEs have significant ability to compel repurchases; therefore other measures of risk alignment have been advocated such as the retention of economic interests by sponsors of securitizations. Generally, SIFMA supports requirements such as those in the Dodd-Frank Act for transaction sponsors to retain a meaningful economic interest in securitized products, with appropriate regulatory discretion in terms of implementation of such a regime. We believe that retention of such an interest can help to align the incentives of originators and sponsors with securitization investors, thereby helping to restore confidence and functionality to the securitization markets, an essential step in the path to economic recovery and growth. SIFMA believes it is very important that Federal regulators are given the authority to design and apply retention requirements in a manner that specifies permissible forms and amounts of retention, how retention requirements may be calculated and measured, the duration of retention requirements, whether and to what extent hedging of retained interests is permissible, and other important implementation details. We note that as providers of a corporate guarantee of principal and interest on securities, the GSEs retain 100% of the risk of their issuances.

Many also point to alternative structures such as covered bonds, where loans remain on the issuing bank's balance sheet. Covered bonds are often discussed as a replacement for, or an alternative to securitization. SIFMA and its members strongly support the development of a covered bond market in the U.S., and in 2008 SIFMA formed the U.S. Covered Bond Council, which comprises issuers, market makers, and investors in covered bond markets to further this mission. One of the primary goals of this group is to

establish a legislative framework for covered bonds in the U.S., as this is viewed as an essential component of the growth of this market. SIFMA members do not believe, however, that covered bonds should be viewed as a replacement for securitization or the GSEs, especially at this point in time. SIFMA members encourage policymakers to promote and foster a liquid covered bond market, but view it as distinct from, and complementary to, securitization markets such as those for GSE and privately issued MBS.

3. **Should the government approach differ across different segments of the market, and if so, how?**

   - ***Commentary could address: differentiation of approach based on mortgage size or other characteristics; rationale for integration or separation of functions related to the single-family and multi-family market; whether there should be an emphasis on supporting the production of subsidized multifamily housing; differentiation in mechanism to convey subsidies, if any.***

Historically the GSEs and FHA/Ginnie Mae have acted within the bound of conforming loan limits. Thus, government support (implicit and explicit) has been focused on a limited portion of the housing markets. This regime reflected a view that the appropriate recipients of such support were homebuyers and homeowners with lower to moderate incomes, and that higher income borrowers would be served by banks through portfolio lending or private label securitization. Thus, the boundaries between public and private markets were in many ways determined by loan limits. This was not a strict rule, however, as private securitization included products that were below the loan limits but outside of the underwriting guidelines of the GSEs and FHA. Given the implicit support of the GSEs, and the benefits that conferred on their funding costs, private securitization markets generally could not economically compete with GSE MBS for conforming products. If Congress determines that changes to loan limits are necessary, we believe it is important that any changes be measured and gradual, to allow for private sources of mortgage funding to fill in the space once filled by the activities of the GSEs and/or FHA.

As we have discussed previously in this paper the ultimate existence and scope of the activities of the GSEs or their successors are policy questions. However, SIFMA members believe that there was, is, and will remain a role for private securitization markets in U.S. mortgage finance. Our members do not believe the current situation, where the GSEs and FHA support 95% of mortgage lending, is desirable, tenable, or healthy for taxpayers or housing markets in the long term. Therefore, we do believe the activities of any future GSE or successor should be circumscribed and targeted to where their economic impact would be maximized, and that private markets fill in around that space.

As noted previously and in the following section, SIFMA's Task Force supports the activities with respect to multifamily housing, and believes that if GSEs exist in the future that multifamily housing is appropriately within their purview.

4. How should the current organization of the housing finance system be improved?

- ***Commentary could address: what aspects should be preserved, changed, eliminated or added; regulatory considerations; optimal general organizational design and market structure; capital market functions; sources of funding; mortgage origination, distribution and servicing; the role of the existing government-sponsored enterprises; and the challenges of transitioning from the current system to a desired future system.***

Broad, Overarching Conclusions

At a high level, SIFMA Task Force members believe it is essential to preserve the benefits that securitization brings to lending markets. Chief among these benefits is the creation of a mechanism for private capital, and importantly, international capital, to flow to end users of consumer credit products. As discussed earlier, banks cannot replicate the scale and scope of these capital inflows with their balance sheets alone – securitization is necessary. This inflow of capital comes through both private securitization as well as GSE and government agency securitization, and we believe there is a complementary role for both.

While a number of problems have surfaced in the last few years, SIFMA's task force believes the appropriate approach is to fix what is broken, and bolster what worked. It does not make sense to discard products, services, and market practices that were demonstrably sound and beneficial to mortgage finance markets.

With respect to private securitization markets, industry participants are working to develop transactions that are palatable to both issuers and investors. This process will take time, and will require a meeting of the minds between and among issuers, underwriters, and the investors who buy their products. Recently we have seen the first RMBS transaction supported by new-issue loans. While this was but one transaction, it is at the least a promising sign that private mortgage securitization is not dead. We believe that significant time and work is in front of the industry before the private markets may be declared healthy, and it is important in the interim that the government not take actions that will preclude or otherwise significantly harm progress towards the restoration of vibrant private RMBS markets.

Some specific considerations for the GSEs follow.

The Specific Form of Corporate Organization, and Securities Issuance, by the Successor(s) to the GSEs is Flexible, as Long As It Provides for Homogeneity in Secondary Markets

The TBA market is based on one fundamental assumption – homogeneity. TBA trading is based on the assumption that the specific mortgage pools which will be delivered are fungible, and thus do not need to be explicitly known at the time a trade is initiated. At a

high level, one pool is considered to be interchangeable with another pool. What this means for securities issued by any future GSE or successor entity or program is that regardless of how they are organized, or how many there are, the securities must look the same from the perspective of an investor. They should share the same guarantee, the same terms (payment day delay, etc…), and be for all intents and purposes fungible.

A Security Issuer Modeled After Ginnie Mae?

One option for securities issuance is to create a single entity that issues securities, modeled on GNMA (or, with appropriate staffing and resource and technology increases, presumably it could be GNMA). Regardless of how many GSEs are created, or even if any are created, one entity would issue the government guaranteed debt. This would provide for homogeneity and would minimize duplication of efforts on the part of multiple GSEs. SIFMA's Task Force would support such an outcome.

How Many GSEs?

If one entity is established to securitize loans, then questions of the appropriate number of GSEs becomes somewhat (but not entirely) less important, in the context of the maintenance of homogeneity in their MBS issuances. It is sometimes suggested that there should be more than two GSE-like entities in order to minimize systemic risk and "too big to fail" problems that are faced today, and on the surface, this would seem to be accomplished by creating five, six, seven or more GSEs. However, we note that each GSE will be placing the same "bet" on the housing markets, and thus the total risk across the system would not be reduced. Further, any future GSE is likely to be more strictly regulated and its activities more circumscribed or described alternately, less diversified. Thus the multiple GSEs would be significantly similar in terms of their activities, assets, and risk profiles. In the event of another significant downturn, the correlation between them will likely be 100%. Certain of these risks may be mitigated by a careful drawing of the boundaries of the activities of the entities in terms of products, activities, and risk limits, but recent experience has shown that unexpected events can devastate the most carefully constructed risk management plans. Thus, while the creation of multiple GSE-like entities could result in no single "too big to fail" entity, the risk of a systemic failure will still be present.

Furthermore, if the securities issued by the multiple entities were not sufficiently homogeneous in the eyes of investors, they would trade in separate TBA markets with reduced liquidity and higher interest rates for mortgage borrowers. An important factor for liquidity in these markets is the size of the market – that is, the available supply and new production of products for a given issuer, coupon, and term. Estimates vary on what is the minimum level of "tradable float" for a given product at the security coupon level, but it is safe to say that is it in the multiple tens of billions of dollars and most likely exceeds $50 billion per coupon (e.g., a liquid market in TBA eligible FNMA 5.5% coupon MBS would require at a minimum $50 billion of outstanding, tradable securities). Right now, there are distinct TBA markets for Fannie Mae and Freddie Mac securities, divided into the term (15 vs. 30 years) and further segmented by coupon. As the number

of GSEs is increased, the number of TBA markets that will need to be supported by market makers and investors will increase ultimately reaching a point where fragmentation and operational complexity negatively impacts liquidity. Also working against liquidity will be the fact that the tradable supply in each distinct market will get smaller as more GSEs become issuers of MBS. Thus, policymakers must be sensitive to the need for significant issuance of homogeneous securities into a limited number of distinct markets to ensure liquidity. If the securities issued by multiple GSEs are not homogeneous, then liquidity will be impaired to the detriment of mortgage borrowers.

On the other hand SIFMA members do believe there is an important benefit to having more than one GSE. This benefit is not so much in terms of competition in terms of prices, products, or profits, which is the usual rationale for desiring a multiplicity of participants in a market (and which played a role in the demise of the current GSEs – especially competition with the private MBS markets). Rather, it is competition in terms of responsiveness to originators and investors. If only one GSE is created, what incentive will it have to be responsive to the needs of its originators? Originators will not have an alternative. Maintaining at least two entities would thus provide incentives for the GSEs to be responsive to their originator clients, and also to the needs of investors, for they would have to face a risk of losing business to the other. Given the considerable expertise and experience of the professional staff of both GSEs, it may be advisable to keep the current infrastructure as intact as is reasonable while still accomplishing the desired policy and reform goals. A strong regulator, as discussed below, would be needed in order to monitor the activities of the GSEs and ensure that this responsiveness does not turn into a repeat of a competitive "race to the bottom" similar to that which was experienced in the previous decade.

Portfolios Present a Number of Issues, But Ultimately At Least A Limited Operation Portfolio Is Needed

SIFMA task force members agree on an important overarching premise regarding portfolios – if they exist, whatever form portfolios take will require a clear mandate. One thing that is clear in the aftermath of the last two years is that inappropriate management the risk of the portfolios contributed to the inability of the GSEs to support the housing markets when their support was most needed.

Transactional Portfolios Are Needed To Keep MBS Markets Liquid and Provide Flexibility to Originators

Our members agree portfolios will be required if for nothing else but to facilitate securitization and standard maintenance of securities issuance programs, such as providing a holding facility for loans that are repurchased from securitized pools. Even if the GSEs or successor entity themselves do not issue MBS (i.e., it is issued by a GNMA-like entity), one would assume that the future GSE or successor entity would be the parties responsible for repurchasing delinquent, modified, or otherwise non-qualifying loans from securities. Furthermore, the GSEs currently provide to originators the ability to sell loans on a flow basis, that is, as they are originated, to the GSEs. The GSEs serve as an aggregator, and collect loans until a critical mass is reached and MBS can be issued.

Further, portfolios also served a function of intermediating prepayment risk for smaller institutions that may not have had either the size or ability to economically manage such risks on their own. If GSEs were unable to provide these functions, smaller originators may have problems managing such risk, issuing MBS on their own due to warehousing costs and other issues, and they would be forced to sell their loans to a larger institution (a competitor) that could support a large portfolio of loans. This would likely have a negative impact on the pricing of their lending products to consumers. If portfolio activities were limited to serving this role, they could be capped at levels significantly lower than their current size and significantly mitigate current concerns around systemic risk they present.

However, some SIFMA members believe that the portfolios should serve a somewhat broader purpose than simply facilitating securitization of single-family mortgages.

Multifamily Lending has Generally Been a Portfolio Product

The GSEs have traditionally played an important role supporting multifamily lending programs, especially through their retained portfolios[2]. While these programs are smaller than the traditional single family business, they are no less important to many homeowners and renters. However, the multifamily markets have not lent themselves to supporting a liquid MBS market akin to that of single family products to this point. One reason is because the collateral is less homogeneous and more concentrated, and another is simply due to the size of the markets compared to single family – they are much smaller. Thus, the GSE portfolios have played a very important role in supporting multifamily lending, and if this support is withdrawn it is not clear what will provide needed liquidity to multifamily lenders. Task force members note, however, that if successors to the GSEs were to issue multifamily MBS that were government guaranteed, there would be a market for it. The policy question is whether or not this market would provide pricing that enabled the desired amount of multifamily finance. Whether or not the GSEs have portfolios, SIFMA members believe that multifamily activities should remain within the scope of acceptable activities for GSEs or successor entity in the future. We do not believe that multifamily markets will operate efficiently without this support.

Historic Role of the Portfolios, and the Question of the Need for a MBS Market Backstop

Prior to 2008, the GSE portfolios played an important role as a kind of backstop or source of liquidity of last resort for their MBS markets, providing demand in areas where demand was weak. In this case, the profit motive of the GSEs incented them to buy their own MBS when it was "cheap". This activity mitigated volatility, serving to keep mortgage interest rates more stable. Given this past role, many SIFMA task force members believe that in the future portfolios can and should play an important role as a countercyclical buffer, stepping in to create stability in mortgage markets when private investor demand is weaker. Due to the GSEs' difficulties, the Federal Reserve played this role throughout 2009, although to an extreme far beyond the traditional role of the

[2] According to the 2008 FHFA annual report, at the end of 2008 Fannie Mae held $117 billion of multifamily loans in addition to the outstanding $38 billion in multifamily-backed MBS. Freddie Mac held approximately $72 billion in multifamily loans in addition to its $13.5 billion in outstanding MBS issuances. 2008 FHFA report available here: http://www.fhfa.gov/webfiles/2335/FHFA_ReportToCongress2008508rev.pdf

GSEs.[3] Many members of the SIFMA task force believe that the GSEs or successor entities should retain portfolio functions for these purposes, but limited to activities with respect to conforming products. Furthermore, many task force members believe it is appropriate for any portfolio functions beyond an operational portfolio supporting the guarantee business to be housed in a separate entity or otherwise completely walled off from the guarantee business.

A challenge with this approach relates to the motivation for GSE or successor entity to play this role. As noted above, in the past the profit motive of the GSEs provided incentives to purchase "cheap" securities in the secondary market. However, the downside of this profit motive was that the GSEs arguably did not have incentives to shrink the portfolios in times when they were not necessary to provide stability to the markets. Given that any future GSE or successor entity is likely to have a moderately or extremely reduced motivation and/or ability to earn unlimited profits, it is somewhat unclear what would incent the GSE or successor entity to purchase securities in this manner. That being said, there may be a nexus between this portfolio function and guarantee fees charged by the GSEs, in that, if a GSE were organized as a utility or otherwise with strict ROE or earnings targets, when portfolio profits were higher, guarantee fees charged by the entity could be reduced, and when portfolio profits were lower, guarantee fees could be increased. This would create incentives for portfolios to shrink in times when MBS were not "cheap" and providing sufficient returns. However, it is unclear if such a portfolio would be able to attract the level of talented professionals that would be required to manage such an important function.

Assuming the GSEs were allowed to play this role, appropriate maximum sizes for the portfolios could be implemented if desired. This number would likely be somewhere above zero but significantly smaller than the current $900 BN cap faced by each GSE. The maximum size should be clearly related to the capital of the institution and the overall size of the mortgage markets. Should the markets require support above and beyond the capacity of these limited portfolios, it is likely that the nation would be facing another financial or economic crisis that would make direct, explicit government intervention in all likelihood necessary. Regardless of the ultimate level of the cap, graduated capital standards may be appropriate in order to incent appropriate risk management as the portfolios grow.

Significant challenges exist, however, to creating portfolios that are able to expand quickly from de minimis levels to larger sizes to provide support to mortgage markets. Presumably the GSEs or successor entity will need to issue debt to support a portfolio expansion (discussed further below). However, if there is not a significant supply of outstanding debt, liquidity for new issuances and the market's capacity to absorb significant quantities of securities will be limited. Therefore the ability of the GSEs or their successors to provide support may be limited by (a) the absolute amount of debt they are able to issue in a short period of time, and/or (b) the cost of the debt issuances.

[3] The Federal Reserve entered the market with a mandate to push mortgage rates down and increase affordability of mortgage products, as well as to drive investment out of GSE MBS and in to other financial products to support those markets, through what the Fed calls the "portfolio balance channel". See remarks of Brian Sack, Executive Vice President of the Federal Reserve Bank of New York, available online: http://www.newyorkfed.org/newsevents/speeches/2009/sac091202.html

Thus, if portfolios are expected to fill this role of a balance sheet of last resort, they will need to have a steady state level that provides enough liquidity so that their sizes can be increased quickly in case of emergency.

Ultimately the question of whether or not a backstop bid is required for MBS markets is a policy choice. While a portfolio that played this role could have the effect of smoothing out volatility, it is important to keep in mind that some degree of volatility is normal for a financial market. It can also be argued that if the GSEs or their successors effectively and consistently transmitted investment capital from investors in MBS to the banks that make loans to borrowers that this by its very nature would have the effect of smoothing out volatility in mortgage rate, and that their portfolios are not needed for this process to take place. The smoothness that is obtained may not be to the same level as if they were also actors with portfolios, but questions of the socially desirable level of mortgage rate volatility are not questions for markets, but rather policymakers.

Larger Policy Questions Regarding Portfolios

The issue of portfolios raises a relevant policy question – if the portfolios are meant to serve a public policy purpose (stability in the mortgage markets/balance sheet of last resort), should they be housed within an official arm of the government (such as the Treasury) or reside in private or semi-private markets? One major difference between the past portfolio activities of the GSEs when compared to the Federal Reserve's effort is that, generally speaking, the GSEs acted with economic motivations with respect to their own MBS, and other market participants were better able to discern why the GSEs acted as they did, and have a better window into where these large, important players may next act. In contrast, the actions of the Federal Reserve have stemmed from a macroeconomic policy goal as opposed to a relative value, profit motivated goal, and have caused market distortions due to their unique nature. If the portfolio is housed within a government entity, it could have an appearance of being a price targeting mechanism, and be considered to be more likely to act with non-economic motivations that could lead to distortions of the market. Ultimately, a portfolio that did not act in accordance with economic principles could lead to meaningful distortions of the MBS market.

Most of the task force members believe GSEs or their successor entities should be prohibited from purchasing anything other than their own conforming MBS. However, some task force members strongly believe that if properly managed, retained portfolios including non-conforming assets would serve an important function commensurate with broader policy goals. This view is based on a premise that portfolios are not inherently bad, but rather that mismanagement of risk caused the problems we are now dealing with. These members note that the GSEs could serve as providers of seed capital to small or new markets that have not yet developed strong liquidity on their own.

All in all, the task force members believe a retained portfolio in some form is necessary on a purely operational basis, at a minimum. Beyond this level of activity, policy choices must be made regarding the role that a portfolio could play in mortgage markets. A portfolio could have a special role in multifamily markets; and if policymakers determine that smoothing out significant volatility and liquidity disruptions is a policy goal, a

portfolio housed either in a GSE-like entity or an agency of the government would be a means to accomplish that goal.

Considerations for GSE Corporate Debt

Task force members agree that if the GSEs or successor entities maintain portfolios of any significant size, such portfolios will need to be financed, and this most logically will come through the issuance of corporate debt. This raises the question of whether such corporate debt should carry some form of a government guarantee like that proposed for MBS as previously discussed.

Some task force members believe it might be difficult for the GSEs or successor entities to issue non-guaranteed debt in significant volumes, if at all, in times of financial or economic stress. One solution to this problem might be to establish a permanent financing facility for the GSEs within the Treasury Department or the Department of Housing and Urban Development. On the other hand, GSEs that issue guaranteed debt will achieve a funding advantage over non-GSE market participants. It is conceivable that these competitive issues could be addressed through regulation; in any case issues around the corporate debt of the entities need to be considered in more detail. They are not, however, directly related to the issues which are central to this document, those being liquidity and capital formation for mortgage markets. We also note that to the extent that the GSEs are limited to owning government guaranteed MBS, this would likely confer benefits to their debt issuances, as they would be perceived as safer.

Transition Issues and Resolution of the Conservatorships

-Guarantee Needed For Existing Securities

SIFMA Task Force members believe the government must clearly state intentions with respect to legacy GSE issues prior to and during any transition, and that existing GSE MBS and corporate debt should be explicitly guaranteed. Bifurcation of markets into pre- and post-reform markets should be avoided at all costs. Especially for the MBS, considerations of bridging the assets from the 'old' market into the 'new' market will arise. Exchange programs for existing assets could be arranged in the event that terms of securities under the new regime materially differ from terms of existing securities. These exchange programs have been executed in these markets in the past, and lessons learned from those experiences can guide future operations.

-Creation of a Wind-Down Vehicle

In terms of addressing issues with delinquent, poorly performing, or non-conforming assets held by the GSEs, SIFMA Task Force members are in general agreement that existing "bad" assets should be spun off into a wind-down vehicle (i.e., assets split into a good bank/bad bank arrangement). Determining the structure of the vehicle involves tradeoffs: Both existing GSEs could become wind-down vehicles (or merged into a single vehicle) and new activities carried out in a new entity. This would provide the benefit of nominally providing a "fresh start" and allowing policymakers to "eliminate" Fannie Mae and Freddie Mac, which could confer some benefits. On the other hand,

seemingly simple things like name changes of the enterprises will present significant operational challenges for investors in terms of requirements for new investment committee approvals, documentation, IT systems, and other similar issues. Therefore it may be easier to simply create a new entity and transfer the bad assets into that entity.

-The Challenge Is To Determine What Is "Good" And What Is "Bad"

Non-agency assets held in the retained portfolios of the current GSEs may be easily identified and placed into the wind-down vehicle. SIFMA Task Force members believe that loans held in the existing portfolios should also be placed into the wind down vehicle. Many existing Agency MBS securities held in portfolio, however, are composed of good and bad assets.

One option for these existing securities would be to place bad loans bought out of securities into the bad bank as they are repurchased. However this would involve some degree of operational complexity and inefficiency. Therefore it may be advisable to place all existing portfolio holdings into the wind-down vehicles. If some of the wind-down vehicle's assets perform well, that will only serve to reduce the ultimate costs of the wind down process. Additionally, assets in the bad bank need the same transparency or better than they have now as they will be an excellent source of market information.

Our members have reached a general consensus that the easiest and most efficient way to separate assets is to draw a clear line on the date when the GSEs are reorganized. Assets held by the GSEs before that time would be placed in the bad bank, and assets created after that time would be placed in the good bank. If there is a policy goal to retain assets in the new companies to the extent possible, then only non-conforming assets (by the new definition of non-conforming, whatever that may be) could be moved into the wind-down vehicle.

Policymakers Must Provide for a Strong Regulator and Strong Capital Adequacy Standards, And Define a Clear Mission for Successors to the GSEs

It is clear that due to poor risk management, flawed business strategy and other management and policy failures, the GSEs became insolvent. Part of the blame for this can appropriately be ascribed to the fact that the GSE's former regulator, OFHEO, lacked certain powers that were appropriate for its role such as the ability to freely adjust risk based capital standards, better regulate the management and activities of the GSEs, and place the entities into a conservatorship as opposed to receivership, if needed. This has been at least somewhat rectified since 2008 with the creation of FHFA. Going forward, any GSE must continue to be regulated by a strong, empowered regulator with the powers to disallow practices that have become too risky, enforce appropriate capital standards, and to reign in competitive excesses that threaten the stability of the organizations. For this to be possible, the regulator must be sufficiently funded so that it is able to develop a staff with the requisite expertise and experience to manage such an important role. Presumably fees on government reinsurance could fund the regulator. In any case, it will be important to market participants that the future entities, if they exist, are properly regulated as to avoid a repeat of recent history.

5. How should the housing finance system support sound market practices?

- ***Commentary could address underwriting standards; how best to balance risk and access; and extent to which housing finance systems that reference certain standards and mortgage products contribute to this objective.***

Bad Underwriting is at the Center of Market Disruption and Key to Future Success

At the center of the recent market distress lies bad underwriting. The crisis spun out of control because of the pervasiveness of poorly performing products; poorly performing products became so pervasive because relaxed underwriting standards allowed volumes of loan origination to expand to unsustainable levels.

While many reforms have been proposed, suggested, and/or implemented, the most effective check on future excesses would be regulation of mortgage underwriting that requires that lending be sensible and based on some reasonable expectation of repayment. Of course, a balance needs to be stuck between access to credit and assurance of repayment, as it is unreasonable to expect that each and every borrower will repay his or her loan. But the bottom line is that attempting to regulate primary lending markets through regulation of securitization and other secondary markets is by definition inefficient, will cause distortions, and will be likely to see only uneven success. We note that while improvements to underwriting can help lead to a safer system, they will not entirely eliminate systemic risk. The system will still be vulnerable to exogenous shocks, however, it should have a more solid base of support to withstand such events.

The GSEs traditionally have been a reference point for origination standards. They also, as discussed above, have fostered the development of beneficial products such as 30 year mortgages, and standardized documentation.

Some thoughts on the role of underwriting standards and the future of the GSEs follow.

Role for Government and the Regulator in Setting Underwriting and Risk Management Standards for GSEs and any Successor Entities

The GSEs were established with a clear public policy goal of providing a stable source of funding for the mortgage market and thus mortgage availability and affordability for homebuyers. Arguably the GSEs got into trouble when they strayed beyond their original mission whether by their choice or because of policies that incented the GSEs to stray. It seems appropriate that an explicit government guarantee, such as what we have suggested above, should be matched with an explicitly defined mission specifically as it relates to product and credit parameters. We believe it is appropriate for policymakers to make decisions regarding what mortgage products should be the beneficiaries of government support. It is also appropriate for the government, if it offers a guarantee, to set out in a broad manner uniform underwriting standards that appropriately balance the availability of credit to deserving borrowers and the risk they present to the government insurance program. Historically, SIFMA has supported efforts of legislators to develop uniform regulations and laws regarding mortgage lending; by regulating the activities of the

conduits of the majority of mortgage lending, a similar purpose may be achieved through a more appropriately market-based mechanism. In other words, if policymakers have a view as to what is the most beneficial form of mortgage lending, that can be the area in which the GSEs or their successors operate. Lending products that fall outside of that area will be forced to stand on their own, and attract investment capital through their own merits and performance.

That being said, our task force members believe that there are sound market efficiency reasons to preserve the ability of the GSEs or their successor entities to implement specific policies and criteria, such as risk-based pricing or underwriting guidelines, within broader parameters outlined by Congress and their regulator. We note that FHA has struggled to implement risk based pricing for its program, which has resulted in negative consequences for the performance of FHA's insurance fund.

This limited flexibility would allow the GSEs to react to changing market conditions, and with an appropriate risk management infrastructure in place, provide an efficient service to the economy.

6. **What is the best way for the housing finance system to help ensure consumers are protected from unfair, abusive or deceptive practices?**

   - ***Commentary could address: level of consumer protections and limitation; supervising agencies; specific restrictions; and role of consumer education***

The best protection for consumers will be the development and maintenance of sound underwriting principles. We note that while many policy efforts have aimed at the secondary markets, such as risk retention, assignee liability, or otherwise, the most impactful, direct, efficient, and effective means to regulate lending standards is by actually regulating lending standard. The answer is not to use the secondary market as a policeman for primary markets; rather, primary markets need direct attention. Furthermore, the market values of loans and mortgage-backed securities are determined by the integrity of the origination process – this is aligned with the interests of mortgage borrowers.

7. **Do housing finance systems in other countries offer insights that can help inform US reform choices?**

SIFMA's task force acknowledges that other countries have developed mortgage finance systems that have been successful and resilient through the recent market disruptions – Canada and Denmark are commonly noted. While we agree that these arrangements have worked for these countries, these models are not "the answer" to issues faced by the U.S. We do believe that policymakers should look to what has worked for these countries and if, and how, it could be applied to the U.S. However we do not believe a broad-brush general application of the foreign systems can be simply transferred to the U.S.

As a general matter, we note that both Canada and Denmark's mortgage markets are fractions of the size of the market in the U.S. and are significantly more homogeneous

and geographically concentrated. They are likely not scalable to the size of the U.S. markets. We also note that in many other countries, fixed rate mortgages are not predominant. The unique characteristics of the U.S. economy, geography, and populace have led to the development of a mortgage finance system that is customized to its needs. While a number of problems have become painfully apparent in the last few years, our Task Force does not believe it is appropriate to discard the fundamental underpinnings of the system and attempt a wholesale importation of a foreign country's policies. Each of these other countries have likewise developed a mortgage finance system customized to their needs; importing the U.S. model there would be similarly unlikely to succeed.

As discussed above, we believe that ultimately the best approach to the U.S. mortgage market should be focused on the U.S. mortgage market, and central to that focus is to ensure that underwriting policies and practices are robust and promote sound lending.

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Testimony of Michael Bodaken
President, National Housing Trust
September 29, 2010

House Committee on Financial Services

Hearing on the Future of Housing Finance

Chairman Frank and Ranking Member Bachus, and members of the Committee, thank you for inviting me to testify today. My name is Michael Bodaken, and I am President of the National Housing Trust.

The National Housing Trust is a 24 year old national nonprofit organization dedicated to the preservation and improvement of existing affordable rental housing. Through our work in real estate development and affordable housing finance, the Trust has helped save and improve more than 22,000 apartments in 41 states, leveraging more than $1 billion in investment for affordable housing. The majority of these apartments have HUD subsidized mortgages or project-based rental assistance contracts.

We engage regularly with FHA, Fannie Mae and Freddie Mac and the Federal Home Loan Banks both in our operations as a nonprofit developer and at the policy level.

Our primary interest in the future of the nation's housing finance system is that the system be fairly balanced between homeownership and rental housing, and that the system provides liquidity, counter cyclicality and flexibility to assure the ongoing finance of rental housing. As I explain below, rental housing is the current tenure of at least 1/3 of all Americans and provides shelter for about half of all low-income households.[1]

The Housing Finance System Must Serve Rental Housing as well as Homeownership

All too often in housing finance discussions, policymakers overlook the central role rental housing plays in so many peoples' lives. Nevertheless, the fact remains that one-third of our nation's families and seniors depend on quality rental housing. Further, we know that renters have, on average, greater housing needs than homeowners. According to the Joint Center on Housing Studies at Harvard University, over 40 million U.S. households spend more than 30% of their income on housing; of these 40 million, nearly half, 19 million, expend more than 50% of their income on housing. Renters comprise a disproportionate share of these cost burdened households, constituting over 45% of those who expend more than 50% of their income on housing (compared to 30% of our nation's homeowners).[2] This housing need disparity is geographically widespread. Nowhere in the U.S. is a household earning the minimum wage able to afford a HUD Fair Market priced apartment. Many in our nation's workforce, including, but

[1] The information presented below is based, in part, on material developed by the Multifamily Subcommittee of the Mortgage Finance Working Group facilitated by the Center for American Progress in which the Trust participates.

[2] State of the Nation's Housing, 2010, Joint Center for Housing Studies, p. 5.

not limited to, teachers, firefighters and municipal workers, are renters. Yet, in discussions of housing finance, these people-and their housing needs-tend to be sidelined.

Hence, the "Future of Housing Finance" in the United States must effectively take into account both homeownership and rental housing. As Shaun Donovan, Secretary of HUD, remarked at the recent White House Conference on the Future of Housing Finance:

> "[A robust housing finance system] means ensuring that financing is available for those who will build the rental housing that we need to provide choices for those families for whom homeownership may not be the best option."[3]

What Type of Housing Finance System Works Well for Rental Housing?

Similar to that which accommodates homeownership, the characteristics of an effective rental housing finance system include the following:

1. *A well functioning, liquid secondary mortgage market supported by a government guarantee executed by an institution that engages in prudent underwriting.*

If recent experience has taught us anything, it is that a federal backstop is necessary to maintain liquidity for the housing market. There is little disagreement that the size residential mortgage markets and their importance to Americans demand that the federal government play such a role. In discussions of the housing crisis, the conventional wisdom is that rental housing, like single family housing, suffered large delinquencies and foreclosures. While it's true that there has been an increase in delinquencies in and foreclosures in the multifamily market, a review of the experiences of various multifamily mortgage lenders and a comparison to the crisis in the single family market during the crisis is instructive.

While it is tempting to think of "housing" as one category in the economy, the recent housing crisis was fueled almost exclusively by a crisis in the single family homeownership market. Perhaps no statistic is more telling here than a comparison of the performance of Fannie Mae and Freddie Mac single family vs. multifamily loans:

- Fannie Mae and Freddie Mac's share of delinquent (60 days without payment) or foreclosed loans rose from approximately 3 to 11.5% between 2005 and 2009;

- During that same time frame, Fannie Mae and Freddie Mac's delinquent or foreclosed multifamily loans remained at less than 1%.

Perhaps more importantly, loans provided by the government sponsored enterprises (GSEs) clearly outperformed private lenders. The GSEs had significantly lower delinquency rates on the multifamily mortgages they hold compared to "private label" investors in multifamily MBS as well to commercial bank loans. Specifically, the delinquency rates experienced by Fannie and Freddie were 1/14th the default rate for private label multifamily MBS, and 1/11th that of the commercial banks (0.45 percent versus 6.5 percent and 5.0 percent, respectively) at the end of

[3] Prepared Remarks of Secretary Shaun Donovan at White House Housing Finance Conference, August 17, 2010.

2009.[4] Unlike their underwriting of single family loans, the GSE multifamily mortgage business was prudently underwritten, standardized and characterized by a wide portfolio diversification.[5]

2. *A government supported secondary market that provides counter cyclical liquidity to the system without interruption.*

The "Great Reeession of 2008-2009" provided concrete proof of the value of counter-cyclicality, at least in the multifamily housing market.

As referenced above, the GSEs' multifamily loan experience, in contrast to single family and private label multifamily lending, was both positive and profitable.

Yet the GSE's lack of delinquencies in the multifamily mortgage market in 2008 and 2009 was not due to their absence from the market. Indeed, quite the opposite: it's not too much of a exaggeration to state that without the GSEs, the rental housing mortgage market would have frozen altogether in 2008 and 2009. According to both the GSEs and the National MultiHousnig Council, during the market retreat, the GSEs picked up the slack, purchasing over 84% of multifamily mortgages in 2009 for securitization.[6] Moreover, their loans were geographically widespread. A review by the Trust in the spring of 2010 indicated that both Fannie Mae and Freddie Mac made multifamily loans in almost every state in 2008 and 2009.

Whatever the future fate of the GSEs, this type of market counter cyclicality is entirely appropriate and necessary for the market to function in times of stress. While one hopes that we won't encounter such stress in the future, we would be wise to take into account institutions that can play this crucial role should another housing recession occur in the U.S.

3. *The majority of the activity of this government backed entity would issue mortgage backed securities that would carry an explicit government guarantee of timely payment. The majority of multifamily loans should serve households earning less than 80% of median income.*

According to the National Multi Housing Council, "90 percent of the apartment units financed by Fannie Mae or Freddie Mac over the past 15 years-more than 10 million units-were affordable to working families [whose income] was at or below their communities' AMI." [7]

Moreover, according to data gathered from both Fannie Mae and Freddie Mac, some 62% of their combined multifamily loans made between 2006 and 2009 were made for apartment complexes where rents were less than 80% of the local community's AMI. In some years, the percentages of loans made that benefitted households earning less than 80% reached over 80% of

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[4] Housing Finance-What Should the New System Be Able to Do? Part 1: Government and Stakeholder Perspectives, 111th Congress, 2nd Session, March 23, 2010, Testimony of Robert E. Dewitt representing the National Multihousing Council and the National Apartment Assn. before the House Committee on Financial Services.

[5] Joint Center for Studies at Harvard University, "Meeting Multifamily Housing Finance Needs During and After the Credit Crisis: A Policy Brief," January, 2009.

[6] Jonathan Pollack, Global Head of Principal Trading, Deutsche Bank, "Discussion Materials for June 15, 2010 Panel on Multifamily Housing Capital Markets," PowerPoint Presentation, June 15, 2010, p. 4.

[7] DeWitt testimony, p.4

the units financed.[8] Notably both Fannie Mae and Freddie Mac indicated that, unlike their single family loans, their multifamily loans were profitable.

While recent experience proves that a federal guarantee or insurance of multifamily loans or loan pools (but not the institutions themselves) is necessary to provide the same liquidity in multifamily lending as exists in the single family market, there needs to be a public quid pro quo for these explicit guarantees. The Trust believes it is essential that the trade off for government backing of multifamily loans require a commitment by the issuer to agree to finance at least 50 or 60% of all loans for multifamily properties where rents were less than 80% of local AM-a standard that is consistent with the recent, past practice of the GSEs.

While the debate of the future of our housing finance system is being conducted, there is an emerging crisis in the commercial real estate market that bears on how future housing intermediaries could serve the affordable housing rental market. Thousands of commercially financed rental properties now are worth less than the debt that is owed on them. As foreclosures on homes and apartment buildings continue to unfold, a growing number of renters are competing for a limited supply of affordable housing. Many of these families will be seeking apartments at the lower end of the of the cost spectrum, where there is already a shortage of affordable rental housing for the poorest households. Although market conditions have resulted in lower housing costs for many middle-income households, increased demand for the most affordable housing is actually leading to higher rents and tighter credit screening in some markets.

These properties need to be refinanced, even as the recession forces rents downward and commercial credit is as tight as ever. There will increasingly be a need for fixed rate refinancing of these underwater properties into prudent loans that are supported by more realistic rents. To the extent supportable debt is based on these new rents, and to the extent these new rents are affordable to those earning less than 80% of median income, the future housing intermediaries can and should provide financing for apartments that house a broad spectrum of households, many of whom earn less than 80% of median income.

Digging Deeper: Preserving Section 8 Subsidized Housing Is the Logical, Cost Effective First Step in Solving the Housing Needs for Very Low Income Renters. Low Income Housing Tax Credits Are Increasingly Being Used for Affordable Housing Preservation. Secondary Market Issuers that Provided a Government Guarantee for Multifamily Lending Need to be Involved in Saving Government Assisted Multifamily Housing.

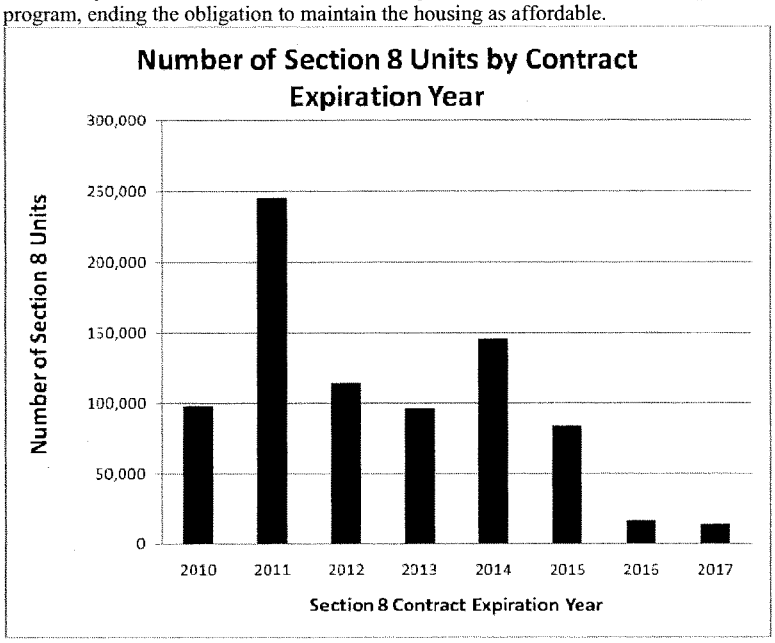
Having said that the secondary market institutions have a primary target of making at least 50-60% of their loans to rental housing with rents less than 80% of AMI, the Trust supports an additional targeting of lending for the preservation of HUD assisted housing that typically provides shelter to households earning less than 50% of median income, hereafter "very low income households." The fact is that the challenge of providing affordable shelter to very low income Americans has proven difficult. The relatively high overall housing vacancy rate created by current economic conditions masks the critical mismatch between the nature of existing supply and unmet demand. An analysis conducted for HUD demonstrates that between 2005 and

[8] Data gathered from GSEs by National Housing Trust.

2007 the number of units affordable to households at or below 50% of area median income fell by 7%, *or a loss of over 1.5 million homes*, while the number of units affordable to households with incomes of over 100% of area median grew by 34%.[9]

For the Trust, the "duty to serve" of any future government sponsored housing finance intermediary starts with a survey of existing federally supported housing, an especially important resource of homes affordable to those with worst case housing needs at a time when housing affordability challenges are growing worse. Federally subsidized housing serves nearly every community in the nation.

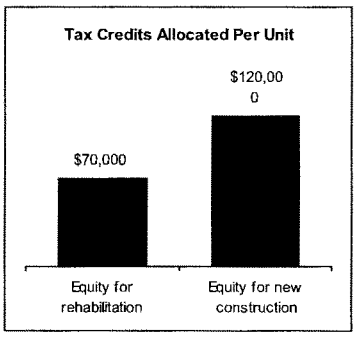
The largest of these programs, the project-based Section 8 rental assistance program, provides affordable apartments for more than 1.3 million extremely low income households. Of these 1.3 million apartments, 70%, or over 800,000 apartments, are governed by contracts that expire over the next 7 years. When a Section 8 contract expires, the owner can choose to opt out of the program, ending the obligation to maintain the housing as affordable.



Notably, federal government costs increase when an owner opt outs of a federal project-based rental assistance contract because the vouchers provided to protect eligible tenants from being displaced typically cost more—$1,000 more than the average project-based subsidy.

[9] Eggers, F.J. & Moumen, F. (2009, June). *American Housing Survey: Rental Housing Dynamics: 2005-2007*. Prepared for U.S. Department of Housing and Urban Development Office of Policy Development and Research. Bethesda, MD: Econometrica, Inc.

Further, the low income housing tax credit, the principal tool for affordable housing equity, is increasingly being used to preserve and improve existing rental housing. Over 40 states have an explicit preservation "incentive" in their housing tax credit Qualified Allocation Plans. In most states, the preservation of Section 8, HUD assisted housing is explicitly eligible for this incentive. In turn, these tax credits have attracted billions of dollars in private sector investment in the rehabilitation of federally subsidized housing. In a cost constrained environment, it's more efficient to preserve existing HUD assisted housing than to build new housing that serves very low income households. The preservation existing affordable housing is less expensive than constructing new housing as demonstrated in the following graph.[10]



Preserving existing, HUD assisted affordable housing provides an opportunity to reinvest in and improve our communities and protect the historic investment made by the federal government. If we do not preserve and improve the millions of apartments that have been produced through these successful public-private partnerships, we will permanently lose our nation's most affordable homes. This will represent a squandering of billions of taxpayer dollars. Safeguarding this housing presents an opportunity to reinvest in and improve our communities. Our future housing finance system must take into account this existing reality. [11]

Thus:

- Hundreds of thousands of privately owned, HUD subsidized apartments have contracts that expire over the next 7 years;
- State housing finance agencies are increasingly focused on the rehabilitation of existing housing; and
- FHA and HUD have a significant mission and financial stake in the maintenance of the nation's Section 8 inventory.

[10] Research by National Housing Trust.

[11] "Any changes in the housing finance system that fail to take into account the interdependence of housing policy goals and the needs of the capital markets and housing finance systems [into consideration] could easily derail the progress of critically important assisted housing programs, particularly rental housing programs." Remarks of Michael A. Stegman, Director of Policy and Housing, John D. and Catherine T. MacArthur Foundation, White House Conference on the Future of Housing Finance, August 17, 2010.

It is self evident that the future financing of government backed multifamily, Section 8 housing should be supported by the institution or institutions on which our nation's housing finance rests. The changes in the future housing finance system must take into account the interdependence of these privately owned properties, backed by FHA insurance and the properties dependence on HUD subsidies to operate.

Independently, the financing of preservation of affordable housing can produce a number of societal benefits. For example, we know that hundreds of thousands of these HUD subsidized apartments are located near mass transit. [12] The preservation of this housing not only serves very low income renters, but also maintains neighborhood diversity. Likewise, financial intermediaries could participate in mortgage financing that would reduce HUD's horrendous energy bill. Some have estimated that the retrofitting of the HUD stock would save HUD over $1 billion annually! [13]

Recommendations to Serve Very Low Income Households

The Trust proposes that the nation's future secondary market institutions have affirmative duties to:

- Provide reasonably priced forward commitments for rental housing serving very low income households;
- Consider their ability to act as guarantor or credit enhancer for low income housing tax credit transactions for very low income households, requiring an appropriate fee for that activity;
- Provide program related investments and lines of credit to creditworthy nonprofit and for profit intermediaries and developers who are preserving and improving multifamily housing affordable to very low income households;
- Provide flexible underwriting of affordable housing preservation transactions in underserved markets that balances the risk of the venture with the strength of the development team;
- Extend special financing for "green" affordable multifamily housing serving very low income households;
- Conduct outreach to state housing finance agencies and conduits on currently delinquent properties, especially if such properties can be "repurposed" to serve very low income households.

[12] Preserving Affordability and Access in Livable Communities Subsidized Housing Opportunities Near Transit and the 50+ Population,, National Housing Trust, Reconnecting America and AARP, April, 2009

[13] Scaling the Nationwide Retrofit of Affordable Multifamily Housing: Innovations and Policy Recommendations, Discussion Draft, September 27, 2010, p. 40.

Conclusion

Fixing the existing housing finance system is a complicated endeavor that requires careful analysis and a balance of taxpayer risk and the importance of housing to our national economy. As we design a future housing finance system, it's worth considering that one third of us rent and many of those who rent have significant housing burdens. Any successful future housing finance system must meet the challenges and take advantage of the opportunities in the U.S. rental housing market

Fortunately, we know that the performance of the government supported enterprises in multifamily housing was prudent, profitable and often served households earning less than 80% of median. Equally important, together with FHA, between 2008 and the present, the government supported enterprises provided the essential counter cyclicality for multifamily housing required when private lending dried up. These are good bases upon which to build the next generation of U.S. housing finance intermediaries.

Statement of:

Tom Deutsch
Executive Director
American Securitization Forum

Testimony before the:

Committee on Financial Services
United States House of Representatives

Hearing on:

The Future of Housing Finance—
A Review of Proposals to Address Market Structure and Transition

September 29, 2010

ASF Testimony
The Future of Housing Finance
September 29, 2010

Chairman Frank, Ranking Member Bachus and distinguished Members of the Committee, my name is Tom Deutsch and as the Executive Director of the American Securitization Forum (the "ASF")[1], I very much appreciate the opportunity to testify here on behalf of the 330 ASF member institutions who originate, structure and invest in the preponderance of residential mortgage-backed securities ("RMBS") created in the United States, including those backed entirely by private capital as well as those guaranteed by public entities such as Fannie Mae, Freddie Mac and Ginnie Mae (for the purposes of this testimony, collectively, the "Government-Sponsored Enterprises" or "GSEs").

In this testimony, I seek to address these key issues to the future of US housing finance:

1. Importance of the Process of Securitization to Mortgage Lending
2. Transitional Concerns Related to the GSEs
3. Future Structure of Any Government Role in the Secondary Mortgage Market
4. Return of a Private Secondary Mortgage Market
5. Industry Improvements to the Securitization Market Infrastructure
6. Covered Bonds Legislation

Let me begin my remarks by stating what I believe to be a near consensus proposition—there is very strong political and economic will in the United States today to decrease the overall level of federal involvement in housing finance, and to have more private capital eventually replace many of the risks and rewards of that involvement. Given that 89% of mortgage loans made in America in the first half of 2010 were guaranteed by the GSEs, there isn't a shortage of opportunity to achieve this goal. But we are all aware of the fragile state of the US housing market with real estate prices continuing to fall and new home purchases at historic lows, notwithstanding equally historically low mortgage rates for conforming prime borrowers. As such, there is little opportunity for an overnight transition, but a strong need to begin that transition as soon as possible to restore long-term health to the housing and mortgage markets. The market will not stabilize until home buyers and sellers know where the government and public guarantees are going to land and until all of the securitization reforms have been finalized. There is, therefore, a need for well-considered and well-coordinated haste.

Reducing dependence on public guarantees for new mortgage origination necessarily implies that private capital investment in mortgage originations will have to be reinvigorated. Although large and small bank portfolios have continued to help fund some level of mortgage origination outside of the GSE business, that level has not been sufficient to meet overall consumer demand

[1] The American Securitization Forum is a broad-based professional forum through which participants in the U.S. securitization market advocate their common interests on important legal, regulatory and market practice issues. ASF members include over 330 firms, including issuers, investors, servicers, financial intermediaries, rating agencies, financial guarantors, legal and accounting firms, and other professional organizations involved in securitization transactions. The ASF also provides information, education and training on a range of securitization market issues and topics through industry conferences, seminars and similar initiatives. More information regarding the ASF can be found at www.americansecuritization.com.

and reinvigorate the housing market. And as regulatory capital levels rise through various policy initiatives such as Basel III and FAS 166/167, the balance sheets of large banks will be further constrained over time from extending additional mortgage credit. Although key legislative initiatives such as covered bonds may help extend the balance sheets of banks to fund additional mortgages, there will still be outer limits of bank risk and capital that constrain the availability of mortgage and consumer credit.

As this Committee is aware, the private-label RMBS market for new mortgage origination has been dormant since early 2008, save for one transaction completed this spring. As debate moves forward on the elimination or transformation of the GSEs, I would encourage a debate of equivalent strength as to how to reinvigorate the private-label RMBS market without overburdening that market with regulation or regulatory uncertainty. Although the securitization market has been deeply engaged in its own reform efforts and supportive of some appropriate legislative and regulatory changes, there are now a myriad of proposed and enacted regulations that have created an extraordinary burden for the market to understand and comply within a short period of time. While many of these proposals and initiatives have merit in isolation, there does not appear to be robust macroprudential oversight or rationalization of the potential cumulative consequences of all of these changes—harmonization will be key in order to avoid duplicative (or even potentially contrary) standards and regulatory fragmentation. Fragmentation, in turn, risks not only creating uncertainties that could frustrate the return of responsible private securitization activity, it can also create opportunities for regulatory forum shopping.

Importance of the Process of Securitization to Mortgage Lending

Securitization generally refers to the process by which consumer and business assets are pooled into securities that are issued and sold into the capital markets. The payments on those securities depend primarily on the performance of the underlying assets. Over the years, securitization has grown in large measure because of the benefits and value it delivers to transaction participants and to the financial system, including increased efficiency of funding, reduced cost of financing for businesses and credit for consumers, and incremental credit and liquidity creation. Over the past 25 years, securitization has grown from a relatively small and unknown segment of the financial markets to a mainstream source of credit and financing for individuals and businesses, representing a vital sector of the financial markets.[2]

The first collateralized mortgage obligations (the predecessor securities to today's mortgage-backed securities) were issued in June 1983 by Freddie Mac and were rapidly replicated by the private industry as investors recognized the flexible nature of the obligations and demanded increased issuance thereof. Between 1990 and 2006, just before the downturn, RMBS issuance

[2] For more information on the role and importance of securitization to the financial system and US economy, see ASF Reg AB II Comment Letter, Attachment II, pg. 143-147 (August 2010). http://www.americansecuritization.com/uploadedFiles/ASFRegABIICommentLetter8.2.10.pdf.

grew at an annually compounded rate of 13%, from $259 billion to $2 trillion a year.[3] It has been estimated that securitization has funded some 59% of outstanding home mortgages.[4]

Ultimately, the process of securitization links the origination capabilities of lending institutions with the long-term investment needs of pension funds, mutual funds and sovereign wealth funds. Put another way, securitization allows the senior teacher's retirement assets to lend important mortgage credit to the junior policeman. Through an effective process, the teacher earns higher returns on his retirement savings and the policeman pays a lower interest rate on his mortgage.

Transitional Concerns Related to the GSEs

Getting from our current state of the GSEs to some future state will require some appreciable time measured in years for the transition. The length of time of this transition may vary widely depending on how dramatic that transformation is and how the existing assets and infrastructure of the GSEs are used.

During this transition though, it is absolutely essential that any arrangements not impair or create uncertainty regarding the guarantees of previously-issued GSE RMBS. Having now largely resolved the uncertainty regarding the explicit versus implicit nature of the guarantees, the ASF feels that it would be an extraordinary error if any transitional arrangements altered previous commitments. Any uncertainties created on past securities would immediately call into question for investors the credibility and value of any future guarantees.

Second, there shouldn't be any underestimation of the critical importance of maintaining the so-called "To-Be-Announced" ("TBA") market. Although not well understood outside the housing finance industry, the TBA market makes it possible for borrowers to have the peace of mind of locking in favorable mortgage rates and originators' immediate and liquid sale in the capital markets. For a variety of reasons discussed more fully in the ASF's comment letter submitted this summer to the Departments of Treasury and Housing and Urban Development in response to the April 7, 2010 request of those Departments (the "ASF Comment Letter," which is attached as Exhibit A")[5], it is difficult to replicate a TBA market outside of the GSEs, though not necessarily impossible in the long-term. As these are very technical and detailed matters, I direct your attention to the ASF Comment Letter.

Finally, some ask how the U.S. government could begin to recoup the hundreds of billions of dollars of GSE losses the US taxpayer will have to otherwise absorb. Although it's not clear how much of that value could realistically be recouped, there are certainly steps that can be taken

[3] National Economic Research Associates, Inc. (NERA), "Study of the Impact of Securitization on Consumers, Investors, Financial Institutions and the Capital Markets," pg. 16 (June 2009), www.americansecuritization.com/uploadedFiles/ASF_NERA_Report.pdf.
[4] Citigroup, "Does the World Need Securitization?" pg. 10-11 (December 2008), www.americansecuritization.com/uploadedFiles/Citi121208_restart_securitization.pdf.
[5] See also http://www.americansecuritization.com/uploadedFiles/ASFGSEReformCommentLettertoTreasury-7.21.10.pdf.

to seek maximum value of what is left in the GSEs. First, a responsible evaluation of this question must be anchored in the broader context of building a stable and sustainable model for housing finance policy going forward. This means that approaches need to recognize the significant national interest in an orderly transition to such a stable and sustainable model for housing finance, and accordingly policy solutions must be fair to commercial counterparties and other housing finance partners who are necessary to build for this future. Additionally, no serious commentary that I am aware of suggests that the professional staff of the GSEs, the information technology, the physical plant, or the intellectual property employed by the GSEs were forces that pushed the GSEs into conservatorship. Instead, the system of implicit government guarantees and a weakly empowered oversight regulator appear much more likely to be the root causes of their losses. Any transition plan should preserve in various forms the human capital and other assets the GSEs have built up over the years. As much as some commentators desire to raze to the ground the mistakes of the misguided GSE system and start with a completely blank slate, taxpayer value should be maximized by converting aspects of the industrial organization and physical plant of the GSEs into private market functions. There have been many suggestions of how this may be accomplished, but many focus on the similarities to the process that Sallie Mae went through when they were privatized.

Future Structure of Any Government Role in the Secondary Mortgage Market

The conservatorship of the GSEs has clarified, as a practical matter, that the guarantee feature of the GSE's is, for all intents and purposes, an explicit obligation of the United States. The capital markets find that clarification to be meaningful progress to appropriately price the tail risk associated with GSE RMBS, as it has ended the historical, long-running uncertainty regarding the "implied guarantee." Therefore, through all parts of our membership, ASF members have reached the near consensus that, going forward, any form of federal or agency guarantee should be clear and explicit. We further believe that the most efficient execution is to attach any guarantee directly to the securities issued into the capital markets. Loan-level guarantees, which may serve a role for other purposes, are not ideal for capital markets execution because of their operational and legal challenges. Moreover, as a conceptual matter, the role of any guarantee should be a 'catastrophic' or '100-year flood' structure that allows maximum use of private capital to limit the government's potential liability, while providing a tail risk backstop for other unforeseen risks. If there is a place for any form of government guarantee though, it would create an impetus for the U.S. government to determine if it has a role in setting standards/requirements for the underlying collateral for the securities the government is backing. Dodd-Frank explicitly permits the government to define underwriting standards in certain situations, and those standards may well be appropriate for the entity replacing the GSEs.

A separate question is whether any successor entity or entities to Fannie and Freddie should benefit from federal support/guarantees at the entity level, rather than solely at the mortgage-backed security level. As you know, Fannie and Freddie can, and do, issue debentures which are guaranteed to the same extent as their mortgage-backed securities. These debentures, which of course provide Fannie and Freddie with a favorable cost of funds, have been primarily used to finance the GSEs' portfolios, and the portfolios, in turn, have generated a substantial level of

controversy. Ultimately, market participants have significant concerns regarding how a public/private hybrid model of corporate governance could be effective.

The continued maintenance of material portions of the GSEs' portfolios is not broadly supported by the ASF membership. Some argue that successor GSEs should maintain a *de minimus* portfolio for liquidity reasons, but ultimately these proposals vary appreciably in their definitions of what a *de minimus* amount would be. Great caution must be exercised in winding down the sizable portfolio of private label RMBS that the GSEs currently own, as any expedited sale of those assets may impair their value and cause significant disruption in the secondary securities market.

Return of a Private Secondary Mortgage Market

There are a number of provisions of the Dodd-Frank Act ("Dodd-Frank") that the ASF has been supportive of and see as positive developments towards re-establishing a non-government securitization market in the United States. Indeed, we note with great pride that many aspects of the substantive provisions of the Act mirror the ASF's own initiatives to help re-establish this market, especially the ASF's "Project RESTART," which facilitates increased transparency, standardization and diligence to foster renewed investor confidence in securitization. However, the ASF believes it is very important to not consider Dodd-Frank in isolation, as the RMBS and consumer ABS market is currently facing a barrage of regulatory initiatives from the Federal Deposit Insurance Corporation (the "FDIC"), the Securities and Exchange Commission (the "SEC"), the banking agencies, and numerous other regulatory bodies, not to mention potential future regulation that may emerge from the Consumer Financial Protection Bureau. It is also important to note that while Dodd-Frank calls for an interagency process to define risk retention and underwriting standards, some regulators such as the FDIC have issued regulations on a unilateral basis, which creates additional challenges.

Over the last year and a half, the securitization market has been confronted with a wave of legislative and regulatory action, including the securitization-related provisions of the Dodd-Frank Act, the FDIC's final rule relating to its securitization legal isolation safe harbor (the "Safe Harbor Rule"), the disclosure rules ("New Regulation AB") proposed by the SEC, changes in regulatory capital requirements, international initiatives such as "Basel III" and changes in generally accepted accounting principles ("GAAP"). While ASF acknowledges that legislators and regulators at many levels have an interest in addressing past securitization problems, our members are concerned about the impact of multiple layers of securitization legislation and regulation, especially when those regulations are implemented on a unilateral basis that are not often well-coordinated. If each interested regulatory body adopts a separate proposal to address concerns with past securitization practices, the fragile securitization markets face the threat of regulatory overload. Legislative and regulatory changes require U.S. financial institutions to make systems changes as well as documentation changes, which can take substantial time and be very costly. Successive waves of regulation will inevitably slow down the restart of the securitization markets. Ultimately, if the aggregate burden for U.S. financial institutions is too great, it could lead them to significantly reduce the amount of their securitization activities or

abandon securitization altogether and rely on deposits or other alternative sources of funding.[6] This would likely lead to a contraction of available credit for consumer finance where securitization has historically provided a significant source of funding. Or in the case of private label RMBS, prevent its restart.

The Dodd-Frank Act addresses risk retention, ongoing reporting requirements, due diligence and disclosure requirements, representations and warranties, and conflicts of interest in securitization. There is significant overlap between the legislation and the matters covered by the Safe Harbor Rule promulgated by the FDIC and New Regulation AB proposed by the SEC. The imposition of reforms on a unilateral rather than interagency basis will ultimately lead to multiple requirements for U.S. financial institutions that are securitizers. For instance, there theoretically could be three different retention requirements imposed on U.S. financial institutions: one imposed this past Monday by the FDIC on insured depository institutions as part of the Safe Harbor Rule, a second imposed by the SEC on all financial institutions for shelf eligibility and a third imposed by Congress as part of federal legislation and implementing regulations of Dodd-Frank. Those retention requirements will likely be structured differently and implemented at different points in time. In addition to being confusing and costly to implement, differing rules could be disadvantageous for financial institutions that are subject to the more onerous regulations. For example, if the requirements for securitization by U.S. insured depository institutions are significantly more restrictive than those for other entities engaging in securitizations, those requirements will pose an undue burden for U.S. insured depository institutions. We therefore believe that any regulation of securitization should be implemented on an interagency basis to create not only a level playing field for all financial institutions but also to enable each institution to more effectively determine the aggregate burden associated with such regulations.

Capital relief has long been and continues to be an objective and advantage of securitization. GAAP has generally been used as an initial measure to determine whether an asset is treated as on or off-balance sheet for risk-based capital requirements, which are intended to reflect risks associated with on-balance sheet exposures as well as off-balance sheet exposures. With the implementation of FAS 166/167 and the fundamental transition for securitization accounting to move from a risk-based framework to a control-based framework, the assets of formerly off-balance sheet securitizations were more likely to come back on-balance sheet for accounting purposes and new transactions using the same traditional structures were more likely to be on-balance sheet going forward. Under the new bank regulator rules issued in January, U.S. institutions will be required to maintain risk-based capital as if there had been no risk transfer through securitization on the basis that they have retained too much risk. At the same time, they

[6] A recent *Global Financial Stability Report* issued by the International Monetary Fund states: "While most of the current proposals are unambiguously positive for securitization markets and financial stability, some proposals—such as those designed to improve the alignment of securitizer and investor interests and accounting changes that will result in more securitized assets remaining on balance sheets—may be combined in ways that could halt, not restart, securitization, by inadvertently making it too costly for securitizers." John Kiff, Andy Jobst, Michael Kisser and Jodi Scarlata, Chapter 2, *Restarting Securitization Markets: Policy Proposals and Pitfalls*, (October 10, 2009) at 77, available at www.imf.org/external/pubs/ft/gfsr/2009/02/pdf/chap2.pdf.

would be required under various regulations to retain 5% of the credit risk of the transferred assets to assure a sufficient exposure to risk to encourage improved underwriting of loans. We are concerned about reforms that impose significant costs on U.S. institutions yet are justified by seemingly contradictory rationales.

Additionally, the retention of a material portion of the credit risk of the financial assets in a securitization could also cause the assets of a securitization that would otherwise be off-balance sheet to be brought back on-balance sheet for accounting purposes. If the minimum 5% interest retained by a financial institution is viewed as a significant economic interest in a variable interest entity under FAS 167 and the financial institution is also the servicer or is viewed as having the power to direct the activities of the securitization vehicle that significantly impact the securitization vehicle's economic performance, then such an interest could cause the consolidation of the securitization entity's assets onto the balance sheet of the financial institution and triggers substantially more capital required to be held.

The timing of regulations will also be critical. As an example, the new securitization safe harbor takes effect on January 1, 2011, which will likely be prior to the enactment of a final version of New Regulation AB or any of the regulations outlined in Dodd-Frank. This means that U.S. insured depository institutions will have to make significant documentation and systems changes in order to avail themselves of the benefits of the securitization safe harbor, without even knowing whether other rules enacted by the SEC or other regulators will be consistent. For instance, the safe harbor rule requires disclosure of loan-level data for RMBS securitizations without specifically identifying all data to be disclosed. New Regulation AB also proposes the requirement that loan-level data for RMBS securitizations and identifies specific fields of information that should be disclosed. The SEC has received substantial comments on these loan-level disclosures and may make significant changes to those requirements in a final set of rules. Issuers will need to assess whether to incur high costs and divert significant personnel and technological resources to make the fundamental changes required to comply with the disclosure requirements of the Safe Harbor Rule knowing that the work they do would likely need to be redone within a year to address the final SEC rules. As new rules and regulations are presented in waves, the costs of compliance will be compounded and the revitalization of the securitization markets will inevitably be slowed. With reform occurring at several levels and over time, issuers will likely sit on the sidelines until regulatory certainty and stability return.

The regulatory challenges are further exacerbated when you consider that the market will in many cases not be able to tap the unregistered private placement market in situations where new regulations or disclosure requirements will be difficult or impossible to meet. New Regulation AB proposes specific disclosures for private placement transactions that rely on safe harbors set forth in Rule 144A and Regulation D. The Safe Harbor Rule goes even further and provides that transaction documents require that disclosure comply with the requirements of existing Regulation AB, or any successor requirements, "*even if the obligations are issued in a private placement or are not otherwise required to be registered*" (emphasis added). This expansive provision would presumably extend to pure private placements, which do not rely on private

placement safe harbors and which the SEC specifically indicated that it did not intend to regulate.

What all this adds up to is an unprecedented level of regulatory change in the securitization market. Combined with the continued uncertainty of future regulations, the ASF believes a private mortgage market could be paralyzed for quite some time. Without knowing the complete regulatory picture or the aggregate burdens associated with securitization, market participants are not able to answer fundamental questions relating to RMBS transactions, including the types of mortgages permitted, the disclosure required, whether safe harbor protection will be offered, whether an accounting sale has occurred or the capital charge to be incurred. Even more concerning, given the size of the housing finance market, it is difficult to see how the broader U.S. economy can significantly improve until this uncertainty is resolved and securitization returns.

Industry Improvements to the Securitization Market Infrastructure

The ASF has been a strong and vocal advocate for targeted securitization market reforms and we continue to work constructively with policymakers to identify and implement them. We believe that any reforms to the securitization market need to be considered and implemented on an interagency basis to ensure that there is a level playing field for all market participants. The ASF is also actively identifying, designing and implementing numerous industry-driven market standards and practice improvements to rebuild and strengthen the securitization infrastructure. It is important that any reform of the securitization market impose mechanisms to encourage appropriate extension of credit to deserving borrowers while not going so far as to inhibit the many benefits of securitization.

In January, 2008, the ASF launched its Project on Residential Securitization Transparency and Reporting ("Project RESTART" or the "Project")[7], which is a broad-based, industry-developed initiative to help rebuild investor confidence in mortgage and asset-backed securities, restore capital flows to the securitization markets, enhance market lending discipline and, ultimately, increase the availability of affordable credit to all Americans. The Project has sought to identify areas of improvement in the process of securitization and refashion, in a comprehensive and integrated format, the critical aspects of securitization with market-based solutions and expectations. It has been recognized by senior policymakers and market participants as a necessary industry initiative to improve the securitization process by developing commonly accepted and detailed standards for transparency, disclosure and diligence that each appropriate market participant will be recommended to implement. In its March 2008 Policy Statement on Financial Market Developments, the President's Working Group (the "PWG") on the Financial Markets recommended that the ASF develop templates for disclosure in securitization that support efforts to improve market discipline[8] and on June 24, 2008, Acting Under Secretary for Domestic Finance Anthony W. Ryan announced that the PWG had engaged the ASF as the

[7] For more information on Project RESTART, see www.americansecuritization.com/restart.
[8] "Policy Statement on Financial Market Developments," The President's Working Group on Financial Markets (March 2008), page 13. See www.ustreas.gov/press/releases/reports/pwgpolicystatemktturmoil_03122008.pdf.

private sector group to develop best practices regarding disclosure to investors in securitized credits.[9] Since its inception, ASF members participating actively in the Project include institutional investors, issuers, originators, financial intermediaries, servicers, rating agencies, due diligence professionals, trustees, outside counsel, outside consultants, data modelers and vendors, as well as ASF's professional staff.

On July 15, 2009, the ASF released final versions of the first two deliverables of the Project, a disclosure package of loan-level information to be provided by issuers prior to the sale of private-label RMBS transactions (the "Disclosure Package") and a reporting package of loan-level information to be updated on a monthly basis by RMBS servicers throughout the life of an RMBS transaction (the "Reporting Package"). Both of these packages increase and standardize critical data at issuance and throughout the life of a transaction, which will enable investors to better perform deal and loan-level analysis on the basis of the credit quality of the underlying mortgage loans. By increasing data and standardizing available information, institutional investors will be able to better distinguish pools of high quality loans from lesser quality pools. The release of the Disclosure and Reporting Packages was timely given the Administration's proposals for regulating financial markets in the summer of 2009 and the introduction of financial regulatory reform legislation later that year. The Dodd-Frank Act specifically calls for issuers of ABS to disclose "asset-level or loan-level data, if such data are necessary for investors to independently perform due diligence." Not long before the passage of the Dodd-Frank Act, the SEC proposed New Regulation AB, which includes loan-level RMBS disclosure and reporting proposals as originally contemplated and designed by Project RESTART.

In connection with the development of the Disclosure and Reporting Packages, the ASF also created a unique loan identification number, known as the ASF LINC™, for securitization reporting purposes to facilitate the monitoring of assets from origination through the securitization process. One of the problems in the securitization market has been the inconsistent fashion in which assets have been identified. In a typical mortgage securitization, the originator, primary servicer, master servicer and trustee could all assign different numbers to identify the loan on each particular system. Implementation of the ASF LINC™ remedies this problem by assigning numbers that will be standard across the entire industry, enabling market participants to track an asset throughout its life regardless of who holds legal title to or services it at any particular time. The ASF also released a proposed ASF RMBS Bond-Level Reporting Package (the "Bond-Level Reporting Package") consisting of data fields that provide enhanced and standardized reporting of bond-level information throughout the life of an RMBS transaction.

The ASF also believes that one of the drivers of future success of the RMBS market will be an increase in the standardization of the agreements governing transactions. Capital commitment decisions by loan originators, financial intermediaries and fixed-income investors, as well as risk assessments by rating agencies, are more easily and efficiently made when contractual provisions are relatively consistent across issuers. Increased standardization in a securitization transaction creates additional liquidity in the market because the due diligence process required to make an

[9] Assistant Secretary Anthony W. Ryan, Remarks at Euromoney's Global Borrowers Investors Forum (June 24, 2008). See www.treas.gov/press/releases/hp1053.htm.

investment decision becomes more efficient. For example, the type and form of representations and warranties in past transactions varied greatly, and investors have often complained about a lack of transparency of the representations and warranties given across issuers. Representations and warranties are used to allocate the risk of defective mortgage loans among the mortgage originators, issuers of securities and investors who purchase them. A broad-based working group met extensively to address concerns with existing representations and warranties by providing a baseline set of representations and warranties for RMBS transactions and a more transparent process for determining whether departures from that baseline have occurred in a given transaction. The ASF released on December 15, 2009 the final version of a model set of representations and warranties for RMBS transactions (collectively, the "Model Reps") designed to more clearly allocate origination risks between issuers and investors and provide enhanced investor protections over what had been previously provided in "pre-crisis" transactions.

The ASF is also aware that, for these Model Reps to be effective, the repurchase process in place for breaches would need to be reformulated. Throughout the development of the Model Reps, many deficiencies in the current repurchase process were raised by investors, who believe that most PSAs do not provide a strong enforcement mechanism for the party making the repurchase demand and also do not clearly provide sufficient means and guidance needed to enable the party enforcing a repurchase obligation to pursue such matters. In light of these issues, members of Project RESTART have begun discussing a uniform set of procedures (the "Model Repurchase Provisions") to enforce the Model Reps by, among other things, clearly delineating the roles and responsibilities of transaction parties in the repurchase process and allowing greater access into the mortgage loan files so that breaches can be discovered.

The ASF will also be producing model servicing provisions for PSAs which will create more standardized documentation provisions and work rules in key areas, such as loss mitigation procedures that servicers may employ in dealing with delinquent or defaulting loans.

Covered Bonds Legislation

The ASF membership has broad and near universal support for passage of a legislative framework for US covered bonds, as covered bonds have appreciable potential as a product to encourage additional private mortgage lending by banks. This product offers a distinct securitization alternative to issuers and investors to create more effective market competition for best execution. The legislative framework proposed by Representatives Garrett and Kanjorski would make covered bonds available to most any bank, both large and small. Market forces for pricing and terms would certainly create distinctions between and among different institutions over time, but all banks should have the option of accessing this important potential source of capital.

However, the legislative process of authorizing this product has become a tug-of-war between the product's supporters and the FDIC. The FDIC, while not opposed to the product, is insisting on including the product within the scope of its receivership powers. The FDIC's point, of

course, reflects its view regarding the best way to protect the Deposit Insurance Fund (the "DIF").

Although our members certainly respect the importance of protecting the DIF, the FDIC's view regarding the treatment of covered bonds in the case of a depository institution's conservatorship or receivership would keep covered bonds as a seldom used source of funding in a competitive global capital market. Global investors would shun US covered bonds in favor of European covered bonds, since the European bonds would not have the same repudiation risks that the FDIC would impose. As such, the FDIC's powers should be clearly circumscribed with limited powers in the event of the issuing bank's conservatorship or receivership. This identical issue is also raised now by the FDIC on traditional securitizations, which are not structured as covered bonds, given the FDIC Safe Harbor Rule that was announced on Monday. Without overcoming the FDIC's objections and passing covered bonds legislation, a product with real potential to shift burden of housing finance from the government's shoulders to the private sector will never reach its potential. The ASF is willing and able to work directly with the FDIC towards a suitable compromise that would enable the covered bond market to develop into a viable source of financing.

The ASF has submitted, and continues to submit, detailed comment letters on specific, substantive provisions of Dodd-Frank, Covered Bonds legislation, and other legislative and regulatory proposals, and of course the Committee Members and Staff are invited to review and discuss any of these comments with the ASF at any time.

Conclusion

Chairman Frank, Ranking Member Bachus and distinguished Members of the Committee, I thank you again for the opportunity to participate in this hearing on the most serious set of issues facing our mortgage market today and look forward to answering any questions you may have regarding my testimony.

Thank you.

American SECURITIZATION FORUM

EXHIBIT A

July 21, 2010

VIA E-MAIL

Alastair Fitzpayne, Acting Executive Secretary
Department of Treasury
1500 Pennsylvania Avenue
Washington, D.C. 20220

Re: Reform of the Housing Finance System
(eDocket Numbers TREAS-DO-2010-0001, HUD-2010-0029)

Ladies and Gentlemen:

The American Securitization Forum (the "ASF")[1] submits this letter in response to the Notice and Request for Information (the "Request") issued by the Department of the Treasury ("Treasury") and the Department of Housing and Urban Development ("HUD") seeking public input on establishing a more stable and sound housing finance system.

We appreciate the enormous task Treasury and HUD is preparing to undertake in addressing these issues, which we see as fundamental not only to the securitization markets, but also to the global financial markets and the US economy.

We would also like to note that our comments are being made on behalf of the securitization industry and we are not in a position to address many of the aspects of the housing finance system which Treasury and HUD are planning to review. However, because the bulk of housing finance takes place in the capital markets, via securitization through either the government sponsored entities (the "GSEs") or the private label market, we feel it is appropriate for the ASF to offer its observations with respect to several of the questions listed on the Request. We believe that our responses are consistent with one of the ASF's core values: "to improve the long term health and

[1] The American Securitization Forum is a broad-based professional forum through which participants in the U.S. securitization market advocate their common interests in important legal, regulatory and market practice issues. ASF members include over 340 firms, including issuers, investors, servicers, financial intermediaries, rating agencies, financial guarantors, legal and accounting firms, and other professional organizations involved in securitization transactions. The ASF also provides information, education and training on a range of securitization market issues and topics through industry conferences, seminars and similar initiations. For more information about ASF, its members and activities, please go to www.americansecuritization.com

vitality of the securitization market, and to advance the greater good that securitization provides to consumers, businesses and the economy."

I. The Role of Securitization in the Housing Finance System.

Before addressing the questions listed in the Request, we believe it would be helpful to provide a brief review of several aspects of the nation's housing finance system. In this regard, it is useful to begin with the very basics: the nature of the housing stock, and how it is financed.

The nation's housing stock consists of various types of physical assets: single-family detached homes, townhouses and multifamily structures, which run the gamut from small, owner-occupied and managed two-to four-family structures to the 15,372-unit Co-op City development in the Bronx, New York City. One common characteristic all of these different types of housing structures share is that they are all capital assets, the construction or purchase of which is most appropriately financed through medium or long term debt secured via a security interest in the related real property. Put more simply, the nation's method of financing its aggregate housing stock is via mortgage finance.

A mortgage loan consists primarily of two distinct instruments: a promissory note, which represents the borrower's obligation to pay and a mortgage, deed of trust or long-term lease type document, which creates a security interest in the property that can be enforced by the lender in the event of a borrower default on the note. The note is a fixed-income instrument, suitable for investors seeking a fixed-income return. These investors may be individuals, banks and other financial institutions such as insurance companies, pension funds, the GSEs, or the U.S. Treasury.

A. Government Securitizations.

Prior to the 1970's, the primary source of residential mortgage credit was savings and loan associations. These "thrifts" originated and serviced mortgage loans, and generally held them in their portfolios until maturity or prepayment. The funding for these portfolios was primarily savings deposits.[2]

The consequences of this non-securitized portfolio lending strategy included:

- localized markets, with a high degree of variation in rates and the availability of credit;
- sensitivity on the part of the thrifts to the mismatch between the short-term funding provided by deposits and the long-term (fixed rate) mortgage loans; and
- concentration of mortgage risk in a single industry (thrift industry).

[2] See, generally, Lewis S. Ranieri, "The Origins of Securitization, Sources of Its Growth, and It's Future Potential", in A Primer on Securitization, eds. Leon T. Kendall and Michael J. Fishman (Cambridge, MA.: The MIT Press, 1996).

All of these consequences added up to a market which was limited, segmented and unpredictable, in turn inhibiting the growth in home ownership.

The thrifts' "originate and hold" strategy also had the effect of vertically integrating in a single industry the three principal economic components of mortgage finance. The thrift was the originator of the mortgage loan, the servicer of the mortgage loan and the long term financier of the mortgage loan. The first two of these components are active businesses, requiring management skills and contact with consumer. The third component is essentially passive and requires certain skills relating primarily to the management of financial risks.

These elements of the housing finance system began to change in the 1970's when the "Agency" or GSE market began to develop rapidly. Although government support for the residential housing finance market dates to the Depression, with the establishment of the Federal Housing Administration ("FHA") in 1934, and the Federal National Mortgage Association ("Fannie Mae") in 1938, prior to the 1970's the government's support was primarily limited to loan-level guarantee programs. Fannie Mae was partitioned in 1968 into two parts: the Government National Mortgage Association ("Ginnie Mae"), a federal agency, and a federally-chartered but shareholder owned enterprise still known as Fannie Mae. The Federal National Mortgage Association ("Freddie Mac"), another federally-chartered, shareholder owned enterprise was created in 1970, primarily to serve the thrift industry.

The earlier government support mechanism of loan level insurance through the FHA and the Veterans' Administration (the "VA"), although encouraging thrifts and other lenders to make loans which they otherwise would not, did not fundamentally impact the "originate and hold" strategy. The disaggregation of the three economic components of mortgage finance was however, greatly facilitated by the GSE's creation and participation in the secondary mortgage market.

The "disaggregation" is one of the principal benefits of securitization, as it permits banks and other finance companies to focus on what they do best – originate and service loans. Disaggregation further provides for more efficient matched funding, via the capital markets, for the fixed income instruments which comprise the mortgage notes. Since the underlying fixed income instruments are generally of fairly long term (fifteen to thirty years) a capital market execution also permits time tranching, providing the opportunity for investment at all points along the yield curve, as well as credit tranching, to permit investment all at points along the risk/return spectrum. All of these aspects combine to make securitization the most efficient method of financing the capital assets which make up the nation's physical housing stock, from single-family detached homes to the largest multi-family complexes.[3]

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[3] The economic benefits of securitization have been the subject of many academic and scholarly articles. These articles generally have concluded that securitization has positive impacts on the cost and availability of credit, as well as on the dispersion of risk. One recent study, "Study of the Impact of Securitization on Consumers, Investors, Financial Institutions and the Capital Markets" (June 17, 2009), (hereafter, the

B. Private Label Securitizations.

The GSEs have been limited by their charters to the purchase and finance of the "conforming" part of the market, defined primarily by certain credit and documentation standards (such as loan to value ratio), and subject to maximum principal balance limitations. The non-conforming loan mortgage market (the "private label" market) also dates from the 1970's. It really began to come into its own, however, following the passage of the real estate mortgage conduit ("REMIC") legislation in 1986. The private label market serves both the "jumbo" (loans with principal balances in excess of the conforming loan limits) and the "subprime"/"Alt-A" markets (loans which do not meet other standards set by the GSEs).

As a result, from effectively zero in 1970, the percentage of residential mortgage loans securitized in 2007 was roughly 60% for conforming loans, roughly 75% for jumbo loans and roughly 100% for sub-prime loans.[4]

C. The Market Since Financial Crisis.

With the virtual disappearance of the private label market since the onset of the financial crisis, the residential mortgage market has become essentially a government market, with close to 99% of all new residential mortgage finance transactions being through Fannie Mae, Freddie Mac and FHA/VA.[5]

The recent history (at least since the REMIC legislation) of the US housing finance market reveals two broad trends:

- securitization has largely displaced portfolio lending; and
- private label (non-government) securitization grew relative to Agency securitization.

Since the beginning of the finaneial crisis the first of these trends has accelerated while the second has broken down. Previously dominant private market participants have withdrawn. The GSEs, as mandated by their charters, have not. The GSEs have continued to support liquidity in the secondary mortgage markets by buying into supply when demand is low. Consequently, the market has been able to operate by becoming a government market in terms of issuance and insurance, and largely a government market in terms of portfolio holdings. The ASF's view is that the smooth functioning of the housing finance sector of the U.S. financial market is a national priority and the government's dominant role in the U.S. housing finance system during the recent crisis was both necessary and appropriate.

"NERA Study") was produced by National Economic Research Associates, Inc. at the request of the ASF, and is available at www.americansecuritization.com/uploadedfiles/ASF_NERA_Report.PDF

[4] NERA Study, p. 25.

[5] American Banker article, "Fannie, Freddie and Ginnie at Nearly 100% Market Share", June 2, 2010.

The commercial real estate market provides guidance as to what might have happened to the residential real estate market in the crisis, but for the government's involvement: Generally speaking, the commercial real estate and mortgage markets have not received widespread government support, with the result that credit is unavailable for most types of properties (other than multifamily properties, which are supported to some extent by the GSEs). Much of that market has become an "all cash" market and commercial real estate prices in many areas are currently down to 30-40% of replacement cost. Residential real estate has also suffered a substantial loss of value, particularly in several previously overheated markets.[6] However, the decline in home values, while severe in some markets, has been mitigated across the country by the availability of mortgage credit.

II. Questions for Public Solicitation of Input.

What role should the federal government play in supporting a stable, well-functioning housing finance system and what risks, if any, should the federal government bear in meeting its housing finance objectives?

GSE Securitizations. Throughout the financial crisis, the US residential real estate finance market has been financed not only through the government support but also through securitization. Technically, this is because securitization is a nothing more than a financing technique; a government or GSE securitization is still a securitization. A government securitization, however, carries with it a government guarantee, making government securitization fundamentally different from a private label securitization. This is because a government securitization poses, on the investor side, a more narrow set of risks (prepayment, currency and interest-rate) than do private label securitizations, which of course have all those risks plus credit risk, as well as (arguably) more legal and regulatory risks. Of course credit, legal and other risks do not disappear in government securitizations, they merely do not fall on the investors, but rather on the government and thus, ultimately, on the taxpayers. But in terms of structure, disclosure, the need for registration of securities, and various other issues, it appears that the government securitization market is so substantially different from the private label securitization market that the same practices and procedures need not necessarily apply to both markets. Put another way, the government securitization market is more like the Treasury market, and the private label market is more like the corporate bond market.

Another way to view the government securitization market is that its defining characteristic is less its securitization aspect, and more its guarantee aspect. If government securitizations are "secured Treasuries" they should theoretically trade within Treasuries. That has not proven to be the case, suggesting that perhaps the prepayment

[6] See, generally, The Congressional Oversight Panel's February 2010 Report, "Commercial Real Estate Losses and the Risk of Financial Stability", pages 27-36, http://cop.senate.gov/documents/cop-021110-report.pdf.

and interest-rate risk associated with the actual, underlying mortgage pool creates more distraction than benefit to the investor community.

The last observation is demonstrated most dramatically when considering the "To-Be-Announced", or "TBA" market, for GSE MBS. A TBA is a contract for the purchase or sale of GSE MBS (e.g., $50 million of 5½% Fannie Mae MBS due in 2040) to be delivered at a future, specified date, sometimes substantially (up to 90 days) in advance of the settlement date. At the time of trade, however, neither the exact pool, number of pools, or loans comprising the pool are known; rather the trade, and in fact this entire market, is made possible only because of the fundamental assumption of the essential homogeneity and the fungibility of GSE MBS.

The TBA market thus allows originators to hedge and fund their forward origination pipelines, since they can originate loans (i.e., "lock in" the rates and prices on the loans) during the period between the trade and the settlement dates.

It is worth noting that what makes the TBA market possible – its homogeneity – is a result of two underlying factors, first, the fungibility of the conforming loan product, which is a standardized product with established and uniform underwriting guidelines and form documentation, and, second, the effect of the GSE guaranty, which equalizes all of the securitized MBS in terms of credit risk. In other words, it is probably not possible that the TBA market could be replicated outside of the GSEs, or outside of some replacement of the GSEs that, itself, was able to replicate the two underlying factors of fungible product and uniform credit risk across different originators.

We also observe that many of the reforms being suggested with regard to the private label MBS market – most notably, perhaps, the furnishing of enhanced loan level data to investors – is inconsistent with the operation of the TBA market, since its unique characteristic is that the underlying loans need not even be identified as of the trade date. This again suggests the uniform disclosure and registration requirement for GSE and private label MBS may come at a heavy cost.

Any GSE "reform" which does not accommodate, or suitably replace, the existing GSE MBS TBA market will undoubtedly impact mortgage originators both severely and negatively by reducing the originators' options to "rate lock" and thus satisfy consumer needs. As is always the case, these impacts will surely disproportionately fall on the nation's smaller finance companies as well as the community bank sector

The GSE Portfolios and Securitization. Many commentators have raised questions regarding the policy behind the practice of the GSEs to maintain portfolios.[7] These portfolios consist of both whole loans as well as private label MBS and GSE MBS. The ASF expects this practice of the GSEs to be one of the principal areas of focus as the government undertakes its review of federal housing policy.

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[7] See, by way of illustration, Dwight M. Jaffee of the University of California at Berkley, "On Limiting the Retained Mortgage Portfolio's of Fannie Mae and Freddie Mac", June 30, 2005, http:fic.wharton.upenn.edu/fic/papers/05/0538.pdf

Those who are critical of the GSE portfolios frequently suggest that the practice results from the GSEs' historical structure as private, stockholder–owned entities. Under this line of reasoning, enterprise profits can be enhanced with a business strategy of borrowing at a relatively low rate, and investing the proceeds of the debt in higher yielding assets. More specifically, these commentators allege that the GSEs can issue debentures at a taxpayer subsidized rate, and then manufacture arbitrage profits which accrue, not to the taxpayers who make it all possible, but to the far more limited universe of GSE shareholders. Ancillary arguments along these same lines suggest that the GSEs may also engage in relatively risky hedging strategies in an attempt to preserve these arbitrage profits.

Thus, the issue of the GSEs' portfolios is frequently linked as well as to the issues of private ownership of the GSEs and the related profit-maximizing behavior, the suggestion perhaps being that, in the absence of private ownership, there would be no inclination to generate the alleged arbitrage profits and thus no inclination to maintain portfolios. As a consequence, those commentators conclude that the GSEs should perhaps be limited solely to their guarantor function (like Ginnie Mae) and prohibited from maintaining portfolios.

These are very difficult arguments to address, because it is impossible to separate out the two fundamental strains of reasoning supporting the argument: one based on the profit-maximizing inclination of privately owned enterprises, and one based on an alleged misuse of a taxpayer-supported benefit. The ASF is certainly not today in a position either to support or criticize the practice of maintaining GSE portfolios.

We would urge the government in considering this complex issue to keep in mind two very broad principles. First, the recent financial crisis has demonstrated that anything which maximizes the options available to the government is probably a positive rather than a negative, under the general proposition that more options are better than fewer.

What follows from this first principle is that any hard and fast policy prohibiting the maintenance of GSE portfolios is also a policy which narrows the universe of available options. The maintenance of portfolios is not necessarily inexorably linked with the question of private versus public, or some sort of hybrid ownership structure.

Our second observation is that the maintenance of GSE portfolios funded by GSE debentures tends to retain relatively more risk on the GSEs and their owners than do GSE securitizations (i.e., transactions in which the GSEs act only as guarantors). To the extent that the maintenance of the portfolios arguably give rise to "arbitrage profits", it is useful to remember that profits are economically the flip side of risk, which in the case of the GSE portfolios are primarily prepayment and interest rate risks. A GSE securitization strategy, as compared to a GSE portfolio strategy, will tend to transfer both prepayment and interest rate risk to the investors, rather than retain these risks at the GSEs and their owners; this is true whether those owners are private shareholders, the government, or some hybrid.

Private Label Securitization Market. An important element of government housing policy is the regulatory architecture governing securitization. As is well known, the financial crisis has precipitated a number of reform proposals. The government has issued several proposed rules, and the securitization industry has developed a variety of initiatives, aimed at both the seeuritization market and the broader structured products industry. The ASF will comment on many, if not all of the government proposed rule-makings. Consequently, we will not repeat here our observations on those more targeted letters, but rather will set forth our views on several fundamental points, in particular:

- much of the source of financial crisis seems attributable to an overheated real estate market; and

- a rising real estate market increases lenders' willingness to provide credit, and borrowers' willingness to take on debt.

The Structure of Mortgage Credit as a Fixed-Income Investment. With respect to the residential mortgage sector, there are generally considered to be two aspects to a lender's underwriting analysis: the borrower's ability to repay, and the likelihood that the collateral value of the real estate will be sufficient to satisfy the debt in the event of a borrower default. This point is driven home with particular clarity in so-called "single-action" states, where, by law, upon a borrower's mortgage default, the lender must choose between an action against the borrower on the note (i.e., an action against the borrower's personal credit) and on action against the mortgaged property (i.e., foreclosure and sale). Not surprisingly, and, indeed, entirely sensible is the phenomenon that a lender would be more inclined to extend credit on a secured loan (such as a mortgage) when the value of the collateral is, by all available indications, on the rise. Put another way, if a loan is secured by both personal credit and collateral, a strong collateral position will put a lender in a position to make more accommodations regarding the borrower's personal credit strength, and vice-versa. Consequently, one would expect relatively more emphasis on collateral value when collateral values are rising, and less emphasis on personal credit.

As noted at the outset of this letter, securitization, as a technique, works best when the underlying assets are themselves debt or debt-like instruments with predictable and scheduled cash flows. The securitization technique also works with less predictable cash flows, for example, the case of "liquidating trusts" where the assets are, from the outset, foreclosed or seriously delinquent real estate properties. In these structures, however, the securitization's cash flows become relatively unpredictable, and time and credit tranching become difficult since recovery periods and rates are uncertain. As a result, the securities issued in a liquidating trust structure tend to be on the more speculative side of fixed-income investments – in effect, equity type investments structured as fixed-income investments. As a general principle of finance, the difference between equity investments and fixed income investments is rather fundamental, so any misapprehension (or outright confusion) as to whether an investment is an equity versus a fixed-income investment is likely to lead to substantial mis-pricing and inefficiency. An investment backed by real estate properties would generally be considered an equity type investment, whereas an investment backed by promissory notes would generally be considered a fixed income investment – the investments in effect take on the character of the underlying assets

which service the investment. Thus investments which rely heavily on "the future" and/or "management" are essentially equity investments not ideally suited to classical securitization.

What this line of reasoning means for government policy in the housing finance system is simply this: state or federal law policies which relieve consumers from personal liability for mortgage debt, such as a "single-action" rules, tend to make residential real estate lending relatively more like equity and relatively less like debt. Since the securitization market is at its most efficient as a fixed-income market, then, other things being equal, the more emphasis there is on borrower credit, as represented by the promissory notes, and the less emphasis there is on the real estate, the more efficient the securitization structure becomes.

Many commentators on the recent crisis acknowledge the contributing roles of the real estate bubble and of the securitization market, and also the likely fundamental truth that bubbles will always be with us, and they can only be seen, at least by most of us, when they pop. Hence in the narrow area of real estate finance, the best solution is probably a structural one, to encourage both borrowers and lenders to focus relatively more on personal credit, and relatively less on real estate values, thus helping to re-order the housing finance system, at least as regards securitization, more strongly to a proper fixed-income market.

General Regulatory Uncertainty. Today, the President just signed the Dodd-Frank Act, which impacts the securitization markets primarily through the risk retention and credit rating agency reform provisions, although other aspects of the Act, particularly as regards resolution regimes for financial institutions and consumer protection, also have the potential for huge, if indirect, impacts on this market. Many important details of implementation have been left to a variety of federal agencies, including the SEC, HUD, the FDIC, the Federal Housing Finance Agency, the OCC and the Federal Reserve. The legislation mandates various time frames for regulations, generally one or two years following enactment. In addition, both the previously-introduced covered bond legislation, as well as the not-yet taken up issue of GSE reform have the potential to alter vastly the regulatory landscape for the securitization industry.

Apart from this legislation, the SEC has recently promulgated a variety of new regulations regarding credit rating agencies and the ratings of "structured finance products", and is in the process of revising the principal regulation relating to securitizations, Regulation AB -- a process that will likely continue for another six months to a year.[8] Meanwhile, the FDIC is currently in the process of revising its legal isolation safe-harbor regulation for securitizations, 12 CFR 360.6, primarily in response to accounting changes which themselves remain in flux.[9]

With regard to the judicial system, recent court decisions as well as pending cases also add to the pervasive sense of uncertainty in the securitization markets. Among the more

[8] Securities Act Release No. 9117 (April 7, 2010), published in the Federal Register on May 3, 2010.
[9] Federal Register, Vol. 75, No. 94, May 17, 2010, p. 27471.

notable cases are the Dante[10] and Metavante[11] decisions from the Lehman bankruptcy, the General Growth Properties ruling regarding the "adequate protection" doctrine in bankruptcy,[12] and the SEC's action against Goldman Sachs relating to disclosure issues in the Abacus CDO transaction.[13]

It goes without saying that all of these legislative, regulatory and judicial actions are important and well-merited in their own right, and that the issues are complex and require both time and substantial thought. Nevertheless, that having so many different bites being taken at essentially the same apple by so many different governmental bodies – and indeed, different branches of government – is not a recipe for a quick revival of the securitization markets and/or the nation's system of housing finance. Government officials from the Treasury Secretary[14], the Federal Reserve Chairman[15] and the FDIC Chairman[16] on down have all made the point that a revival of the securitization markets is a necessary condition to a revival of the U.S. economy. Given all the different tracks on which these government actions are currently traveling, the visible supply of legal and regulatory uncertainty extending out over the securitization markets for the next two years at least seems to indicate that a full economic recovery is also at least that far off.

In light of this, the ASF strongly believes that federal housing finance policy should work to restart the non-agency residential mortgage secondary market in a rational and coordinated way. Regulatory uncertainty, among other things, is presently frustrating the ability of originators to develop a sound business strategy in the non-conforming product. Market regulation of securitization transactions should promote a sustainable non-agency securitization market. This should be done in a collaborative and coordinated way, which facilitates the core credit intermediation functions of banking organizations. We believe that a single, national standard arising out of the Dodd-Frank Act, and implemented by joint interagency regulatory rulemaking will best achieve the housing finance policy goals of promoting responsible underwriting and market transparency, while addressing the need of industry participants to have a clear, practical and efficient approach. A fragmented approach to regulating these markets, in which various regulatory bodies (and, indeed, all three branches of government) develop slightly different rules governing the exact same subject matter, is unlikely to produce efficient results and prove to be a drag on the mortgage market.

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[10] See "Bankruptcy Judge Invalidates Securitization Payment Structure", HousingWire, January 29, 2010, http://www.housingwire.com/2010/01/29/bankruptcy-judge-invalidates-securitization-payment-structure.

[11] See "The Specter of Lehman Shadows Trade Partners", Wall Street Journal, September 17, 2009, http://online.wsj.com/article/SB125313981633417557.html

[12] See "General Growth: Bankruptcy and the Downfall of Securitization as We Know It", (Westlaw Business, Legal Currents, May 5, 2009, http://currents.westlawbusiness.com/Articles/2009/07/20090728_0053.aspx?cid=&src=

[13] See "SEC Split Over Goldman Deal", Wall Street Journal, July 17, 2010, http://online.wsj.com/article/SB10001424052748704229004575371601322076426.html

[14] Secretary Geithner's remarks on "Meet The Press", March 29, 2009, reported at http://seekingalpha.com/article/128432-straight-talk-from-geithner-on-securitization

[15] Chairman Bernanke quoted at the Federal Reserve Bank of Chicago meeting's question and answer session, May 6, 2010, reported at http://www.reuters.com/article/idUSWEN433720100506

[16] Chairman Bair's remarks to the Housing Association of Non-Profit Developers Annual Meeting, Tyson's Corner, Virginia, June 7, 2010, http://www.fdic.gov/news/news/speeches/chairman/spjun0710.html

Risk retention mandates associated with residential mortgage credit risk need to be practical and flexible, and need to recognize that there are many paths to the mountaintop. Various policy proposals have been advanced by Congress (through the Dodd-Frank Act), the FDIC, the SEC, and others. While each proposal addresses the same subject matter and each share certain elements, these proposed standards are all different. To the extent that risk retention is required, the Dodd-Frank Act authorizes regulators to determine whether it is to be accomplished in a particular way such as for example a pro-rata vertical slice, a first-loss interest, holding similar loans on balance sheet in unsecuritized form, or other reasonable methods. High-quality qualified residential mortgages will be exempt. Also, reasonable standards concerning sunset provisions and permitted hedging should be considered. Further study should be undertaken to determine how best to approach risk retention, its consequences to balance sheets and bank capital, as well as a review of its potential macroeconomic effects. A "one-size-fits-all" approach is unlikely to produce the best results.

As the markets heal, private organizations should increasingly be encouraged to participate in the non-agency securitization markets. If banks continue to refrain from non-agency securitization activity, concentrations of mortgage credit risk appear likely to continue to reside within the FHA and Ginnie Mae, within the GSEs, and with other governmental or quasi-governmental bodies. Responsible, user-friendly non-agency securitization markets should be viewed as a tool to help gradually reduce concentrations of these risks in governmental agencies, as well as transferring these risks outside of the banking system.

To the extent the process of resolving the legal and regulatory uncertainties surrounding securitization can be co-ordinated and (not unduly) accelerated, the revival of the housing finance system and of the U.S. economy in general will happen sooner rather than later.

Do housing finance systems in other countries offer insights that can help inform US reform choices?

The ASF strongly supports the view that the US should consider systems, and individual aspects of systems, of housing finance from other jurisdictions. Three broad areas for consideration suggest themselves:

- different cultural notions of the desirability of home ownership;
- with respect to residential housing finance, product offerings and imbedded issues of risk allocation; and
- alternative securitization products, and covered bonds in particular.

Home ownership. Treasury and HUD have solicited public comment on the issue of a federal housing policy for "sustainable home ownership". This is perhaps the broadest of the questions posed by the notice, and although, once again, the ASF has no special wisdom on this bedrock issue, we will offer some broad observations on home ownership, consumer credit and the capital markets.

As noted earlier in this letter, there are three basic forms of the hard assets which make up this nation's or any nation's physical housing stock: single-family detached, townhouse and multifamily (both small and large complexes). Although "home ownership" is not synonymous with "single-family" detached homes, there is enough truth to that to make it useful to see the two things as synonymous. Viewing the issue a different way, however, leads to considering the home ownership issue not as an issue of the type of housing unit; but rather as the "owner" versus the "renter" model, where the primary difference, arguably is whether the unit's inhabitant has any equal investment in the "bricks and mortar" which make up the unit. In many people's minds, these two different ways of seeing "home ownership" collapse, and become fused in the notion that one "buys a home" (single-family detached or townhouse) and one "rents an apartment".

Certainly the notion that home ownership is a desirable goal seems deeply imbedded in the yet broader notion of the "American Way of Life". This notion serves as the marketing principle for both the GSEs as well as many depository and non-depository lenders.

Beyond "home ownership" as a marketing principle for the residential mortgage industry, such a principle fits in nicely with the even broader concepts of consumer spending and consumer credit. It seems commonsensical to conclude that there is probably some sort of a direct correlation between the size of one's housing unit (or units) and one's appetite for spending on large purchases such as autos and appliances. Many such purchases are likely financed, at least in part, on credit. Thus, it is probably the case that "home ownership" correlates with not only increased mortgage credit but also increased consumer spending and consumer credit. Since roughly 70% of the U.S. economy is based on the consumer sector[17], any large-scale effort to redefine "the American Way of Life" away from home ownership should take into account any broader potential impact on the American economy.

Another fundamental observation about "home ownership", at least insofar as it means the single-family detached unit, is that it is likely the most environmentally expensive way to meet the nation's housing needs. This is true for many of the same reasons "home ownership" promotes increased consumer spending: single-family detached homes compared to say, large multi-family buildings likely promote more autos, more appliances, heavier energy usage, and so on.

Residential housing finance product mix. Via the process of securitization, risks can be allocated between the issuer/sponsor on the one hand and the investors on the other hand (and among different investors through tranching). But an even more fundamental risk allocation is between the consumers on the one hand and the issuer/sponsor/investors on the other hand, and examining that risk allocation through a consideration of the product mix may be a worthwhile exercise.

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[17] "Consumer Credit in U.S. Declined More Thank Forecast", Bloomberg Business Week, July 8, 2010, http://www.businessweek.com/news/2010-07-08/consumer-credit-in-u-s-declined-more-than-forecast.html

It is fair to say that the standard, benchmark residential product in residential housing finance is the 30-year fixed rate mortgage with limited prepayment penalties. It is also fair to say that this product is essentially a U.S. product, of limited availability in other countries, where shorter-term and adjustable rate loans are far more common.

As noted above, the 30-year fixed rate product transfers interest rate and prepayment risk (refinancing risk when seen from the borrower's perspective) from the borrower to the investor. By comparison, a five-year adjustable rate loan would retain more interest-rate and refinancing risk on the borrower. Particularly if coupled with enhanced legal rules which solidify the personal liability of borrowers on their residential mortgage loans, the specter of a looming need to refinance may lead, structurally, to more conservative lending and borrowing practices in the residential mortgage finance space. The flip side of more risk retention by the borrower is less risk to the investor, whether the investor is a GSE or a private investor.

Another variable in mortgage products relates to the use of loan proceeds. In this area, the big divides are between purchase-money versus refinance or equity take out, and owner occupied versus non-owner occupied. Although all of these products are available in other jurisdictions, the primary question for the U.S. perhaps is whether products other than owner occupied, purchase – money residential housing finance transactions should benefit from any sort of government support, including eligibility for federally-provided insurance or GSE purchase. Since government mortgage insurance and entities such as Fannie Mae and Freddie Mac are by and large U.S. creations not found in other jurisdictions, these product characteristics are not directly susceptible to a cross-jurisdiction review, but are worthy of consideration by the government in terms of the federally supported residential product mix.

Covered Bonds. Covered bonds are the primary securitization product from abroad which is under discussion in the U.S. Several years ago, the FDIC provided regulatory guidance on the product[18], and a bill has been introduced in the House to further solidify the legal underpinnings of the product[19]. Among knowledgeable observers, an enhanced legal regime for US covered bonds has wide support, and as a general matter the ASF supports covered bonds. Covered bonds are a popular securitization-style method of financing for housing in a number of other jurisdictions, and in Europe have been used for over a century. Covered bonds are a bank product (as distinguished from a product issued by non-depository finance companies) although this is only true as a historical matter. There is no apparent market or legal rationale which would prevent covered bonds being issued by entities other than banks (e.g., Fannie Mae, Freddie Mac or non-depository finance companies).

Although the structure is more complex, covered bonds are essentially secured debt of a bank, with the collateral being a "cover pool" of financial assets (such as mortgages). Unlike in a classical securitization, the cover pool is not a static pool, and the bonds do

[18] "FDIC Policy Statement on Covered Bonds", August 4, 2008, http://www.fdic.gov/news/news/financial/2008/fil08073.html

[19] The "United States Covered Bond Act of 2010", introduced March 18, 2010, Rep. Scott Garrett of New Jersey.

not amortize based upon the pool's amortization -- the structure is more like corporate debt (i.e., bullet maturities). Covered bonds, since they structurally provide for "skin in the game" (because the issuing bank as fully liable for credit risk), are a particularly attractive product for consideration in the U.S. at this time, especially in light of the much criticized "originate to distribute" practice allegedly prevalent in the residential market during the pre-crisis years. As stated above, the ASF is generally supportive of making covered bonds available as an alternative capital markets method of financing housing (and other forms of) credit in the U.S. However, there is one principal point the ASF would like to make about covered bonds.

It is likely the case that one principal reason why covered bonds have not previously played a large role in the U.S. is because of the presence of the GSE's, which are uniquely U.S. constructs. Put another way, no jurisdiction has entities similar to Fannie Mae, Freddie Mac and the Federal Home Loan Bank System and a meaningful covered bond market. This could suggest that these may be two different ways to support mortgage finance, and how these techniques may co-exist is not something on which any other jurisdiction provides much guidance.

Consequently, ASF's only observation is that, while covered bonds appear to be a promising idea for the U.S., care should be given to the implementation of the idea in the U.S.

* * * * *

We very much appreciate the opportunity to offer our observations on these issues of true national importance. We further understand that the Government is only at the very beginning of the process of its review, and we offer to the Government in advance continued access to the American Securitization Forum's member resources and expertise as the process continues. Should you have any questions concerning our observations, or if you feel we may further assist you in this task, please do not hesitate to contact me at 212.412.7107, tdeutsch@americansecuritization.com, or our outside advisors on this matter, Armando Falcon of Falcon Capital Advisors, LLC at 202.393.4150, afalcon@falconhfg.com, or Chris DiAngelo of Dewey LeBoeuf LLP at 212.259.6718, cdiangelo@dl.com.

Sincerely,

Tom Deutsch

Tom Deutsch
Executive Director
American Securitization Forum

Testimony of

Michael A.J. Farrell

Chairman, Chief Executive Officer and President

Annaly Capital Management, Inc.

Before the

U.S. House of Representatives Committee on Financial Services

Hearing on

"The Future of Housing Finance—A Review of Proposals to Address Market Structure and Transition"

September 29, 2010

Washington, DC

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Chairman Frank, Ranking Member Bachus, and members of the Committee, thank you for the opportunity to speak today on the future of housing finance, a subject that affects virtually every American, and not just homeowners. My name is Michael Farrell, and I run Annaly Capital Management. Annaly is the largest listed residential mortgage REIT on the New York Stock Exchange with a market capitalization of $11 billion. Annaly, together with our subsidiaries and affiliates, owns or manages over $90 billion of primarily Agency and private-label mortgage-backed securities (MBS). Additionally, we also are deeply involved in the mortgage markets through our securitization, structuring, financing, pricing and advisory efforts.

I am here today representing the secondary market investors who have historically provided the majority of the capital to the $11 trillion mortgage market, and my remarks are focused on that perspective. Debate over housing finance reform has largely been about government's role in it, and rightly so given that Fannie and Freddie's government-sponsored hybrid charter was ultimately disastrous for taxpayers. However, there are certain activities that these Agencies performed that are important to the pricing and liquidity of the housing and mortgage market.

The current housing finance system, certainly the one that prevailed until underwriting standards started to slip around 2004, is the most efficient credit delivery system the world has ever seen. There are important elements of the existing system that are worth keeping:

- First: securitization, where fully documented borrowers of similar creditworthiness using similar mortgage products are pooled and receive the benefits of scale in pricing.
- Second: the government guarantee to make timely payments of interest and principal on MBS that scales the process even further by making the securities more homogeneous.
- Third: the to-be-announced, or TBA market, which is what Fannie and Freddie and Ginnie facilitate. It is through the TBA market that most residential mortgages are pooled and sold, and it enables originators and investors to hedge themselves.

I believe that the market will adapt to whatever changes occur to these items in a new housing finance system. However, the market will adapt to the new structure by repricing it. If the new system has significantly different risk, uncertainty and friction than the housing finance system we have now, the consequences may be that our housing finance system is smaller with lower housing values and less flexibility and reduced mobility for borrowers. This can have ongoing and broad consequences for economic growth.

If mortgage rates and house prices were not an issue, the government would not have to be involved in housing finance. But these are important issues. Therefore, I believe a housing finance system that utilizes a government guarantee on well-underwritten mortgage securities would maintain the significant size and liquidity of the market, as well as continue to provide

for relatively lower costs to the borrower. Going forward, however, the portfolio activities of Fannie and Freddie should be eliminated. The private market would expand its investment activity to fill this role, much like Annaly and its brethren do now. But it is important for the Committee to understand that the majority of Agency MBS investors ***finance their positions***, using financing that is available and priced where it is because of the government guarantee on the assets. Fannie and Freddie financed their portfolio purchases through the capital provided by the debt markets. This is an essential component of housing finance.

In any transition, Congress must consider the potential size of the market in the system to which we are transitioning, because about $8 trillion of the $11 trillion in home mortgage debt is funded by investors in both Agency and private label mortgage-backed securities. Of that $8 trillion, some 70% is held by investors in rate-sensitive Agency MBS, with the balance in credit-sensitive private-label MBS. There isn't enough capital for the universe of credit-sensitive private-label MBS investors to supplant the installed base of rates buyers, ***at least not at the current price***. Without the support of mortgage values and home prices that is provided by the government guarantee, the funding hole of $8 trillion will get smaller only by ***shrinking the value of the housing collateral and the mortgages needed to finance them***. At its essence, then, any transition to a new housing finance system has to factor in the speed with which these values will change.

In conclusion, I believe that Fannie and Freddie should continue to operate in conservatorship with a goal of winding down their retained portfolios over a set period of time and honoring the guarantees of the Agencies. For simplicity's sake, and the markets like certainty and simplicity, going forward Congress should consider delivering explicit government guarantees on MBS in a manner similar to Ginnie Mae. This would enable it to continue to serve as the portal between the borrower and the secondary market through securitization and the TBA mechanism, but most importantly enforce underwriting standards for mortgages carrying the government guarantee.

Thank you again for the opportunity to testify today, I look forward to answering your questions.

###

Appendix I: Annaly Capital Management's Submission to Treasury's Request for Input on Reform of the Housing Finance System, July 21, 2010

Introduction to Annaly:

Annaly Capital Management, Inc. (NYSE: NLY), one of the nation's leading investors in fixed income securities, is uniquely qualified to provide responses to the questions on housing finance posed by the Department of Treasury. We are primarily investors in Agency mortgage-backed securities (MBS) and, through our subsidiaries and affiliates, in non-Agency loans and mortgage-backed securities, but we touch the mortgage market in a number of different ways—asset management, securitization and structuring, financing, pricing and advisory work.

Annaly is the largest listed residential mortgage REIT on the NYSE with a market capitalization of approximately $11 billion and $70 billion in Agency MBS on its balance sheet. Annaly's principal business strategy since its inception in 1997 is to generate net income for distribution to investors from its portfolio of Agency MBS and from fee and service income earned by its two wholly-owned SEC-registered investment advisor subsidiaries, Fixed Income Discount Advisory Company (FIDAC) and Merganser Capital Management, Inc. (Merganser), and its wholly-owned broker-dealer subsidiary, RCap Securities, Inc. (RCap).

FIDAC is the external manager of two separately traded mortgage REITs, Chimera Investment Corporation (NYSE: CIM) and CreXus Investment Corp. (NYSE: CXS). Chimera, launched in November 2007, manages a portfolio of non-Agency residential mortgage loans and securities, and CreXus, launched in September 2009, invests in commercial real estate loans and securities.

Together, Annaly and its subsidiaries own or manage over $90 billion in assets (at March 31, 2010), have a wide range of public institutional and individual shareholders, and have the investment expertise, analytical focus, size, systems capabilities and track record to represent the perspective of investors in mortgage loans and securities.

Background on Annaly's Answers:

The Obama Administration is seeking public input on the future of the housing finance system, including Fannie Mae and Freddie Mac (the Agencies or GSEs), and the overall role of the federal government in housing policy. As we understand it, the endeavor is a step towards developing a system that avoids the critical events that contributed to the financial crisis of the last two-and-a-half years (including the missteps of Fannie Mae and Freddie Mac) and enables the housing finance market to achieve the policy goals of the US government once market conditions normalize. Specifically, the public input is intended to help the government determine the appropriate level of government involvement in housing finance, if any, while minimizing taxpayer risk.

This is not a straightforward exercise. The housing finance system in the United States has largely been a success story, and changing it won't necessarily improve it. Creditworthy borrowers—those with a pattern of good credit behavior, money for a down payment, and full documentation—have generally been able to access mortgage credit on essentially the same terms and conditions regardless of where they live in the US. In effect, this has created a national housing finance system and borrowers are not disadvantaged by the vagaries of local credit conditions. With the advent of securitization technology, the secondary market of mortgage investors has developed into a deep and global market that has generally worked to the advantage of the average American homebuyer. The liquidity that Fannie Mae and Freddie Mac provide, both through their MBS guarantees and through their own balance sheets, has been an important component of this system, and not just for the conforming borrower. Indeed, a conforming borrower has generally paid a lower rate than a jumbo prime borrower, but the conforming mortgage rate also serves as an effective benchmark for other mortgage rates.

It has not been a perfect system, however, and its flaws became most evident beginning in the first decade of this century. These flaws are well-documented and include (but are not limited to):

- Fannie Mae and Freddie Mac, as private companies with public policy charters, served two masters. They pushed for profitability for shareholders to the detriment of their government charters by increasing their leverage and lowering their own underwriting standards. In the end, they achieved their charter objective, but they failed both masters.
- Mortgage originators ignored prudent underwriting standards and unleashed a flood of affordability products on unwitting and unqualified borrowers.
- Mortgage borrowers misunderstood or ignored the risks of the affordability products.
- The financial engineers on Wall Street created CDO and SIV structures that fed unprecedented demand and embedded leverage on leverage.
- Ratings agencies used flawed models, included perpetual home price appreciation assumptions, to improperly rate the different cash flow tranches.
- Investors in both the senior tranches (including the GSEs) and the junior tranches exercised poor judgment in trusting that others on the assembly line (originators, rating agencies, underwriters) did their jobs responsibly.
- The socialization of credit risk around the globe infected virtually every financial institution.

The key to overhauling housing finance in America is to understand what was broken, then keep what worked and discard what didn't.

What didn't work is the Agencies' retained portfolio activities and poor underwriting standards in the broader mortgage marketplace. The retained portfolios of Fannie and Freddie were managed at significantly high levels of leverage given the risk they were taking on. The portfolios were designed by the creators of the GSEs to be a tool for providing market liquidity when credit was freezing up, to keep credit flowing to the mortgage market. The typical sign that this was happening was spread widening in the secondary market, whereupon the Agencies stepped up purchases. Unfortunately, the GSEs were probably too liberal in their approach to this part of their mandate, and instead exploited any attractive arbitrage they could for profit. As Secretary Geithner said in his testimony to the House Financial

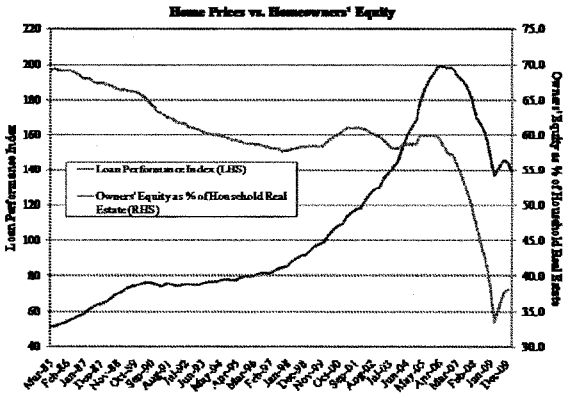
Services Committee, "The GSE charters contained a fundamental misalignment of interests. As private companies, the GSEs had a fiduciary duty to maximize profits. However, at times this duty conflicted with their public mission, which was relegated to a subordinate role."

Responsibility for underwriting standards was abrogated by virtually everyone along the assembly line of MBS creation. This quote by William D. Dallas, founder and CEO of Ownit Mortgage Solutions, one of the many sub-prime mortgage lenders that went bankrupt during the crisis, epitomizes how far this went. He was asked why his company continued to lower lending standards even as the risks grew. "The market is paying me more to do a no-income verification loan than it is paying me to do the full documentation loans," he explained. "What would you do?"

And as we know, the Agencies bought hundreds of billions of the triple-A tranches of MBS collateralized by these subprime mortgages for their retained portfolios, thereby enabling their creation.

We also want to make sure that this evaluation of the housing finance system is conducted in the proper context. Specifically, in the broad sweep of housing finance, we must focus on the period from 2003 to 2007, when anomalous practices occurred that led to the situation we are in today. In Figure 1, we see how the decline in home prices since the peak in 2006 has translated into a decline in home equity as a percent of household real estate, but home equity also declined during the greatest run-up in home prices in American history. This occurred due to the mortgage credit bubble that enabled homeowners to refinance, trade up to more expensive homes and extract well over a trillion dollars of equity during the 2002-07 period.

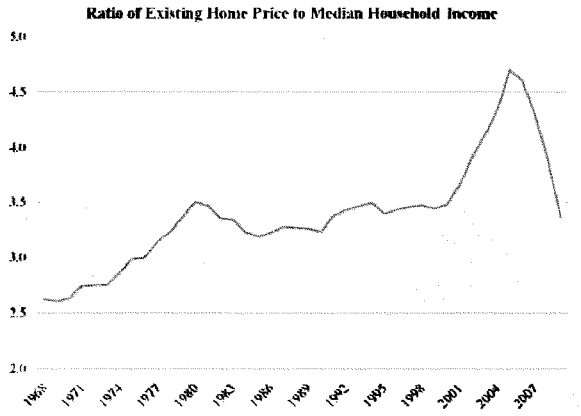
Figure 1



Sources: Federal Reserve, First American Corelogic

In Figure 2, we see that home prices spiked relative to incomes. It appears that beginning in the late 1960s the rise of the GSEs helped make more expensive houses more affordable, and then from the mid-1970s onward the new normal for the next 25 years was for home prices to average about 3.25 times annual income. Then beginning in 2001 the market took off and home prices peaked at 4.5 times annual income in 2006. How could this be sustained? Through affordability products.

Figure 2



Sources: Bureau of the Census, National Association of Realtors

Affordability products are mortgages that relaxed or ignored prudent underwriting guidelines to enable borrowers to acquire ever more expensive houses. Standards were eased and the face of the mortgage market changed. Figure 3 shows the changes in underwriting standards through the peak of the bubble in 2006.

Figure 3

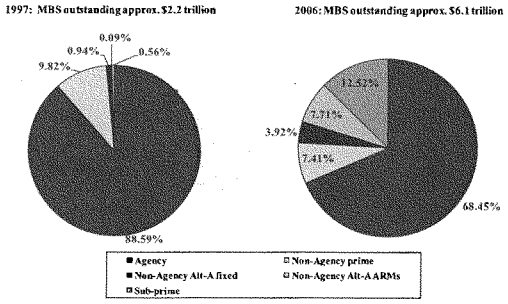
Sub-prime Collateral Attributes by Vintage Qtr

	Q1 2003	Q1 2004	Q1 2005	Q1 2006	Q4 2006
Orig Loan Size	145,763	160,842	173,076	187,833	189,337
FICO	613	622	621	627	632
DTI	40	40	40	42	42
Debt-to-Income >=45%	36%	36%	37%	44%	48%
Stated Income / Low Doc Loans	32%	36%	39%	45%	46%
Combined Loan-to-Value	80	83	84	86	89
Combined Loan-to-Value > 90%	3%	11%	19%	31%	38%
Orig LTV	80	81	81	81	82
Interest Only Loans	1%	5%	20%	24%	19%
Purchase Loan w/2nd lien for down payment	7%	29%	37%	53%	64%

Source: Credit Suisse

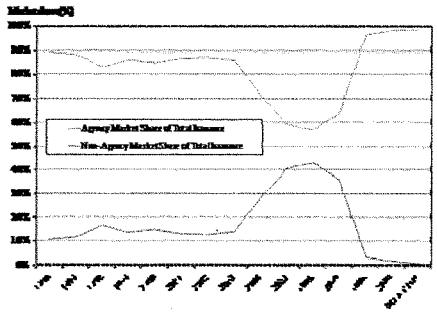
Figures 4 and 5 set forth the market share of Agency and non-Agency MBS outstanding and issuance. It is clear that the period of 2003 to 2007 was the anomaly.

Figure 4



Source: Deutsche Bank

Figure 5



Source: SIFMA

To us, this is the root cause of the financial crisis: A mortgage credit bubble built on poor, seemingly unregulated underwriting standards. Whatever the outcome of this process, avoiding this condition should be a component of housing policy.

To conclude, the market will adapt to whatever policy objective comes out of Washington, most likely by repricing the risk, uncertainty and friction of whatever replaces the current system. The consequences of change are that the size, scope, availability and efficiency of the current housing finance system will change as well. If the new system is significantly different than the housing finance system we have now, the consequences may be that our housing finance system is smaller, perhaps more appropriately priced, but with lower housing values and less flexibility and mobility for borrowers.

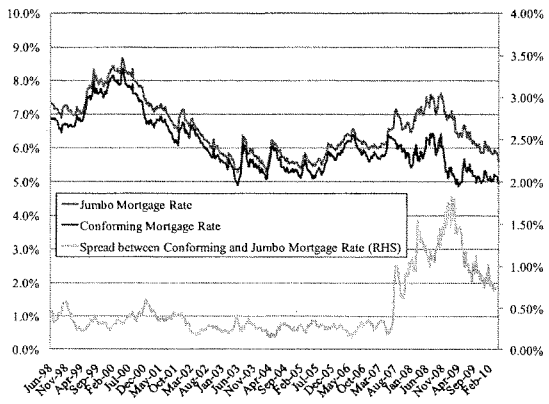
Answers to Questions:

1. ***How should federal housing finance objectives be prioritized in the context of the broader objectives of housing policy?***

The objectives as constituted in the original charter of the GSEs are a good starting point: to provide liquidity, stability and affordability to the US housing market, including stabilizing the nation's residential mortgage markets and expanding opportunities for both homeownership and affordable rental housing. In light of the experiences of the recent past, housing policy should also include as an objective minimizing the risk to the taxpayer of any government involvement.

To us, the single most important decision for policymakers is whether it should concern itself with setting standard and simplified underwriting practices for both rentals and homeownership. Everything flows from that decision, including arriving at the appropriate market-based mortgage rate and protecting the taxpayer. Figure 6 sets forth the differences between jumbo and conforming mortgage rates from 1998 to today, a period which included the period of arguably more prudent underwriting standards prior to 2003, as well as the bubble years that followed.

Figure 6



Sources: Bankrate.com, Bloomberg

Please note that during the credit crisis starting August 2007, jumbo rates (those that are not government wrapped) increased dramatically, partly reflecting the reduced liquidity and increased aversion to all credit-sensitive instruments. Importantly, the graph does not reflect the quantity of credit available at those rates. We believe that, while a mortgage market without some level of government support will have higher rates than one with government support, it can exist and capital will flow to it.. What is unclear is how much higher rates would be if there were no government-guaranteed portion at all and how large and efficient housing finance would be, especially in an environment where home prices are decreasing.

A commitment by the government to play a role in underwriting standards for the entire housing finance system and provide government backing to promote mortgage liquidity and availability leads to one set of potential solutions to a new housing finance market. If, as a matter of policy, the government wants to be completely out of the housing market, crafting the housing finance system will take a different path.

However, we believe that targeting or managing risk-based underwriting standards on the one hand and having zero government involvement in the mortgage and housing market on the other are irreconcilable policy objectives.

2. ***What role should the federal government play in supporting a stable, well-functioning housing finance system and what risks, if any, should the federal government bear in meeting its housing finance objectives?***

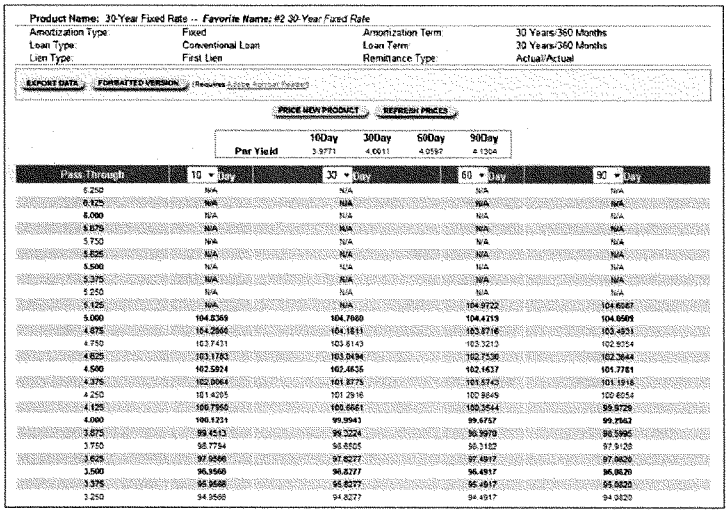
While we believe that the free market would find a way to set market clearing prices in order to establish a primary and secondary market for mortgage loans and MBS, we believe a housing finance system that utilized a government guarantee on securities would maintain the significant size and liquidity of the market, as well as provide for relatively lower costs to the borrower. The current housing finance system, certainly the one that prevailed up through 2003, is the most efficient credit delivery system the world has ever seen. It is like an electric power grid that delivers power to those parts of the country that have the demand, through efficient allocation of supply. But in the case of mortgage credit, the supply of credit comes from all corners of the globe, and the delivery is such that most borrowers of similar credit profile are able to access mortgage credit on essentially the same terms across the country. By relying on the grid, or in this case the secondary market, instead of the local bank, credit flows more freely.

There are several reasons why this works. First, securitization technology, where borrowers of similar credit are pooled and receive the benefits of scale in pricing. Two-thirds of all mortgages are held in securitized form, with only a portion of mortgages in raw loan form residing on bank balance sheets.

Second: the wrap, or the Agency guarantee to make timely payments of interest and principal. The wrap scales the process even further by making the securities more homogeneous, and takes conforming mortgages out of the universe of credit buyers and into the much deeper and more liquid market of rates investors. This is obviously a market that is much more willing to invest in times of market crisis. However, while the government guarantee will help to increase the size, scope and liquidity of the part of the market that enjoys that guarantee, prudent and risk-based underwriting standards should be maintained and enforced in order to protect the taxpayer from the risks of providing that guarantee.

Third, the to-be-announced, or TBA market, which is what Fannie/Freddie and Ginnie facilitate. The homogeneity and standardization engendered by the wrap mean that investors are evaluating the securities to see *when* not *whether* they will be repaid. This critical part of the market, by far the most liquid in the Agency market, is where the borrower meets the secondary market, and it enables originators and investors to hedge themselves. Where the rubber meets the road for Fannie and Freddie is the Agency cash window, or what they are willing to commit to paying an originator for forward production. Figure 7 is a screen shot of the Fannie Mae cash window commitment rates July 13, 2010. Originators can set their rates and offer up to 90-day rate locks to borrowers based on these rates.

Figure 7



Product Name: 30-Year Fixed Rate -- *Favorite Name: #2 30-Year Fixed Rate*

Amortization Type:	Fixed	Amortization Term:	30 Years/360 Months
Loan Type:	Conventional Loan	Loan Term:	30 Years/360 Months
Lien Type:	First Lien	Remittance Type:	Actual/Actual

EXPORT DATA | FORMATTED VERSION (Requires Adobe Acrobat Reader)

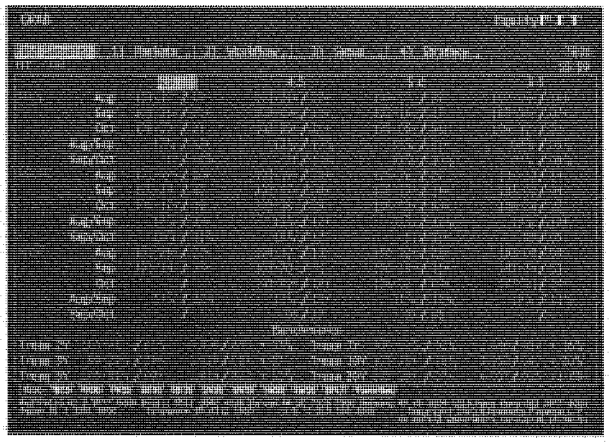
PRICE NEW PRODUCT | REFRESH PRICES

	10Day	30Day	60Day	90Day
Par Yield	3.9771	4.0011	4.0597	4.1304

Pass Through	10 Day	30 Day	60 Day	90 Day
6.250	N/A	N/A	N/A	N/A
6.125	N/A	N/A	N/A	N/A
6.000	N/A	N/A	N/A	N/A
5.875	N/A	N/A	N/A	N/A
5.750	N/A	N/A	N/A	N/A
5.625	N/A	N/A	N/A	N/A
5.500	N/A	N/A	N/A	N/A
5.375	N/A	N/A	N/A	N/A
5.250	N/A	N/A	N/A	N/A
5.125	N/A	N/A	104.9722	104.6067
5.000	104.8369	104.7660	104.4219	104.0505
4.875	104.2966	104.1811	103.8716	103.4851
4.750	103.7431	103.6143	103.3213	102.9254
4.625	103.1783	103.0494	102.7536	102.3544
4.500	102.5924	102.4635	102.1637	101.7781
4.375	102.0064	101.8775	101.5743	101.1918
4.250	101.4205	101.2916	100.9849	100.6054
4.125	100.7950	100.6661	100.3644	99.9729
4.000	100.1231	99.9943	99.6757	99.2962
3.875	99.4513	99.3224	98.9870	98.5995
3.750	98.7754	98.6505	98.3182	97.9128
3.625	97.9566	97.8277	97.4917	97.0820
3.500	96.9566	96.8277	96.4917	96.0820
3.375	95.9566	95.8277	95.4917	95.0820
3.250	94.9566	94.8277	94.4917	94.0820

The cash window of Fannie Mae becomes a portal for the originator to meet the secondary market. Pull up BBTM on a Bloomberg screen to find what secondary market investors will pay for a Fannie 4% for forward delivery. Figure 8 sets forth the TBA market rates for July 14, 2010.

Figure 8



Not only does this process allow lenders to plan their pipelines and price their products, it also allows smaller lenders to compete with larger ones knowing there is a buyer for their product. It allows secondary market investors to plan their buying programs and hedge themselves. Trillions of dollars of annual volume goes through the cash window to get funded by the secondary market, thanks to the Agency guarantee, securitization and the TBA market. This is a role worth keeping.

Is the guarantee necessary for housing finance in the US? No, it is not necessary, but the economics of the non-Agency mortgage market are considerably different, both primary and secondary, and those economics equate to higher primary mortgage rates for borrowers and, depending on risk appetite within the private market, a smaller mortgage securitization market overall and thus less homogeneity and fungibility of housing credit. Furthermore, the economics of the non-Agency market are often derived from or based on the Agency market's existence, so it is difficult to handicap what they would be in a world without a wrap.

For perspective on relative pricing of mortgages, today, the rate on a 30 year conforming mortgage and a 30-year jumbo prime mortgage is about 4.75% and 5.5%, respectively. The jumbo prime borrower will likely need to be a pristine credit with at least 20% in down payment in order to qualify for the loan. As we have seen above, that 4.75% conforming mortgage will likely get packaged into a Fannie or Freddie 4% or 4.5% MBS, and the originator of that loan will have its capital recycled in order to make a new loan.

That 5.5% jumbo mortgage, however, is a different story. It will likely remain on the bank's balance sheet or be sold to another bank, as currently there is virtually no market for non-Agency securitization. The math for non-Agency securitizations only works with primary rates that are higher than they are today, given today's primary jumbo prime rates, the ratings agencies' requirements for senior and subordinated attachment points, and the return requirements for investors to buy the senior and subordinated tranches.

3. ***Should the government approach differ across different segments of the market, and if so, how?***

We observe that conforming and non-conforming mortgages are currently treated differently in the American housing finance system. By establishing the conforming loan limit, the government's approach sets forth a competitive advantage for any mortgage below that limit. The sectors of the mortgage market that are supported by the government will always have a competitive advantage in terms of rate and availability, and the securities that contain those mortgages will be more liquid and easier to finance. The jumbo prime market is generally priced off the Agency market. While it is understandable to want to try and minimize the government's involvement in the mortgage market by setting a conforming loan limit at lower levels, it is conceivable that increasing the loan limits would not only increase the revenue to the government for the guarantee, but potentially improve its credit exposure.

Government involvement in the multi-family market is good public policy, as these loans would otherwise be difficult to securitize, leading to higher commercial mortgage rates and thus higher rental rates, all other things being equal. Further, this involvement could be targeted for affordable rental opportunities in deserving areas with the appropriate underwriting standards.

4. ***How should the current organization of the housing finance system be improved?***

We are believers in the government guarantee, but we are indifferent to how that is structured or what kind of entity offers it. However, it is imperative that there be no question that the guarantee is an explicit full faith and credit wrap by the federal government. While the denouement of Fannie Mae and Freddie Mac (conservatorship by the US government, funding of losses by the taxpayers) has turned public sentiment away from these institutions, the fact remains that as organizations they currently are performing all of their operations as an instrument of public policy. Their cash windows, securitization process and management of the TBA market enables the mortgage market to function smoothly. They have relationships with a vast network of lenders and secondary market investors. Their professional staffs understand and have demonstrated the ability to meet their charter objectives. Most importantly at this time, the misaligned incentives of the shareholder-owned company are gone from their corporate objective.

Thus, from a market perspective, the path of least disruption and smoothest transition is to change the housing finance system by keeping what works and getting rid of what doesn't. We believe that Fannie and Freddie should continue to operate in conservatorship with a goal of winding down their retained portfolios over a set period of time. At that point in time they would either be recapitalized as heavily regulated public utilities or nationalized and perhaps merged into one entity. This would enable them to continue to have their MBS guaranteed with a government wrap, enforce underwriting standards, and enable the flow of credit from the secondary mortgage market to the primary mortgage market for conforming borrowers through the TBA mechanism.

The one aspect of Fannie and Freddie's current business model that would have to be replaced would be their portfolio activities. That is, their mandate to provide support and stability in times of market crisis or illiquidity. The private market could step up to play that role in tandem with the Federal Reserve.

Funding is an integral part of the mortgage market. The majority of Agency MBS investors are leveraged. Banks, insurance companies, foreign financial institutions and many private investors use varying degrees of leverage, while the GSEs themselves and the Federal Reserve are infinitely levered. All of these investors fund themselves in different ways, but they are all financed by different segments of the credit market. Whether it is deposits, the repo markets, the debt markets, the Agency debt market or Treasury sales financing the Fed's portfolio, all of these investors are levered and this financing is available and priced where it is because of the wrap.

Rather than establish a procedure by which some instrumentality or agency of the US government set itself up as a potential investor in mortgage assets in times of market crisis or illiquidity (like Fannie or Freddie used to, or the Federal Reserve did with its $1.25 trillion buying program), we suggest setting up a funding mechanism that would enable the private market to step into that role. In other words, the

government would not be an investor of last resort, rather it would play its more traditional role as a lender of last resort. This could take the form of a TALF-like program which comes into existence during proscribed market conditions, charges high enough margin and rates yet still enables private capital to earn a return.

5. ***How should the housing finance system support sound market practices?***

With its risk retention language, the Dodd-Frank bill goes some way to fixing the problem of lax underwriting standards. By requiring the underwriter/sponsor of a securitization to retain up to 5% of the principal balance, their "skin in the game" should help align their interests. Moreover, by exempting "qualified mortgages" from risk exemption, it incentivizes underwriters to adhere to underwriting and product features that indicate a lower risk of default (such as verification of assets and income, maximum debt-to-income ratios, required mortgage insurance and others). In a qualified mortgage, it is the borrower with skin in the game. Establishing an underwriting standard that determines the amount of credit risk that needs to be retained by the originator/issuer is perhaps a more effective way to establish the proper incentives for the underwriter. So if a lender wants to make a 125% LTV/low-doc loan, they should have to live with a lot more of the risk of that loan than if they originate a fully documented, 80% LTV loan to a prime credit. It is this latter bucket that makes up the vast majority of homeowners and borrowers in the US, and the ones who primarily benefit from the mechanisms that work well in the mortgage market: the benefits of liquidity and cost that come with the scale and homogeneity of the conforming mortgage and the important TBA market.

In addition, the recent spate of so-called "strategic defaults" suggests that borrowers are coming to believe that there is little consequence for walking away from the obligation to perform on their mortgage. We believe that a sound market practice would be to introduce policies that would reinforce the personal accountability inherent in taking on a mortgage, such as the recently announced plan by Fannie Mae that would lock out a borrower from the market for 7 years if there is evidence of "strategic default."

6. ***What is the best way for the housing finance system to help ensure consumers are protected from unfair, abusive or deceptive practices?***

Naturally, education, clear disclosure and enforced penalties for unfair, abusive or deceptive practices will help protect consumers. But more to the point of the past and future of mortgage finance, many of the homeowners created during 2002-2007 were not financially qualified to own their own homes and should have been renting. Adhering to good underwriting standards should mean that people who aren't financially qualified won't get a mortgage.

7. ***Do housing finance systems in other countries offer insights that can help inform US reform choices?***

We have not conducted extensive research on the housing finance systems in other countries. While other systems (Canada, Denmark, Australia come to mind) may work well in their countries, we do not

believe that they can be an appropriate model for the US due to the lack of scale and diversity of their markets.

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Appendix III: Michael A.J. Farrell Biography

Mr. Farrell is the Chairman, CEO and President of Annaly and FIDAC. Prior to founding Annaly and FIDAC, Mr. Farrell was a Managing Director for Wertheim Schroder and Co., Inc. in the Fixed Income Department, served on the Executive Committee of the Public Securities Association Primary Dealers Division and as former Chairman of the Primary Dealers Operations Committee and its Mortgage Backed Securities Division.

Currently, in addition to his responsibilities at Annaly and FIDAC, Mr. Farrell serves on the Board of Governors of the National Association of Real Estate Investment Trusts (NAREIT), as a director of the U.S. Dollar Floating Rate Fund, a trustee of the Oratory Preparatory School in Summit, NJ and on the Board of Visitors of the Wayne Calloway School of Business and Accountancy, Wake Forest University.

Testimony of
Michael J. Heid
Co-President
Wells Fargo Home Mortgage

on behalf of
the Housing Policy Council
of the
Financial Services Roundtable

Before the House Financial Services Committee
Of the
United States House of Representatives
On

The Future of Housing Finance – A Review of Proposals to Address Market Structure and Transition

September 29, 2010

Mr. Chairman and Members of the Committee, my name is Mike Heid, and I am Co-President of Wells Fargo Home Mortgage. I also am the chairman of the Housing Policy Council ("HPC") of The Financial Services Roundtable, and I am appearing today on behalf of the Housing Policy Council. The Housing Policy Council represents 30 of the leading national mortgage finance companies. HPC members originate, service and insure mortgages. HPC member companies also are major customers of and business partners with Fannie Mae and Freddie Mac.

For many years, and even throughout the financial crisis, Fannie Mae and Freddie Mac performed their secondary market functions efficiently and effectively. It is now very apparent, however, that there were some fundamental flaws in the old GSE model. For example, a lack of adequate supervision and regulation created the opportunity for the GSEs to employ excessive leverage and to grow their portfolios in excess of what was necessary to achieve their original objectives.

Dodd-Frank Act

The financial crisis also revealed flaws in the originate-to-distribute model of mortgage finance. The Dodd-Frank Act seeks to address those flaws by aligning the interests of consumers, lenders and investors to ensure borrowers consistent, fair and equitable access to housing finance and to rejuvenate the secondary market

for mortgage securities. Implementation of the Act will require a thoughtful coordination of various related regulations and accounting practices and a careful balancing of the fundamental objective of the Act with the need to attract sufficient capital to the housing finance system. It also requires that provisions – such as risk retention – be implemented in a way that does not reduce access for credit worthy borrowers.

The new standards required by the Dodd-Frank Act will have a significant impact on mortgage lending standards and securitization. These standards will also greatly influence the secondary market changes to the GSE system that we are discussing today. In short, stronger underwriting standards and risk retention requirements will make the abuses that occurred in the past unlikely to be repeated, and these new standards will have a dramatic impact on the quality of loans that are securitized. Lenders have already implemented stronger underwriting standards, and the current GSEs have tightened their standards and have put many more requirements on originators for the loans that they will purchase and the buy-back requirements for lenders on loans that do not perform.

HPC Proposal

HPC has developed a proposal for addressing the problems inherent in the structure of Fannie Mae and Freddie Mac which I would like to outline for you today. Our proposal is intended to achieve several objectives:

- Encourage private sector capital to support the secondary mortgage market;
- Ensure a steady flow of reasonably priced conventional mortgages to borrowers;
- Limit the role of the Federal Government and the risks taken by the taxpayer in the secondary mortgage market; and
- Provide a flow of funding to support affordable owner-occupied and rental housing.

We propose to achieve these objectives by dividing the existing functions of Fannie Mae and Freddie Mac among a combination of public and private sector entities.

Privately Capitalized "MSICs" Should Assume Credit Enhancement Function of the GSEs

A central feature of our proposal is the creation of new privately capitalized firms to perform the credit enhancement or guarantee function of the GSEs. Currently, the GSEs purchase mortgages from mortgage originators, package those mortgages into securities, and guarantee the payment of interest and principal on

those securities. In exchange for the guarantee, the GSEs charge mortgage originators a "guarantee fee." We propose that these functions be assumed by privately capitalized firms called mortgage securities insurance companies, or "MSICs."

A MSIC would --

- purchase conventional mortgages from mortgage originators;
- guarantee the payment of principal and interest on the securities; and
- charge mortgage originators a fee for the guarantee.

Under our proposal, these privately capitalized entities would be chartered and supervised by the Federal Government, much like national banks and federal savings and loans are chartered and supervised by the Federal Government. However, they would not be backed by the Federal Government, either explicitly or implicitly.

We do not propose a particular organizational structure for the MSICs. Instead, we propose that the investors in a MSIC determine the most appropriate organizational and governance structure for the entity. The validity of the organizational structure and the ability of the investors to manage the entity would be reviewed as part of the chartering process.

We believe multiple MSICs are needed but do not call for a specific limit on the number. We assume that at least 4 will be needed to serve the market, but

probably not more than 8 are necessary. The greater the number of MSICs, the better insulated the housing finance market would be from the failure of any one MSIC. On the other hand, too many MSICs -- with different underwriting systems and procedures -- could be overly burdensome to lenders, particularly smaller lenders.

An Explicit – But Limited -- Federal Guarantee is Needed

An explicit federal guarantee is needed to ensure a steady flow of mortgage finance at a reasonable cost to borrowers. While MSICs would not be backed by the Federal Government, our proposal does call for the Federal Government to provide an "explicit" backup or catastrophic guarantee on the mortgage securities that are issued by MSICs. To be clear, this guarantee would not apply to the MSICs themselves; it would guarantee the payment of principal and interest to investors in mortgage backed securities packaged by MSICs. A MSIC would pay a fee to the government for this guarantee, and this fee would be placed in a reserve.

The challenge we face is designing a secondary market system that ensures a steady flow of reasonably priced mortgages to borrowers while limiting the exposure of taxpayers. Our proposal addresses this challenge by putting several

layers of private capital in front of the federal guarantee, and as I discuss below, subjecting MSICs to "world class" regulation.

Standing before the federal guarantee would be --

- The down payment on a mortgage made by the homebuyer;
- Any private mortgage insurance or other credit enhancement on the mortgage loan;
- The shareholder's equity in the MSIC; and
- The reserve established by fees paid by MSICs in return for the government's guarantee.

These layers of private capital should insulate the taxpayers from paying claims on the guarantee. However, in the event that all of these private resources are exhausted and the Federal Government is called upon to make payments under the guarantee, we support the imposition of a "special assessment" on MSICs to recoup any costs incurred by the government. Thus, the system we propose would operate much like the Federal Deposit Insurance Fund does today.

Finally, if the fees for the federal guarantee are set properly, the federal guarantee would be budget neutral. Under existing federal credit procedures, the cost of federal credit activity in a budget year is the net present value of all expected future cash flows from guarantees and direct loans disbursed in that year. For loan guarantees, cash inflows consist primarily of fees charged to insured borrowers, and cash outlays consist mostly of payments to lenders to cover the cost

of loan defaults. FHA and Ginnie Mae are models for this budgetary treatment. In the case of both FHA and Ginnie Mae, the fees paid for the federal guarantee normally cover claims on the guarantees and other operational expenses.

Capitalizing MSICs

Attracting sufficient private capital to MSICs is a key to the success of our proposal. We assume that the banking industry could be one such source of capital for MSICs since the industry relies upon the existence of a strong secondary mortgage market. Therefore, we propose that banking organizations of all sizes be authorized – but not required – to invest in MSICs. This would permit MSICs to be formed by a consortium of large banks as well as a group of small banks.

We also have tried to gauge the interest of other potential investors. We have done so by previewing our proposal with investments bankers and other industry experts. We have been told that investors would be interested in capitalizing MSICs as long as they could achieve a "reasonable" return on their investment *and* that the relationship between MSICs and the Federal Government was clear and unchanging.

Based upon this feedback, we have undertaken an effort to quantify the capital standards, fee structures, and returns needed to attract private capital and to assess the impact of this structure on mortgage rates. That analysis has involved

the application of various stress tests to project capital levels needed to cover potential losses. It also has involved the identification of a "reasonable" rate of return on capital. We will provide the Committee with our final analysis when it is complete.

World Class Regulator

To ensure the safe and sound operation of MSICs – and further reduce the need for the Federal Government ever to perform on its guarantee – we propose that MSICs be subject to "world class" regulation, by a strong and independent federal regulatory agency. This regulatory regime should include:

- Strong prudential standards – MSICs' should be subject to capital, liquidity and other prudential standards set by the chartering agency;
- Underwriting Standards for Mortgages in MBS – MSICs should be prohibited from purchasing mortgages that do not meet underwriting standards set by the chartering agency. These standards should provide that mortgages purchased by in a MSIC are prudentially underwritten.
- Loan Limits – The federal chartering agency should set, by regulation, limits on the size of mortgages that could be included in mortgage backed securities insured by a MSIC.

- Portfolios -- MSICs should not be permitted to establish and hold portfolios purely for investment purposes. Small portfolios should be permitted to facilitate the development of new products and certain types of loans for which there are limited markets such as multifamily mortgages. MSICs also could use this portfolio capacity to warehouse loans before securitization, to purchase whole loans from smaller banks and for loss mitigation and REO disposition purposes.

Central Securitization Facility and a Single MBS

Our proposal also calls for the creation of a single MBS Securitization Facility to provide administrative services related to mortgage backed securities (MBS) packaged by MSICs. The Facility would process payments on those MBS from the lenders/servicers to the investors. It also would place and administer the federal catastrophic guarantee on the MBS. In other words, this Facility would perform functions similar to those performed by Ginnie Mae for FHA. We recommend that the Facility be part of the Federal Government, and that Ginnie Mae be tapped to perform the services of the Facility, either directly or on a contract basis.

The creation of this Facility also would facilitate the creation of a single mortgage backed security. Today, there are some differences in the terms and

repayment characteristics of the MBS marketed by the two GSEs. These differences can, from time to time, result in differences in market liquidity. We propose that all MSICs be required to adhere to a standard form of MBS that has the same repayment terms and other conditions. A single MBS would promote better understanding of the MBS by investors, and it would enhance the liquidity of the market. This would help ensure home buyers have consistent access to reasonably priced home financing.

A single MBS does not mean that all MBS would be composed of the same type of mortgages, only that the basic legal structure, terms and conditions governing repayment and other administrative features of the MBS would be the same. MBS backed by MSICs could be composed of loans from a single lender or multiple lenders allowing lending institutions of all sizes access to this liquidity.

Like existing GSE securities, these MBS should be exempt from SEC registration requirements. Such an exemption is necessary to maintain the "To Be Announced" (TBA) market. The TBA market is used by the lending industry to reduce risks in the origination process and reduce borrowing costs for consumers. The TBA market allows borrowers to lock in rates in advance of closing a mortgage loan and permits lenders to hedge the corresponding interest rate risk. The TBA market is based upon a trade of a MBS on a future date, and at the time of the trade the MBS to be included in the trade may not be identified. Therefore, it

is impractical to apply standard SEC registration and disclosure requirements. To overcome this practical problem, the GSEs currently disclosure information to investors about the composition of each pool of mortgages backing a security, including the average loan-to-value ratio, the average debt-to-income ratio, the average borrower credit score, the number and value of mortgages from each State, the distribution of mortgage coupon rates, and whether the mortgages were originated in broker or non-broker channels. MBS issued by MSICs should be subject to a similar disclosure requirement.

Affordable Housing

Finally, we propose that MSICs assume the responsibility for supporting owner-occupied and rental housing for extremely-low and very-low income families imposed upon the GSEs in the Housing and Economic Recovery Act. That Act directed the GSEs to annually set aside approximately 4 basis points of the total dollar amount of new mortgages that they acquire and transfer 65 percent of such amount to the Housing Trust Fund and 35 percent of such amount to the Capital Magnet Fund.

The Housing Trust Fund, which is to be administered by HUD, would provide grants to the States primarily for the production, preservation and rehabilitation of rental housing for extremely low-income and very low-income

families. The Capital Magnet Fund, which is to be administered by the Treasury Department, is designed to leverage private sector capital for the development of housing for extremely low-income families, very low-income families, and low-income families. It also is designed to promote economic and community development projects to help such families. We support this transfer payment in lieu of the application of specific housing goals on MSICs. MSICs should not be subject to specific housing goals.

Transition

While in conservatorship, both Fannie Mae and Freddie Mac have performed their three primary responsibilities well: continuing to promote liquidity for housing finance, finding solutions to help keep borrowers in their homes, and conserving the assets of the two enterprises. Without the continued operation of Fannie Mae and Freddie Mac during the crisis, the flow of housing finance would have been severely disrupted. It continues to be imperative that they operate as they are today until the future state is well defined and a careful transition is formulated.

Key transition issues that must be considered include:

- The transition must ensure borrowers have uninterrupted access to reasonably priced housing finance along with other benefits they enjoy

today (for example, access to 30 year fixed rate mortgages and the ability to lock a rate while loans are in process).

- The transition must ensure the continued liquidity of today's agency MBS market and the 'to be announced' (TBA) MBS market in particular which allows lenders to better insulate consumers from the uncertainty of markets and to hedge their risks (thereby reducing borrowing costs).
- The transition must seek the right balance between sufficient capitalization of future credit risk guarantors and how different capitalization requirements impact the costs of home ownership for consumers.
- The transition should also seek to achieve an explicit government guarantee of the MBS with as little actual government risk as possible (achieved by placing sufficient private capital in front of the government).
- The transition must find a fair and equitable way to deal with the legacy assets and liabilities of Fannie Mae and Freddie.
- The transition should seek to preserve the valuable infrastructure of Fannie Mae and Freddie Mac.

- The transition must ensure low and extremely low income borrowers have access to housing while avoiding lending requirements and/or targets for private lenders/guarantors.
- In order to ensure that markets have sufficient time to evaluate and prepare for the transition, the transition should be allowed sufficient time for proposed changes to be clearly communicated. Where possible, gradual steps should be used and 'tested' before proceeding to broader implementation. Given the size, importance, and complexity of the housing finance system, expectations should be for this transition to potentially take multiple years to be realized.

A Note on Other Proposals

Many of the other proposals are very closely aligned with HPC's, and while some call for more or less government involvement, all agree that promotion of liquidity for housing finance is the objective. Several recommendations also call for an explicit guarantee of MBS (not the corporate entities) and for stronger capitalization and regulation. We believe that those recommendations that call for complete nationalization miss the benefits to consumers of innovation and efficiency that private capital will allow and expose the taxpayer to more risk than is necessary to optimize MBS liquidity. Recommendations to completely privatize

miss the necessity of a government backstop to ensure consistent functioning of MBS markets under all economic conditions.

Conclusion

Thank you for the opportunity to explain our proposal. The members of the Housing Policy Council are committed to pursuing this concept, and welcome the opportunity to work with the Committee as it develops its own proposals and reforms.

Statement by Christopher Papagianis

Managing Director & Policy Director

e21: Economic Policies for the 21st Century

Before the Committee on Financial Services

U.S. House of Representatives

"The Future of Housing Finance – A Review of Proposals to Address Market Structure and Transition"

September 29, 2010

Christopher Papagianis is Managing Director and Policy Director at e21: Economic Policies for the 21st Century. e21 (also known as Economics21) is a nonprofit, nonpartisan organization dedicated to economic research and innovative public policy development. Mr. Papagianis was previously Special Assistant for Domestic Policy to President George W. Bush. In this role, he guided the collaborative process within the Executive Branch to develop and implement policies, legislation, and regulations across numerous agencies, including the Departments of Treasury and Housing and Urban Development. He briefed the President primarily on housing and finance issues. Prior to joining the administration, Mr. Papagianis worked in the U.S. Senate as one of the top policy advisers to Senator Jim Talent. Mr. Papagianis helped the Senator develop housing and public finance policy. Before serving in the U.S. government, Mr. Papagianis was awarded the prestigious Peabody Fellowship by Harvard University to pursue research related to public policy issues. Mr. Papagianis is also a graduate of Harvard College.

Chairman Frank, Ranking Member Bachus, and Members of the Committee, thank you for the opportunity to testify on the important topic of the future of housing finance. I am the Managing Director of the non-profit think tank e21: Economic Policies for the 21st Century (a.k.a Economics21). We aim to advance free enterprise, fiscal discipline, economic growth, and the rule of law. Drawing on the expertise of practitioners, policymakers, and academics, our mission is to help foster a spirited debate about the way forward for democratic capitalism. We are supportive of free markets while recognizing the need to devise and implement a reasonable structure of law and regulation that will help ensure our markets avoid catastrophic events in the future. We are therefore focused on developing policies that advance market performance and implementing rules to prevent market malfunction.

Previously, I was Special Assistant for Domestic Policy to President George W. Bush. In this role, I helped guide the collaborative process within the Executive Branch to develop and implement policies, legislation, and regulations across numerous agencies, including the Departments of Treasury and Housing and Urban Development.

Over the last year, a consensus has started to emerge that the main goal in addressing housing finance reform should be to promote the efficient allocation of credit to financing single-family and multi-family housing. Fundamental to this objective is a restructuring of our housing finance system, which includes resolving the conservatorships of the Government Sponsored Enterprises (GSEs) and rationalizing all of the other ways the government subsidizes housing.

As the financial and housing markets are still fragile, a top priority in this process must be an orderly transition. Already, Congress has taken important steps to address certain aspects of the mortgage market through the Dodd-Frank legislation. Important provisions include, credit risk retention requirements, minimum standards on a borrower's ability to repay, and limits on the ways loan originators can be compensated. How these provisions, along with others, are implemented through regulation in the coming months has important implications for the future of housing finance and the GSEs.

Today, I will focus on:

1. **Principles for a transition.**
2. **Rationalizing and streamlining federal housing programs.**
3. **Short-term and long-term drivers of reform.**

1. Principles for a transition[1]

a) Private capital should be the bedrock of our new mortgage finance system. It should have a role at every stage of the process, from primary origination to the secondary market to the application of insurance.[2] Having private capital at risk adds market discipline and keeps the incentives aligned for investors, taxpayers, and mortgage borrowers. While many have argued that only a government guarantee can attract the capital necessary for a liquid housing market through all economic cycles, I believe it is too early in this debate to close off other options.

b) Costs and benefits (subsidies) should be transparent, credible, and comparable. Everything should be on-budget, where it's easy for legislators and taxpayers to review. A particular focus should be paid to accurately accounting for contingent liabilities.

c) Renters should treated be more equitably compared with homeowners. This does not necessarily mean that renters should necessarily get more subsidies, but rather that the societal benefits of homeownership have been inflated over time, compared with renting.

d) Any future housing-related subsidies should be directed to homeowners with as few middlemen as possible. Subsidies should also be recalibrated to encourage equity, not more consumer debt, as leverage levels are still too high for both households and financial institutions.[3]

e) Ensure all institutions providing mortgage finance are adequately capitalized. The GSEs clearly did not operate with enough capital to buffer the risks they assumed, but much of the rest of the industry – from banks, to mortgage insurers, to shadow banks like structured investment vehicles – also operated with inadequate capital.[4] Policymakers should recognize that bailouts in the housing sector are inevitable if the key institutions in the space do not hold sufficient capital.

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[1] This is not meant to be an exhaustive list. Having reviewed the testimony from previous hearings before this committee on the future of housing finance, I wanted to call particular attention to these principles.

[2] An underreported statistic through this housing crisis is that the mortgage insurance (MI) industry expects to pay around $30 billion in claims (in front of the taxpayer) to Fannie and Freddie.

[3] Before 2007, federal policy encouraged prospective borrowers to use second liens over other forms of credit enhancement, like private mortgage insurance, since only the interest paid on a piggyback loan was deductible. A 2007 law leveled the playing field by making mortgage insurance premiums deductible as well. While probably not the optimal policy – perhaps removing second lien deductibility would have been better – the net outcome was probably positive.

[4] As University of San Diego economist James Hamilton speculated in 2007, part of the incentive to assume inordinate amounts of mortgage risk may have been a product of housing's political sensitivity.

2. Rationalizing and streamlining federal housing programs

Every year, the U.S. government commits vast resources to support housing and mortgage markets. In 2009, the federal government dedicated $300 billion to directly subsidize housing.[5] This amount was split roughly evenly between tax subsidies and direct government spending. In all, these subsidies cut across several agencies and over 28 different programs to support both homeowners and renters. Some of these programs are aimed at reducing down payments, while others are focused on increasing the availability of mortgage loans or reducing a homeowner's tax liability.

As policymakers contemplate how to restructure the government's role in the housing sector, a bipartisan goal should be to ensure that all of the different housing programs have discrete objectives that are clearly and accurately accounted for in the federal budget. Until the last few years, the largest federal subsidy for homeownership was through tax expenditures (in other words by lowering a homeowner's tax liability). The single largest housing-related tax expenditure is the mortgage interest deduction. It will cost the federal government $637 billion in forgone tax revenue over the next five years. The next two largest line items are the exclusion of capital gains on primary residences ($215 billion over five years) and the deductibility of state and local property taxes on owner-occupied homes (another $151 billion). In total, tax expenditures that subsidize homeownership will reduce federal revenue by roughly $1 trillion over the next five years.[6]

One of the underappreciated consequences of all the actions to backstop the housing sector over the past few years is that the government now provides roughly the same amount of support for homeownership through spending programs as it does through the tax code. Unlike the fairly straightforward accounting and (on-budget) treatment of all the different tax provisions, the subsidies for housing on the spending side are more complex and confusing. On behalf of taxpayers, the federal government issues, guarantees, and insures mortgages. Taxpayers subsidize the redevelopment and sale of vacant properties and foreclosed homes. They subsidize housing vouchers, a public housing program, and at least eight more block grant initiatives for rental housing.

The budgetary costs of these programs are measured in three different ways – on a cash flow basis, on a present value basis, and on a present value basis adjusted for market risk. Without an apples-to-apples comparison, it is nearly impossible for policymakers to compare the effectiveness of these programs and to allocate scarce budgetary resources in ways that do the most good.

Fannie and Freddie are unfortunate examples of this principle. The Congressional Budget Office estimates that Fannie and Freddie cost taxpayers $291 billion last year, and will cost roughly an additional $90 billion over the next five years. Why are the losses from these GSEs so large? Since the government took them over, the taxpayer was put on the hook for three different, though related, types

[5] Congressional Budget Office. Economic and Budget Issue Brief: An Overview of Federal Support for Housing. November 3, 2009. (See for all numbers referenced in this paragraph.)
[6] Office of Management and Budget. FY 2011 Mid-Session Review: Estimates of Total Income Tax Expenditures For Fiscal Years 2009-2015.

of losses. First, there are losses rooted in all the mortgage-backed securities and guarantees already on the two firms' balance sheets (which total roughly $5 trillion). This is where the bulk of the losses are expected to come from. Second, there are losses that will come from their ongoing operations in the mortgage market where they create mortgage-backed securities by pooling payment streams from many mortgages and then add a guarantee that insulates the purchaser of the securities from the risk of default. The third category of losses will result from the firms modifying some mortgages in an attempt to prevent some foreclosures. When you add these categories up, Fannie and Freddie are likely to be the most expensive bailouts of the past few years, many times larger than AIG or Citigroup or even the entire and much-maligned TARP, which includes the bailout of the autos.

There appears to be a consensus now that the inherent flaw of the "government-sponsored" business was a lack of transparency and accountability with respect to the allocation of the underlying subsidy: profits went to private shareholders and losses were socialized, or ultimately covered by taxpayers. Nearly everyone (in the private sector) believed the government would come to the rescue of Fannie and Freddie if they ran out of capital in a crisis, yet this guarantee or federal backstop was never made explicit. For all intents and purposes, this "implied" guarantee is no different than a straight subsidy, yet it does not appear as a government obligation anywhere in the government's budget today.

Worse, the size of this subsidy was entirely at the discretion of the management of the GSEs. The more implicitly guaranteed "Agency debt" they issued, the larger was the dollar value of the subsidy captured by shareholders and management. The Congressional Budget Office (CBO) estimates that by 2004, the GSEs extracted a combined annual subsidy from taxpayers of $19.6 billion.[7] The problem was that activities that gave rise to a larger subsidy did not contribute in a meaningful way to a better functioning mortgage market. The Federal Reserve Board of Governors released a series of working papers (cited by Chairman Alan Greenspan in previous Congressional testimony) which made the point that the management could exploit the subsidy in ways that did not reduce borrowing costs for potential homeowners.

Certainly some portion of the subsidy was passed on to borrowers in the form of lower interest rates. But it was not established empirically that this transfer from one group of taxpayers to another was efficient. Most estimates suggest the subsidy amounted to between 7 and 25 basis points per year in reduced interest expenses[8] – and that the hidden cost of this subsidy over the past 20 years probably

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[7] Congressional Budget Office. Updated Estimates of the Subsidies of the Housing GSEs. April 8, 2004.
Note: Breaking out this 19.6 billion – the net benefit to homebuyers through lower mortgage rates from the two firms was $13.4 billion, and the residual benefit to Fannie and Freddie shareholders was $6.2 billion.
See also: W. Scott Frame (Financial Economist and Associate Policy Advisor, Federal Reserve Bank of Atlanta and Lawrence J. White (Professor of Economics, Stern School of Business): Charter Value, Risk-Taking Incentives, and Emerging Competition for Fannie Mae and Freddie Mac. February 2007.

[8] Dwight Jaffee and John Quigley of the University of California. The Government Sponsored Enterprises: Recovering From a Failed Experiment. August 2009.
See also: Wayne Passmore. Finance and Economics Discussion Series Divisions of Research & Statistics and Monetary Affairs Federal Reserve Board, Washington, D.C. The GSE Implicit Subsidy and the Value of Government Ambiguity. 2005.

exceeded several hundred billion dollars.[9] Given that this transfer from one group of taxpayers (those providing the resources to underwrite the guarantee) to another (those benefitting from the marginally lower mortgage rate) was intermediated by the GSE management that was incentivized to maximize its own share of the subsidy, it seems highly unlikely that the GSE model was the most efficient mechanism to subsidize potential homeowners.

In addition, Fannie and Freddie were required by Congress to meet affordable housing goals, set annually by the Department of Housing and Urban Development (HUD) in accordance with The Federal Housing Enterprises Financial Safety and Soundness Act of 1992. These targets were designed to push some of the implicit subsidy to low-income families and underserved communities. But was this really the best way to deliver and target these subsidies?

While Fannie and Freddie are the largest providers of guarantees on mortgages, the federal government has many other programs that directly issue, guarantee, and insure mortgages and mortgage-backed securities. The Departments of Agriculture and Veterans Affairs directly issue and guarantee mortgages. The Federal Housing Administration (which is part of the Department of Housing and Urban Development) provides mortgage insurance to private lenders, who then issue mortgages for single- and multi-family homes. The Government National Mortgage Association (Ginnie Mae) guarantees securities backed by mortgages insured, guaranteed, or issued by all the different federal agencies.

The FHA is the largest of these programs today and it aims to extend access to homeownership for those buyers who have low savings, or moderate to low incomes, and can't qualify for conventional mortgage financing. The program insures mortgages in exchange for an insurance fee that is collected by the government. If a borrower defaults on an insured mortgage, the FHA pays the issuer or holder of the mortgage the remaining balance.

The Federal Credit Reform Act governs the budgetary treatment of FHA and the other programs run by USDA, VA, and Ginnie Mae. While all of these programs entail market risk, just like Fannie and Freddie, the cost estimates that the government conducts do not make adjustments for this type of risk. Essentially, this means that risky cash flows are being discounted at a risk-free rate.[10] The same basic premise is at work when the government fails to risk-adjust expected outcomes. As a result, government budget offices often estimate that programs issuing loan guarantees, like FHA, make the government money (or result in net savings to the government when the loans were initially made). It's easy to see how flawed initial cost estimates that don't account for market risk can be by looking at how

[9] Congressional Budget Office. Updated Estimates of the Subsidies of the Housing GSEs. April 8, 2004.
See also: Dwight Jaffee and John Quigley of the University of California. Housing Subsidies and Homeowners: What Role for Government-Sponsored Enterprises? January 2007.

[10] The concept of market risk can be confusing. Sometimes people misinterpret it as the risk that loans default, or interest rates rise. This is not exactly it; moreover, these risks *are* already accounted for under credit reform. At its most basic level, accounting for market risk means that in bad economic times, bad things are *more* likely to happen and getting repaid on a loan is worth *more*. So, in the private sector -- investors demand a little extra (premium) for the risk that cannot be diversified.

FHA's portfolio has performed over time.[11] The original budget estimates for FHA from 1992-2008 projected that the program would earn the government $31 billion. But in reviewing how the program actually performed over that period, CBO estimates that the program cost taxpayers about $3 billion.[12] This is yet another example of how difficult it is for policymakers to write housing policy because the cost information is not always accurate or comparable across programs. All future subsidy estimates should reflect the present value of all cash flows associated with such mortgages – and include an adjustment for market risk.

As policymakers begin to review housing subsidies and consider alternatives to replace the GSEs, they must be careful to make clear the risks and costs of subsidizing housing investment. Government loan guarantees can appear to be low-cost since they pay out only if a borrower defaults and because official estimates often exclude a premium for market risk.[13] But we have learned that such guarantees are contingent on an accurate assessment of the various risks involved, and they can be extremely expensive if those risk assessments are wrong or if the defaults all happen to occur at the same time. Improperly scored loan guarantees also create moral hazard, as the implementing agencies can assume too much risk by lowering their lending standards over time.

Where possible, it would be more transparent and far more efficient for Congress to deliver housing-related subsidies directly to the homeowner. This is the primary way the government subsidizes food with food stamps or charity through the tax code. Private financial institutions would no longer have the ability to capture some of that subsidy for their managers and shareholders, as Fannie and Freddie did for so many years. Direct subsidies would also reduce the risk of another economic crisis.

Thus far, I have not commented on whether all of these subsidies are necessary or desirable. Regardless of the exact policy objective that Congress wishes to pursue (increasing or decreasing housing subsidies moving forward), it is important to note that all options can be achieved out in the open and on-budget. Trying to regulate private firms to complete a public policy mission will always be a flawed solution that is more likely to undermine transparency and miss targeted beneficiaries.

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[11] Clearly, not all cost estimates that turn out to be wrong over time are as a result of omitting market risk. Cost estimates for TARP, for example, did factor in market risk. Yet, over time the cost projections for this program have been lowered.

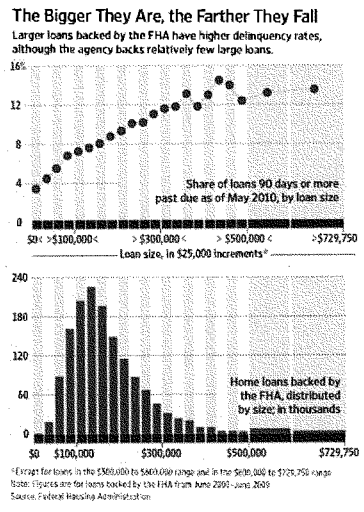
[12] Congressional Budget Office. Economic and Budget Issue Brief: An Overview of Federal Support for Housing. November 3, 2009.

[13] Right now, the Federal Credit Reform Act prevents score keepers, like CBO, for factoring in market risk, even when the organization believes that this factor should be considered in an official cost estimate. This is why CBO has increasingly resorted to using footnotes to show what scores would otherwise look like if market risk was incorporated in their calculations. See also: Jason Delisle, Credit Reform Act: Another Budget Loophole. Economics21. September 17, 2010. Jason Delisle, Small Business Loan Program Risks Taxpayer Losses, But Looks Free. Economics21. July 28, 2010.

3. Short-term and long-term drivers of reform

Important: many of the comments below are suggestions for policy changes that should be considered while the GSEs are still in conservatorship. By most accounts, the broader debate or process still has a fairly long way to go. Therefore, these statements should not be interpreted as tacit support for maintoining the current GSE structure in the long-term. Fundamental reform is necessary.

The future of the 30-year mortgage. There are three general pathways that policymakers could choose from: 1) the government could nationalize the GSE functions and become the sole guarantor of mortgage credit risk; 2) the government could decide to share this guarantee function (as it does now, presumably with structural improvements); or 3) the government could leave this guarantee function entirely to the private market. Many commentators have said this third option would mean the end of the 30-year fixed rate mortgage. My view is that lenders would likely still offer 30-year terms, but that the prices would fall causing required returns (i.e. mortgage rates) to rise (certainly relative to the traditional spread between fixed and adjustable rate mortgages). Banks could be made more inclined to fund mortgages if more were adjustable rate. It's important for policymakers to communicate the basics of a 30-year fixed rate mortgage with a "free" prepayment option. The ability of homeowners to "lock-in" today's payment for 30 years while simultaneously retaining the ability to refinance without penalty when interest rates drop is an enormous benefit. But this benefit was financed by transferring the interest rate risk to taxpayers through the guarantees provided by Fannie and Freddie. Since homeowners *are* generally taxpayers too, this transfer doesn't really make either group better off. And it penalizes renters. It is true that prospective homebuyers will be offered slightly less expensive mortgages under a system where the general taxpayer is bearing some of that long-term interest rate risk. But the key question is whether they would rather pay later (through future bailouts) or pay a true market price up front.



Loan limits. If a private conforming mortgage loan market is ever going to develop, the current loan limits for both FHA and the GSEs will have to be adjusted downward, eventually. In particular, I would recommend that this committee study further why FHA's loan limits are now much more in-sync with those for the GSEs, when historically they were lower. I recognize that the loan limits were all adjusted upwards during the crisis, but the rationale for having a lower limit for FHA seems to have been blurred over time. FHA requires a much lower down payment – and it has traditionally targeted its insurance to first-time homebuyers and low-to-moderate income families. There is no question that the higher limits have buoyed some high-priced housing markets. For example, in some areas the government is offering a 100% guarantee on a $700,000 home or

condominium with just a 3.5% down payment. However, the low down payments and relatively high loan amounts are starting to strain FHA's balance sheet. In fact, there is new data on FHA loans showing higher delinquency rates on larger loans.[14] The committee should also consider moving away from pegging the loan limits to home prices, and explore applying a means test, perhaps based on some factor of a state's median income level. Overall, there are too many subsidies in the housing space that are available to upper-income households.[15]

Loan-to-value ratios. Just like with FHA, a minimum cash down payment requirement should be applied to the GSEs. Credit enhancement products, like mortgage insurance, should still be available. Yet this minimum down payment requirement should be conceptualized in tandem with FHA. As long as FHA's down payment requirement stays at 3.5%, then perhaps a 5% level would be appropriate for the GSEs – in addition to credit enhancement on all loans with an LTV greater than 80. This amount could be scaled up over time to avoid disruptions in the mortgage market. Putting aside the exact number, establishing a floor would be an important first step – as research has shown that mortgage equity, or rather the lack thereof, is the most important predictor of default.[16] This committee should also encourage the Federal Housing Finance Agency to explore whether smart and effective countercyclical LTV ratios could be developed and implemented.[17]

Dodd-Frank implementation. The exact ways in which the housing-related provisions of Dodd-Frank are implemented – and how the market responds – will send important signals to policymakers about the degree to which the government would have to subsidize housing finance in the future to ensure the efficient allocation of credit. For example, the concept of a "qualified residential mortgage" within the new credit risk retention section could set the stage for how a "conforming mortgage" is defined in the future. Will private mortgage insurance be required? Will the regulation specify an LTV?

Covered bonds. This system involves banks issuing debt backed by a pool of mortgages that they hold on their balance sheets. The mortgage assets are then kept separate from their other assets. While these debt instruments are collateralized by mortgages, they are not like traditional mortgage-backed securities in that issuers are required to pay the interest and principal on the bonds regardless of how

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[14] Nick Timiraos. Why FHA Loan Limits Could Fall In Your Neighborhood. The Wall Street Journal. September 23, 2010. The chart on the previous page is from this article.

[15] It is worth noting that the mortgage interest deduction (MID) is regressive since: (a) people in higher tax brackets get a bigger savings per dollar of interest; and (b) people in higher tax brackets are more likely to itemize. See also the work by Edward Glaeser and Jesse Shapiro, Harvard economists, who argue that the MID creates a bias against saving or alternative consumption choices.

[16] Krisopher Gerardi, Adam Hale Shapiro, and Paul Willen. Decomposing the Foreclosure Crisis: Housing Price Depreciation versus Bad Underwriting. Federal Reserve Bank of Atlanta Working Paper, 2009.

[17] Exactly how and why bubbles develop is still a mystery, one that the economic community is still studying vigorously. Many experts suspect they involve positive feedback loops between asset prices and the availability of credit. Higher and higher asset prices – or in the case of this most recent housing bubble, home values – can lead to more aggressive lending practices, which invariably lowers cash investment requirements (allowing for higher LTVs) and more fragile balance sheets for both households and the financial institutions that supply credit. As asset prices rise above their historical trend line, the risk of a decline grows greater. This is exactly when LTVs should inch lower, or down payments should increase slightly.

the underlying collateral is performing. While covered bonds are widely used in Europe, a market has not developed in the United States. The current Federal Home Loan Bank (FHLB) model is similar to covered bonds in that FHLBs "advance" loans to member banks in exchange for liens on mortgage collateral. Some speculate that the very existence of the FHLB system makes a covered bond market unlikely to develop in the U.S. because the pool of assets that would otherwise be segmented for covered bond holders can already be pledged to FHLBs at much lower interest rates.[18]

The public utility model. Over the past few months, several groups have advanced a proposal that would reorganize Fannie and Freddie as (one or more) public utilities. The model hinges on these utilities being privately owned by banks or other shareholders. Yet the idea would be to have them still function like a public utility. For many, the main difference between the utility model and the current structure would be that the current portfolios of the GSEs would be eliminated.

There are two versions of this concept being discussed right now. The first is where the guarantee fee rates (that the utilities charge) would be limited by a federal regulator. (Presumably, the regulator would also strictly monitor risk-taking generally.) The new utilities would be required to pay out a regular dividend to shareholders, which would enable the utilities to raise or attract private capital. This plan would probably require the utilities to be shareholder-owned to keep the liabilities off the federal budget. The other version of this idea, which amounts to a privatization of Fannie and Freddie, would have the bank cooperative (or owners) set the rates with just regular federal oversight (as opposed to hard limits or caps).

Important for both versions – but particularly the first version – is to think through how difficult it would be for the regulator to appropriately set the guarantee fee. The most well known analog would be electric or water utilities. However, guaranteeing mortgage securitization involves significant risk and pricing challenges, where electric or water is more straightforward. Would the new utilities be allowed to charge higher fees for guarantees on mortgages with weaker credit profiles (i.e. based FICO score)? What about charging different rates based on geography, as the utilities will presumably want to ensure that their guarantees are not just tied to one regional housing market? Even if Congress specifically authorized the utilities to use risk-based pricing techniques, determining exactly how much pricing control the government would have (perhaps delegated through its regulator) would be very important.

Traditionally, the federal government has a poor track record when it comes to pricing insurance, or with utilizing risk-based pricing tools. (See the flood insurance program, FDIC insurance, or the FHA example from earlier.) The government routinely projects to basically break even, or make a small profit in most years, only to later expose taxpayers to huge losses on certain occasions in the future. By its nature, insurance on correlated products requires the build-up of large reserves during good times to pay claims during bad times. But the government, historically, has not shown the discipline to allow for this build-up to occur. The result is insufficient premiums during good years and large deficits during tougher economic times.

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[18] Christopher Papagianis. Reform the Forgotten GSE. Economics21. July 1, 2010.

What policymakers should look out for is a model that requires blended risk buckets, where guarantee fees on higher-quality mortgages subsidize the lower-quality ones that are perhaps part of a regulator's mandate for the utilities. If this were to happen, a private entity (that's not regulated in the same way) could undercut the utilities on price for the best quality mortgages. It would then be difficult to ensure that the utilities over time did not develop a relative weak portfolio of mortgages. In short, the utilities would fall prey to adverse selection. Of course, regulators could grant the utilities a monopoly to block competition. But, in my view, securitization is not a natural monopoly and it would be much better to maintain competition and market discipline, rather than rely on just safety and soundness regulation.

Even with competition, it will be a significant challenge to ensure that guarantee fees are set correctly. And, if the fees are set too low for too long, these utilities could very well become insolvent and require taxpayers to pick up the losses, just like with Fannie and Freddie. After all, it is important to remember that Fannie and Freddie would have likely failed even had they no portfolio to speak of because of the losses incurred on guarantees made on hundreds of billions of dollars of Alt-A mortgages that collateralized their MBS pools.[19]

Government's missteps in trying to correctly price mortgage insurance exposes taxpayers to great risk, even in a utility model, and especially if the utilities are insufficiently capitalized. As most everyone now agrees, GSE capital regulation was inadequate. They were required to hold 2.5% capital against their portfolio but only 0.45% capital on mortgage guarantees.[20] While this seems like a clear problem in retrospect, the system appeared to work well for a very long time (so long as mortgage underwriting standards remained high and house prices appreciated consistently). The lesson is that capital standards must be forward-looking. They should not be reduced during periods when default rates and losses are at cyclically low levels. This is especially true when the "cycles" seem to last for particularly long periods.

Conclusion.

While the previous sections reviewed some of the levers that will shape the ongoing transition in housing finance, it is crucial that policymakers also investigate bold new plans or approaches (that are very different from the current GSE model). Some ideas have already surfaced, but many more are in development. Particular focus should be paid to those that would deliver subsidies directly to individuals or families.[21] The more direct the subsidies; the easier they will be to target and transparently account for in the budget.

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[19] Editorial. A Closer Look at GSE Credit Losses. Economics21. June 1, 2010.

[20] Given that guarantee fees averaged 0.2% per year, this meant that the capital reserves built for credit losses on $1,000 of mortgages amounted to just $6.50. In essence, the old capital and guarantee fee system would have been rendered insolvent by 2% default rates and 33% loss severities. A 2% default rate would be $20 of $1,000 of mortgages would go bad. A 33% loss severity on these bad mortgages would result in $6.67 in charge-offs, or losses in excess of the $6.50 in combined guarantee fees and capital.

[21] Charles Calomiris, Professor at Columbia University Graduate School of Business, Time to Introduce Minimum Downpayments for Mortgages. Financial Times. August 24, 2010.

Proposals discussed in this testimony could also impact, or slow, future home price appreciation. But, if new proposals are developed and advanced in a thoughtful manner, trade-offs can be managed – and other important benefits could be passed on, like improved access or affordability. In the end, the overarching goal should be to make taxpayers (i.e. current homeowners, prospective homeowners, and renters) better off through improved subsidy delivery (i.e. targeting) and budgetary transparency.

Statement of

Edward J Pinto

Before the House Financial Services Committee

United States House of Representatives

September 29, 2010

Hearing before US House of Representatives, Financial Services Committee – September 29, 2009

Submitted testimony by Edward Pinto.

Chairman Frank and Ranking Member Bachus, thank you for the opportunity to testify today. During my 36 year career I have been involved in virtually all aspects of housing finance, including the GSEs, affordable lending, mortgage insurance and the primary and secondary mortgage markets. During my five years at Fannie Mae, I was head of marketing (1984-1987) and executive vice president chief credit officer (1987 to 1989). Since leaving Fannie, I have been a consultant to the housing finance industry.

My purpose in testifying is to provide both advice and caution as you begin deliberations regarding the future of housing finance.

<u>Words of caution:</u>

John Adams observed 240 years ago: "Facts are stubborn things; and whatever may be our wishes, our inclinations, or the dictates of our passion, they cannot alter the state of facts and evidence."

Here are the stubborn facts that should convince you as policy makers of the dangers posed by repeating past government housing policy mistakes. Unfortunately even today some are counseling that your only choice is to do just that:

A. A housing finance system built upon government guarantees poses an inherent risk to homeowners and taxpayers alike. Numerous proposals have been made that call for ongoing government support.[1] Against this chorus consider the advice of Paul Volcker, special adviser to U.S. President Barack Obama[2]:

> **"The former Federal Reserve chairman said the mortgage industry is dysfunctional and a 'creature of the government' that needs reform.... he would want to avoid a 'hybrid' institution that is 'private when things are going well and public when things are going badly.'"**

[1] See footnote 7 to Peter Wallison, "Going Cold Turkey: Three Ways to End Fannie and Freddie without Slicing up the Taxpayers", American Enterprise Institute, September 2010 Financial Services Outlook, http://www.aei.org/docLib/FSO-2010-9-g.pdf

[2] "Obama aide Volcker says mortgage market reform crucial", September 22, 2010, http://www.foxbusiness.com/markets/markets/2010/09/22/obama-aide-volcker-says-mortgage-market-reform-crucial/

and Edward De Marco, acting director of the Federal Housing Finance Agency:[3]

> **"To put it simply, replacing the Enterprises' 'implicit' guarantee with an explicit one does not resolve all the shortcomings and inherent conflicts in that model, and it may produce its own problems."**

Director DeMarco went on to point out three risks: First, to assume the government would be better at pricing than the market is questionable. Second, this involvement could likely lead credit allocation and pricing distortions. Third, it could lead to misallocation of investment dollars.

B. A housing finance system designed around flexible and innovative underwriting standards in the pursuit of affordable housing goals presents a systemic risk to all homeowners and our economy. Consider the advice of FDIC Chair Sheila Bair:[4]

> **"First, we must recognize that the financial crisis was triggered by a reckless departure from tried and true, common-sense loan underwriting practices.**
>
> **Traditional mortgage lending worked so well in the past because lenders required sizeable down payments, solid borrower credit histories, proper income documentation, and sufficient income to make regular payments at the fully-indexed rate of the loan."**

In an interview on Larry Kudlow's television program late last month Chairman Frank stated:[5]

> **"[i]t was a great mistake to push lower-income people into housing they couldn't afford and couldn't really handle once they had it."**

We had such common-sense practices in the early 1990s. These practices were slowly destroyed as a result of Congress' passage of the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (the "GSE Act") along with other policy initiatives.

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[3] Testimony of Edward DeMarco, acting director, Federal Housing Finance Agency, before the House Subcommittee on Caspital Markets, Insurance, and Government-Sponsored Enterprises, September 15, 2010

[4] Remarks by FDIC Chairman Sheila C. Bair to the Wharton School, University of Pennsylvania International Housing Finance Program; Philadelphia, Pa., June 18, 2010, http://www.fdic.gov/news/news/speeches/chairman/spjun1810.html

[5] http://www.gopusa.com/commentary/2010/08/kudlow-barney-frank-comes-home-to-the-facts.php

C. Our housing policies have been deeply flawed. FDIC Chair Sheila Bair described it well:[6]

> **"For 25 years federal policy has been primarily focused on promoting homeownership and promoting the availability of credit to home buyers."**

Appendix A contains a list of sixteen pro-cyclical policies that created the long and unsustainable boom in home prices and housing finance. I could find no counter-cyclical policies that were introduced over the same period. Also I could find no otber developed nation that went to such policy excesses and none that have experienced our default levels. This alone should give you pause.

As a result of these policies Congress mandated the expenditure of many trillions of dollars that distorted the housing finance system and then spent trillions more to prop it up. To what end?

- **The collapse and bailout of Fannie and Freddie.**
- **Policies that boomeranged on the very homeowners these policies were ostensibly meant to help.**
- **A homeownership rate on the way back to where it was in the mid-1990s and which is lower than in many other developed countries[7], countries that did not spend trillions.**

Decades of mismanagement by Congress has placed our housing finance system on government life support. It is now clear that this interference has been both a failure and unnecessary.

Some have argued that federal intervention and guarantees are inevitable. Beware of such advice. The failures caused by past interventions are evidence that such intervention does not work. They will say - "but this time will be different." It will not – as Chairman Volcker noted any explicit government guaranty of private mortgages will once again privatize profits and socialize the inevitable losses. We

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[6] Supra. Bair

[7] A recent study completed by Alex Pollock found 16 developed countries with homeownership rates higher than the U.S. See testimony of Alex Pollock before the Subcommittee on Security and International Trade and Finance, Committee on Banking, Housing and Urban Affairs, United States Senate, September 29, 2010

can only be sure that the guaranty will be mispriced and taxpayers will be called upon to make good on it.

Stop micro-managing our housing finance system. Other countries allow for recourse lending, prepayment penalties, and other contractual provisions that help match risk and reward and keep defaults low.

Words of advice:

How should you proceed with getting our housing finance system off life support?

First and foremost have faith in the free market, which works best when Congress interferes least – consider how the free market provides an abundance of food and clothing, which like shelter are necessities of life. Thankfully congressional interference here is relatively minimal. Imagine going to Giant Foods only to find it run like the Postal Service.

Second, one cannot justify a continuation of flawed policies of government interference just because rates may go up. Rates go up and down all the time. Over my career mortgage rates have gone from 9% in 1974 to 18% in 1981 to near 4% today. This has had much less impact than the congressionally mandated abandonment of underwriting standards. Without the distortions inevitably created by government intervention, the market will price for credit risk. Adequate downpayments and capital requirements will assure sound underwriting and that bad business decisions are not bailed out by the taxpayers. As noted previously other developed countries do fine without such government guarantees. A recent comparative study of the Canadian and U.S. housing finance systems found that "when all of these factors are considered, it is hard not to conclude that Canadian fixed-term rates on prime mortgage loans are quite competitive with their U.S. counterparts."[8] Canada's homeownership rate is higher than the U.S.[9] It is worth noting the study's title: "Canadian Residential Mortgage Markets: Boring But Effective?"[10]

[8] John Kiff, IMF Working Paper, "Canadian Residential Mortgage Markets: Boring But Effective?", June 2009, http://www.imf.org/external/pubs/ft/wp/2009/wp09130.pdf

[9] Supra. Pollock Pollock's testimony cautions that Canada has come to rely more and more on high LTV lending and house price increases now exceed those at the height of the U.S. bubble. He advises to stay tuned to see how this plays out.

[10] Supra. Kiff

A return to a privatized housing finance system:

Any return to a privatized housing finance system must be based on the following principles:

1. **Rather than putting additional trillions of tax payer dollars at risk, it is time to withdraw the government from having any role in financing prime mortgages and return to a system backed by private capital.**
2. **It is time to end the government's affordable housing mandates and allow the private sector to return to common sense underwriting standards.**
3. **It is time to return to an emphasis on thrift.**
4. **It is time to return FHA to its former role of serving the low income market, but with higher minimum downpayments so borrowers have more skin in the game.**

Options for the private financing of mortgages include:[11]

Once we return to the concept that prime loans should actually be low risk, many private market opportunities will present themselves. My purpose in laying out the few options below is to demonstrate that the private financing of mortgages is possible once we return to high quality loans that are prudently underwritten. As noted earlier we are the only developed country that interferes to such a great extent and, as a result we are only country experiencing sky high foreclosure rates and default losses:

1. **Private portfolio lending backed by private capital would continue to play a role.**
2. **Covered bonds should be examined as a financing option.**
3. **The Danish mortgage system presents possibilities.**
4. **Private mortgage backed securities issuances backed by mortgages meeting a rigorous regulator defined standard of "qualified residential mortgage" under Dodd-Frank is also feasible.**

Addressing Fannie and Freddie:

The feasibility of these private options is seriously in question as long as Fannie and Freddie are allowed to continue their history of market distortions. Congress should set a definite sunset date after which their charters expire. Their regulator should be given the authority to reduce their loans limits and portfolios so that they disappear by the end of the sunset period.

[11] Supra. Wallison and Pollock for details on these options.

Addressing the FHA:

Likewise, the feasibility of these private options is seriously in question if FHA is allowed to continue to insure such a large part of the market along with its policy of minimal downpayments.

1. **Raise the minimum FHA downpayment on home purchase loans to 5%-10%[12], with reduced seller concession amounts and tightening of other gimmicks that distort home values[13];**
2. **Limit FHA's volume of low downpayment loans to a 10% market share so as not to distort the housing market;**
3. **Reduce FHA's dollar limit back to a level commensurate with its low and moderate income housing mission; and**
4. **Require FHA lenders to have real skin in the game through a coinsurance requirement of perhaps 10%, backed by adequate capital requirements.**
5. **Homeowners without the requisite 5%-10% down would be encouraged to participate in a 5-year downpayment savings plan. Below is an example for saving 10%:**

   a. Establish a five year savings plan based on saving $25 - $35/week would be established. $6500 - $9100 would be saved over 5 years. Add in interest earnings at 3% and an employer match through a 401k or a foundation grant and the total grows to $15,000 - $20,000 at the end of 5 years, enough for a 10% downpayment on a home that sells for 80% of the median; and

   b. At the end of five years, the prospective homeowner has demonstrated thrift; having saved a substantial downpayment, set a goal and kept it, established a banking relationship and savings pattern, hopefully established a solid credit history and is now in a position to buy a home. The bank holding the saving plan account would be a suitable lender.

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[12] One idea would be to set a 23 year loan term on 95% LTV loans and a 30 year loan on 90% LTV loans. At the end of 5 years both loans would have about an 82% LTV (based on original sales price).

[11] A major goal of single family AH is wealth building through homeownership and equity build-up. Clearly past efforts have not worked out well for many, if not most AH borrowers.

The lack of significant equity by large numbers of borrowers in neighborhoods is both a major cause and a continuing contributor to housing price instability. Real estate is fundamentally cyclical and borrowers (particularly those of low and moderate income) need staying power in the form of equity, fixed interest rates, good credit habits, and debt ratios that allow for some cushion.

Appendix A:

The following is a list of pro-cyclical/pro-leverage policies that helped drive the long boom in home prices and housing finance. The first policy dates to 1986. There were no counter-cyclical policies introduced over the same period:

a. **Interest deductions under the income tax code were effectively limited to interest incurred on loans relating to primary and secondary residences in 1986. Aided by the home interest tax deduction, home mortgage debt as a percentage of GDP increased from 39% in 1986 to 50% in 1999 to 75% in 2007.**
b. **Mortgage interest rates continue their declines from the highs of the early 1980s. Rates decline from 10% in 1991 to about 5.5% in 2003-4. Fannie and Freddie grew each time rates dipped.**
c. **HUD's adoption of the National Homeownership Strategy and the Best Practices Initiative. These strategies relied on loosened loan standards in an effort to greatly boost the homeownership rate.**
d. **FHA continued its long-standing policy of progressively reducing down payments, continuing its role as market leader.**
e. **Capital requirements for the GSEs were effectively hard wired into the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (GSE Act). Capital levels were set at 222:1 for off-balance sheet and 40:1 for on-balance sheet assets – levels that the private sector were hard pressed to compete with. The GSEs also had the implicit guarantee of the federal government. This along with high leverage helped fuel their growth. As the GSEs' market share grew, spreads continued to narrow and the GSEs' competitors were crowded out. This forced their competitors to both move out the risk curve (for example, subprime) and to develop ways to increase their leverage levels (for example, CDOs and CDOs squared. Efforts to rein in the GSEs' charters during the boom period failed. Ironically partial charter reform occurred 2 months prior to their takeovers in September 2008.**
f. **GSEs' low- and moderate-income affordable housing mandates implemented by HUD pursuant to the GSE Act. HUD periodically increased the goals from 1993-2008, with most of these increases applicable to the low- and very low-income mandates. This forced the GSEs to greatly increase their subprime, Alt-A and low and no downpayment lending The regulations implementing the Community Reinvestment Act of 1977 (CRA) were amended in 1995 to provide for outcome based performance reviews and mandate the use of "flexible and innovative" underwriting standards. Both CRA and the GSEs' affordable housing goals allocated credit in a manner**

that largely operated independently of market conditions. They artificially created demand by increasing leverage through loosened lending. As a result of CRA and the GSEs' affordable housing goals, for the first time the GSEs and the private sector offered loans with 3% down (1994) and zero down (2000). The volume of these loans expanded rapidly over the period. Affordable housing and CRA mandates led to both the subsidization and mispricing of these higher risk loans.

g. Risk-based-capital requirements implemented in 1988 heavily favored home mortgages and the GSEs' MBS and agency debt. By 2002 these advantages were extended to "AAA" and "AA" private MBS.

h. Loan loss reserving process was based on actual delinquencies. Low defaults during a boom period led to an accumulation of low levels of reserves at the point when the boom ends and defaults accelerate. This is compounded by the increased use of loan modifications. This masked the need for higher loss reserves.

i. In 1995 FDIC, due to the low level of bank failures then occurring, reduced the variable portion of deposit premiums to zero for "well-capitalized banks".

j. Loosened underwriting on investor loans on 1-4 unit properties. This was spurred in part by 1-4 unit rental affordable housing requirements implemented by HUD pursuant to the GSE Act.

k. An income tax law change in 1997 made speculating in homes a vocation for many homeowners. A married couple could live in a home for 2 years and pay zero tax on the first $500,000 of capital gain.

l. Loosened underwriting on cash out refinances. Higher prices promoted the wealth effect and reduced savings. This easy access to equity fueled the private spending boom – in downturn, the opposite happened.

m. Property valuations are based solely on a single input - comparable sales.

n. Nationalization of lending/underwriting/appraisal standards by the GSEs. In a market where the three most important things are location, location, location, the GSEs and their automated underwriting systems applied national standards regardless of local conditions.

o. The GSEs gave the best pricing and greatest flexibilities to the largest lenders. The top 10 lenders increase their market share from 25.8% in 1995 to 71.8% in 2007 (as reported by Inside Mortgage Finance).

p. By late 2003 and notwithstanding the lowest interest rates in over a generation, an affordability gap develops, as the house prices continued their unprecedented rise upward. This reinforced calls for additional loosened lending standards to eliminate or reduce the gap and effectively put CRA, affordable housing mandates and other loosened lending such as subprime and Alt-A on steroids.

These policies induced an increase in demand, an expansion of lending, an increase in leverage, and increasing inflation adjusted and real home prices. Once the boom ended, many of these same policies served to reinforce the down-cycle.

Testimony of

Phillip L. Swagel

Before the Committee on Financial Services
U.S. House of Representatives

"The Future of Housing Finance: A Review of Proposals to Address Market Structure and Transition"

Wednesday, September 29, 2010

Chairman Frank, Ranking Member Bachus, and Members of the Committee, thank you for the opportunity to testify on the future of housing finance. I am a visiting professor at the McDonough School of Business at Georgetown University and a non-resident scholar at the American Enterprise Institute. I was previously Assistant Secretary for Economic Policy at the Treasury Department from December 2006 to January 2009.

Donald Marron Jr. and I have put forward a specific plan for reform of the government sponsored enterprises (GSEs) that ensures the availability of mortgage financing while focusing the government on its relative strengths of providing a backstop against financial catastrophes and directing appropriate subsidies for affordable housing (the plan is available on the Economics21.org website at http://economics21.org/commentary/whither-fannie-and-freddie-proposal-reforming-housing-gses). I will use a discussion of our proposal to address the questions raised by the committee for this hearing, including comments on alternative reform approaches and transition issues.

A plan for GSE reform: Summary

Our plan would have the federal government sell a secondary guarantee to firms that securitize mortgage-backed securities (MBS) made up of high-quality conforming loans. Fannie Mae and Freddie Mac would be privatized and focus on securitization, and would compete with other private firms such as banks that could buy the federal MBS backstop on the same terms. The government would not guarantee any particular firm—shareholders would be wiped out before the government insurance pays off in the event of a failure. Allowing new firms to purchase the government guarantee and compete with Fannie and Freddie on conforming MBS is crucial. The history of government insurance programs is that the coverage is inevitably underpriced and this gives rise to a subsidy. Competition for Fannie and Freddie will help drive the subsidy to families looking to buy a home or refinance their mortgage rather than having the subsidy accrue to shareholders and management. Moreover, with additional firms providing MBS securitization, a GSE could fail without it being a catastrophic event—the activities of other firms would ensure the continued flow of funding to housing.

The existing GSE portfolios would be wound down under the plan to remove the need for massive GSE borrowing that put the financial system at risk and necessitated the government takeover in September 2008. To preserve important features of the current system, the Securities and Exchange Commission (SEC) would provide enough regulatory flexibility to allow for the use of the TBA ("to be announced") structure now used in the securitization of conforming MBS. Part of the insurance premiums charged by the federal government would go to funding affordable housing activities, but these would be carried out by the government and subject to normal appropriations procedures. The balance of premiums

would go into the Treasury general fund and offset over time the expected costs of the government guarantee. Fannie and Freddie and other firms engaged in securitization would not be subject to special housing goals as part of their securitization activities, though banks would remain subject to provisions such as the Community Reinvestment Act.

The choices embedded in this plan are discussed in more detail below, including the pros and cons of this approach and of alternatives. This proposal eliminates the worst aspects of the previous system—uncompensated taxpayer risk, systemic threats to the financial system, lack of transparency, and undeserved duopoly profits. It maintains an effective mortgage market for Americans looking to buy or refinance a home while putting the government role in plain sight and providing a funding source to support affordable housing activities.

The role of government

Decisions on the role of the government in housing are central to reform of the GSEs and of housing finance more broadly. I start from the observation that government involvement is inevitable in housing finance, and thus a pragmatic approach is to ensure that government support is focused, transparent, and effective, while avoiding systemic risks and the situation of public risks and private gains that characterized the former GSE model. Government involvement is inevitable because a government backstop is necessary to ensure the availability of 15- and 30-year fixed rate mortgage products with no prepayment penalty. Other nations have vibrant housing markets and high rates of homeownership with less or no government involvement but also with different mortgage products. I take it as a given that Americans on the whole will want these types of mortgages rather than ones with floating rates and a limited ability to prepay and this is enough to necessitate a government backstop of some sort.

A second reason for an explicit government backstop on housing finance is perhaps more profound: in the next financial crisis--whenever that occurs--it is inevitable that the government will step in to ensure that mortgage financing is available on reasonable terms. This means that a government backstop is latent—markets will act as if it is there but without providing compensation to taxpayers. This is not a problem that can be solved but a fact of life. It would be far better to make the terms of this support explicit and priced rather than leaving it implicit.

Having acknowledged that government involvement is inevitable, it should be as limited as possible. Government involvement in housing finance will take place in at least three dimensions: (1) providing credit guarantees against the financial consequences of mortgage defaults; (2) as a buyer of last resort for mortgage-backed securities; and (3) directing resources to provide subsidies for affordable housing. These are all appropriate roles for the government—and are activities not well-accomplished by private sector entities such as the retained portfolios or housing goals in the former GSE model. It would be best to cleanly separate the function of securitization that can be performed by the private sector from these other activities.

Returning Securitization of Conforming MBS to the Private Sector

A key outcome for housing finance reform is to make Fannie Mae and Freddie Mac again into private firms focused on securitization. The two firms should be truly private without any of their former special privileges such as lines of credit at the Treasury, government board members, special treatment of GSE securities on government ethics forms, and broad exemption from SEC registration. As discussed below, a limited special SEC treatment would cover securitization of conforming mortgages to allow for

the useful TBA structure, but this would extend to all firms performing securitization and not just to Fannie and Freddie.

The newly private Fannie and Freddie would pay insurance premiums to the federal government for a secondary guarantee on mortgage backed securities composed of conforming loans that meet high standards set by their regulator (and as discussed below, other firms would be allowed to purchase this federal backstop and compete with the existing two GSEs). These premiums would be priced at an actuarially fair level—a rate meant to compensate the government for defaults on average over a mix of normal and stressed environments. It is an impossible task to calculate precisely the right premiums, but the best attempt of the regulator will be preferable to the un-priced implicit insurance in the old system. The federal guarantee would be secondary in that substantial private capital would stand in front of the government, with the precise amount to be determined by the appropriate regulator (the FHFA or perhaps the new financial stability oversight council). The public backstop would kick in only after the shareholders of a firm performing securitization and guarantee of conforming MBS are entirely wiped out—the federal government would guarantee the MBS and thus ensure that mortgage liquidity is available even in times of financial stress, but would not guarantee any particular firm. It would not be advisable to set up a new insurance fund in a government system already replete with easily-misunderstood trust fund accounts. Instead, the premiums should go into general revenue with the Treasury providing funds to make good on the full-faith-and-credit guarantees as needed.

The privatized GSEs should not be allowed to rebuild retained portfolios. While in the end the guaranty business rather than retained portfolios accounted for the bulk of GSE losses, the massive borrowing to fund the portfolios gave rise to an intolerable systemic risk that made the GSE bailout necessary in the first place—allowing the GSEs to fail in the fall of 2008 would have posed serious capital challenges to the large number of banks holding GSE debt (a manageable number faced difficulties from losses on GSE preferred shares). A future housing finance system should not allow any firm to parley a federal guarantee into a hedge fund-like investment structure. The activities of the newly privatized GSEs should thus be restricted in this regard for a considerable period—at least until there is enough competition in securitization of conforming loans to make it possible for one of the existing GSEs to fail without requiring a government bailout.

Allowing other firms to compete with the GSEs

Along with selling Fannie and Freddie back into private hands, GSE reform should allow other firms to compete on a level playing field in the securitization and guaranty business. Even with the best efforts of the regulator, it is likely that the government will charge too low a premium for its insurance and this gives rise to an implicit federal subsidy to the private sector. Allowing for competition and entry in the functions of securitization and guaranty is thus important to ensure that this subsidy passes through to American families looking to buy or refinance a home rather than being captured by GSE shareholders and management.

To foster these beneficial effects of competition, other firms would be allowed to purchase the federal secondary backstop on conforming MBS on the same terms as the existing GSEs. It would be natural to expect large banks to enter this market, notably national institutions with the volume of mortgage origination to support an in-house securitization apparatus. The newly-privatized Fannie and Freddie would not have retail operations that originate mortgages, but they would compete as network companies based on the strength of their automated underwriting systems and electronic connections to banks. Over time, Fannie and/or Freddie might well acquire a bank or be acquired by one. Subject to

regulatory scrutiny, this sort of evolution of the housing finance system would be welcome so long as there remains sufficient competition in the securitization and origination of mortgages.

In allowing for entry, it will be important for both the FHFA and banking supervisory agencies such as the Federal Reserve and the Office of the Comptroller of the Currency to ensure that banks do not use financial engineering to extend the federal backstop on conforming loans to other parts of their balance sheet. Support must go in one direction only—shareholders of a bank that enters into securitization will take losses ahead of the federal government on conforming MBS, but taxpayers would not support an institution that becomes financial unstable for any reason (whether from losses on guarantees or on assets other than conforming mortgages). The key is that with entry, a GSE or a new securitizing firm such as a large bank could fail without it being a catastrophic event for housing finance or the economy more broadly—other firms would continue to securitize MBS and ensure the flow of funding to housing.

The alternative approach of a private sector cooperative suffers from the problem that having a single such cooperative or even two of them would recreate a system of firms that are too big to fail, just as Fannie and Freddie were (and are) too important to be allowed to fail. For this reason, if GSE reform does not include entry and competition, it is probably better to choose a heavily regulated utility approach in which the two or even one GSE-like firms are explicitly designated as too big to fail and regulated as such with strict limits on activities and rates of return. While one might then naturally contemplate just making this activity entirely a governmental one, the experience of public sector insurance providers suggests that there will be substantial pressure for insurance premiums to be set intentionally too low and thereby encourage unintended risk-taking. Having some private capital at risk, even if heavily regulated, at least provides incentives for prudent behavior.

Allowing for entry and competition could have important benefits for future innovation in housing finance. One possibility, for example, is that securitizers could put together MBS without the federal backstop. Mortgages in these securities would not pay for the federal insurance premium and this would involve a lower interest rate, but offset by the additional risk involved in forgoing the credit guarantee, which would translate into higher interest rates demanded by market participants. Whether the net impact is for higher or lower interest rates than ones with the federal insurance would depend on the pricing of the government backstop. Such non-guaranteed MBS would be akin to subordinated debt in the previous GSE model and would provide a market-based indication of the perceived value of the federal backstop.

Regulatory actions as part of housing finance reform

The "to be announced" (TBA) structure now used in the securitization of conforming mortgages provides for important benefits in the system of housing finance, including added liquidity and the ability for homeowners to lock in mortgage rates for a reasonable period of time. This system should be preserved in GSE reform, including through SEC actions that provide an exception for security registration procedures with strict oversight to avoid abuse. Allowing competition would spread the universe of conforming mortgages over additional TBA pools and this has the potential to reduce liquidity. This is a downside of a model with competition and entry, but it remains an empirical question the extent to which liquidity would be reduced and mortgage rates rise as a result. It is possible, for example, that a system that keeps the structure of the TBA pools intact through standard setting and close cooperation between securitizers, regulators, and industry participants would ensure a continuation of the benefits of the existing system. And again, allowing for competition and entry has important benefits for

homeowners in terms of lower interest rates and for society in terms of moving away from firms that are too big to fail.

A government backstop on conforming-mortgage-backed securities will put substantial stress on the definition of a conforming loan, because mortgage originators will naturally look to fit as wide a range of loans as possible into the federal insurance coverage. This is unavoidable in a system with government involvement, but at least regulators will be well aware of it and can shine a bright light on the quality of conforming loans. The fact that taxpayer funds are explicitly at risk likewise means that securitizing firms must have substantial high-quality capital in front of the public, both at the level of the individual loan with down payments and in each firm in terms of common equity. In addition to ensuring that conforming loans remain of high quality, regulators will need to ensure that firms engaged in housing finance have the necessary private capital. The crisis revealed that private mortgage insurance (PMI) firms did not have sufficient capital to withstand a nationwide housing reversal. If PMI is allowed to operate under the new system of housing finance, there should be no "discount" on the amount or quality of private capital ahead of the government—PMI could usefully represent a part of the mix of private capital protecting taxpayers but not any diminution of it. A careful assessment, however, might call into question the entire model of private mortgage insurance playing a role in the high-quality conforming loan space.

In the past, proponents of GSE reform were sometimes attacked as being "anti-housing" on the grounds that reform would lead to higher interest rates. This is correct for any GSE reform in the sense that requiring securitizers to hold more capital will tend to raise mortgage interest rates—after all, capital is expensive. This criticism could further apply to a world in which the federal backstop is priced rather than implicit, as the federal insurance premiums would tend to translate into higher interest rates as well. And yet, GSE reform should still go forward, since higher interest rates would represent the impact of additional protection for taxpayers and the financial system. Moreover, these effects would be offset by the beneficial effects of competition that would ensure that any underpricing of the government insurance is passed through to lower mortgage interest rates rather than captured by GSE shareholders and management. Nonetheless, it should be recognized that GSE reform that protects taxpayers against a repeat of the costly conservatorship implemented in 2008 likely will involve higher overall mortgage interest rates. If this is undesirable, Congress should provide an explicit appropriation to subsidize lower rates for desired borrowers or for well-targeted affordable housing purposes.

Support for the economy and for affordable housing

The federal backstop will ensure that mortgages are available even in times of financial crisis, but it is still possible that a shortfall of private demand for housing-related assets could lead to high interest rates that are undesirable from a macroeconomic standpoint. The government could then step in as a buyer of last resort for mortgage backed securities, boosting demand for MBS and lowering interest rates and stimulating the economy. This is best seen as an action for macroeconomic demand management, and thus most appropriate for the Federal Reserve as part of future broad based efforts aimed at monetary policy stimulus. The proposal outlined above would leave in place this ability for the Fed to act. The GSEs themselves and other firms involved in securitization should not play a role in macro-demand management and should not be seen as a buyer of last (or first) resort for mortgage backed securities. It is the case that previous GSE purchases for the retained portfolio provided some additional demand for affordable housing. But it would be better to accomplish the important social purpose of fostering affordable housing in more transparent and effective ways rather than through private firms with potentially conflicting missions.

The federal insurance premium provides an appropriate funding source for affordable housing initiatives. The next step is to specify the types and beneficiaries of these activities—to go beyond saying that "more should be done" to detail precisely what to do and who should receive federal assistance. Under the current system, families purchasing homes with prices above $700,000 receive a portion of the federal subsidy for housing finance as part of an expansive definition of a conforming loan. It could be in the future that Congress decides to target affordable housing resources instead on families with lower incomes and assets. Moreover, rental assistance could be an important component of a suite of policies to foster improved access to affordable housing. These are important decisions. For reform of housing finance, it is essential that these activities be part of the public sector and not carried out within successor firms to the GSEs. Congress should vote on the use of all public resources, including for affordable housing activities.

The disposition of existing GSE portfolios

An important transition issue is the disposition of existing GSE assets and liabilities. Taxpayers are already on the hook for losses embedded in the GSEs' existing portfolios of mortgages, MBS, and guarantees, and these should be brought onto the public balance sheet and managed over time. In this so-called "good bank/bad bank" approach, Fannie and Freddie would then be privatized through initial public offerings as firms with clean balance sheets and profitable businesses performing securitization and guaranty for high-quality conforming mortgages.

As an accounting matter, it might be possible to continue the present arrangement in which the $5+ trillion of assets and liabilities of the two firms are not on the public balance sheet and the Treasury covers only incremental losses. This suffers from a lack of transparency and should not be done. There might have been worries in the fall of 2008 about the financial consequences of expanding the public balance sheet by this huge amount. But it is now well understood that the federal government effectively stands behind GSE liabilities and that these are essentially offset by a nearly equivalent amount of assets on which the federal government has a claim as the effective owner of the GSEs. The federal preferred shares layered on top of the 79.9 percent public share of Fannie and Freddie common stock ensures that the pre-existing GSE common and preferred stock will have little if any value in a privatization—indeed, taxpayers will in the end lose substantial sums on the GSE intervention, perhaps more than the $150 billion already put into the two firms once all the embedded losses are realized and the firms are sold off. Even so, privatization will remove the possibility of further losses from new GSE activities undertaken for policy purposes.

Conclusion

It is important to move thoughtfully in reform of housing finance, but I submit that it is also useful to move expeditiously. The housing market is still weak, but this is not on account of a lack of financing—indeed, the existing federal conservatorship has ensured ample liquidity for well-qualified buyers. The larger problem in housing is instead the lingering effects of the collapse of the housing bubble, including the mass of foreclosures still to come that will weigh on housing prices into the future. With overall financial market liquidity supported by accommodative monetary policy, financial conditions could be seen as supportive for a return of private capital to housing finance. After all, market participants face otherwise low yields on relatively safe assets – and post-bubble, high-quality conforming loans with a government backstop should be seen as such.

It is likewise useful to speedily return the GSEs to private hands to avoid the temptation for the executive branch to use Fannie and Freddie for unchecked spending without a vote of the Congress as would be possible if the firms were directed to intentionally take losses for a policy purpose. One could imagine, for example, the GSEs being directed to facilitate the refinance of homeowners into loans with lower interest rates—effectively a transfer from taxpayers and other owners of the affected mortgages to the fortunate borrowers.

Of all the decisions, the most critical are those on the form of the government guarantee on housing and the market structure of the firms involved in securitization. There are substantial benefits to be had from a framework in which private firms compete and innovate, backstopped by a limited government guarantee to ensure liquidity under stressed market conditions. Allowing for entry and competition into securitization and guaranty will ensure that the benefits of government support go to homeowners, while preserving the essential merits of the existing mortgage finance system.

Mr. Chairman and Ranking Member, thank you again for the opportunity to testify before the committee today. I would be pleased to answer any questions.

"INFORMATION AND THE MORTGAGE CRISIS"

Testimony prepared for

"THE FUTURE OF HOUSING FINANCE –
A REVIEW OF PROPOSALS TO ADDRESS MARKET
STRUCTURE AND TRANSITION"

ON

SEPTEMBER 29TH, 2010

BEFORE THE

COMMITTEE ON FINANCIAL SERVICES

U.S. HOUSE OF REPRESENTATIVES

WRITTEN TESTIMONY OF DR. SUSAN M. WACHTER
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Chairman Frank, Ranking Member Bachus, and other distinguished members of the Committee:

Thank you for the invitation to testify at today's hearing on the "The Future of Housing Finance – A Review of Proposals to Address Market Structure and Transition." It is my honor to be here today to discuss the principles and proposals of various stakeholders related to reform of the housing finance system, as well as the Dodd-Frank Act's implications for the mortgage and securitization markets.

Title XIV of the Dodd-Frank Act is the first step in regulating mortgage origination and securitization, but it is only a beginning. It requires the securitizer to retain at least 5% of the default risk of the underlying assets, but it exempts "qualified residential mortgages" from this regulation. This is a loophole, but even mortgages that do not meet this standard can put the system at risk. 5% risk retention is not a panacea.

The U.S. housing finance market suffers from market failure that will require reform. It is important to understand that the explosive growth of nonstandard mortgages (including adjustable teaser rates, balloon payments, and lax lending standards) and private-label securitization (PLS) was a supply-side phenomenon. The housing bubble was exacerbated by but did not result from greater demand for homes in the face of inelastic supply. Yes, low interest rates, affordable housing policies, local land use regulations, and irrational expectations all contributed to price appreciation, but none of these factors was the primary cause. Instead, it was securitizers' appetite for mortgage-backed securities (MBS) that drove a "race to the bottom" in lending standards, risk creation, and competition for market share.

The proof of this culprit's guilt is the declining spread of MBS over Treasuries in parallel with the rise in nonstandard mortgages and PLS. We now know that Wall Street was securitizing increasingly risky mortgages—that is, with high expected default rates. The securitizers should have been paying investors higher interest rates to compensate them for bearing higher default risk. What actually happened was the opposite: Securitizers sold riskier MBS while paying lower interest rates (even in comparison to the low rates generated by Federal Reserve policies).

The only way that investors would accept such a bad deal is if they did not realize that they were bearing higher default risk. As my recent research with Georgetown professor Adam Levitin demonstrates, that is exactly what happened. The modern housing finance market suffers from asymmetric information. Borrowers and originators (and even securitizers) have much better knowledge about the risk of underlying assets than the investors who end up with them. Specifically, PLS became increasingly complex, and the mortgages became increasingly heterogeneous. Investors have difficulty computing risk for complex and heterogeneous assets. As lenders came to rely on nonstandard mortgages with more variable features, investors became less accurate in assessing each mortgage's risk, let alone the risk of an entire mortgage pool that has been securitized. As my recent research with Simon Frasier University professor Andrey Pavlov demonstrates, the underpricing of risk masked the fact that the capital cushions were really "fake equity" reliant on unsustainable lending standards. When prices fell, that lending disappeared, and equity shrank.

At this time, I request that the two papers referred to the in the previous paragraph be entered into the formal record.

Securitizers took advantage of this blind spot for six reasons. First, traders were compensated with a fee for each product sold, encouraging production and not the long run quality of product. Second, the executives monitoring them were compensated with bonuses that emphasized short-term gain over long-term risk. Third, capital requirements were lower for MBS than many other, less risky assets and effectively decreased with growing leverage over time. Fourth, the rating agencies had the same blind spot as the investors, ignoring the increasing risk of the mortgage pools. Fifth, past government actions gave the securitizers reason to believe that they were "too big to fail." Sixth, these firms hedged much of their default risk with credit default swaps, encouraging them to take more risk. These six factors motivated securitizers to produce as many MBS as possible, which required lower interest rates *and* riskier mortgages.

The Dodd-Frank Act attempts to remedy some, but certainly not all, of these problems. It is clear that the 5% risk retention requirement, while it may make securitizers less likely to increase the riskiness of the mortgage pools, cannot prevent the phenomenon from recurring. Many of the most fragile banks retained far more than 5% of the default risk of the mortgage pools that they securitized. This risk did not stop them from leading the race toward nonstandard mortgages and PLS. Even if the requirement does have the desired incentive effect, however, securitizers will still have difficulty assessing the risk of complex and heterogeneous products, as will investors. They will still agree to low interest rates for high risk when the market is growing, their competition is gaining, and they cannot understand the details of the products or compute the expected default rate of the overall pool.

A more sustainable solution is to move the market toward greater transparency and standardization in the secondary market for mortgage securities. Regulators must encourage originators to issue standard mortgages, for the securitization market, and they must discourage securitizers from bundling complex and heterogeneous products. These considerations are imperative to the transition from the current conservatorship of Fannie Mae and Freddie Mac (the "government-sponsored enterprises," or GSEs) to a new arrangement.

We must ensure that the GSEs remain in their conservatorship for the near future. They own or guarantee more than half the mortgage market, $5 trillion, and they support almost all of new transactions. Without conservatorship, housing prices would have fallen farther and faster, undermining consumer confidence and the balance sheet of the banking sector: unemployment would be higher, and a double dip in housing markets and the economy could not be ruled out, with foreclosures feeding price declines in a reinforcing downward spiral. If Congress wishes this still fragile recovery to build strength and unemployment to fall, they must not terminate the conservatorship until the market stabilizes—an event which may still be a few years away.

Any reform of the GSEs must go hand-in-hand with stricter regulation of PLS. When the government designates "qualified residential mortgages," investors will expect these products to be safe and will be less likely to investigate their risk profile. Reform of the GSEs may involve a similar problem, as any mortgage that receives some form of government support will also be considered "too big to

fail." These designations increase moral hazard and thus systemic risk. "Qualified" must therefore be a very strict designation, as must any explicit government support.

We know from experience, however, that there will be great pressure on future regulators to loosen these standards when the market is thriving. Regulators must therefore require originators and securitizers to inform investors of relevant terms of each loan, as well as other risk-related information. Most importantly, in order for the information to be analyzed, the information that is required must be standardized and the information must be vetted.

Another lesson of the recent bubble and crisis is that it is not enough for investors to understand the products they are purchasing. They must also have better information about the rest of the market, as the other products affect the performance of the mortgages in their pool.

Transparency is not enough. Even with all the information, some products are simply too complex and heterogeneous for investors to assess properly. The Dodd-Frank Act enforces stricter lending standards, but it does less to restrict the products that can be securitized. Securitization offers a very specific benefit to securitizers: It increases the liquidity and profitability of the underlying assets. Therefore, it should only be available to products whose risk can be analyzed. Securitization of nonstandard mortgages and the opacity this creates, as we have seen, increases systemic risk. The resulting "tail risk" is owned by the taxpayer. To avoid the generation of tail risk that is owned by the taxpayer, regulators must adopt stricter standards about information that must accompany the issuance of mortgage backed securities (MBS). Investors and regulators must be in a position to monitor standards in the book of MBS business as they are being generated both to price these risks effectively and to require increased capital if that becomes necessary.

There are several promising options for reform of the GSEs themselves, but any arrangement should limit the level of risk borne by the taxpayers. We must remember the reason the GSEs exist in the first place. Without government support, the long-term, fixed-rate mortgage would not be the dominant form of housing finance in the United States, as the experience of other countries can confirm. We must not lose this centerpiece. Short-term, adjustable-rate mortgages place the interest rate risk on the borrowing household, resulting in mounting defaults, when there is a mortgage rate shock or seizing up of financial markets, as we have seen over the past few years.

One solution, proposed by the MFWG group of the Center for American Progress, is for the government to sell an insurance "wrap" to licensed mortgage issuers that guarantees the underlying mortgage, for standard MBS. Unlike the previous GSEs, this arrangement makes the government support explicit, but the government, not the issuer, receives the interest payments. Another option, proposed in great detail by economists at the Federal Reserve Bank of New York, is to group mortgage originators into cooperatives that purchase and securitize the mortgages of their respective members. The disadvantage for this proposal if taken in isolation is that originators may not join the coops if they are not profitable enough (in other words, the coops would be crowded out by PLS).

In truth, both options are open to "crowding out," the very phenomenon that spelled the GSEs' demise. If PLS can be more profitable using nonstandard mortgages, then originators will flock to

the private securitizers, leaving the government wrap or coops in the dust. Both options, as well as the possibility of a return to the original GSE status with an explicit guarantee of MBS (and perhaps a limited or eliminated MBS portfolio), have great promise, but they all will require significant regulation of private activity to succeed.

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Essent
Essent Guaranty, Inc.

STATEMENT OF ADOLFO MARZOL

VICE CHAIRMAN

ESSENT GUARANTY, INC.

SUBMITTED TO THE

COMMITTEE ON FINANCIAL SERVICES

OF THE

UNITED STATES HOUSE OF REPRESENTATIVES

SEPTEMBER 29, 2010

Chairman Frank, Ranking Member Bachus, and Members of the Committee, thank you for the opportunity to participate in this important hearing.

I am Adolfo Marzol, Vice Chairman of Essent Guaranty, Inc. ("Essent"), a new, nationally licensed private mortgage insurance company headquartered in Radnor, PA. I am pleased to be able to present Essent's views regarding reform of the single-family secondary mortgage market. Let me begin by stating that the historical configuration of the secondary mortgage market has provided vital liquidity and stability to both single-family and multifamily lending and questions of reform must address both. Our comments today are directed to single-family reform, the market we serve. The reform solutions necessary for the single-family market, which is residential lending, are likely to be different from those that may be required for the multifamily market, which is commercial lending. We urge policy makers to consider each market separately and develop appropriate, tailored solutions for each market.

Our proposed approach to reform is consistent in some ways with other reform proposals that have been discussed publicly. However, with regards to the most fundamental questions – what role should government play versus private enterprise in a reformed system and how should those roles be organized – our views differ in important ways. We hope that our views provide added insights regarding important public policy choices and that they will be given consideration.

Concepts Shared with Other Proposals

Our proposal for reform is consistent with many others in three critical ways:

1. The U.S. federal government should provide a full faith and credit guarantee of mortgage backed securities to enable the U.S. mortgage market to attract global liquidity and preserve the 30-year fixed rate mortgage. We, like many others, believe the U.S. should **not** adopt a housing finance system built primarily around adjustable rate or balloon mortgage loans that require average homeowners to manage interest rate risk and deal with mortgage payment shocks. Homeowners are the least able in the system to manage these risks. Without the presence of the federal guarantee, we doubt that risk-averse global investors will be willing to invest in long term fixed-rate mortgage instruments in amounts sufficient to support a mortgage market of the size that the U.S. requires.

2. Government should bear only a discrete and remote credit risk in a new, reformed system. Private capital should bear expected credit losses and the losses that can result from serious macroeconomic adversity resulting in large, nationwide home price declines. Private capital should be sufficient in amount to withstand such losses, trapped and targeted to the absorption of losses and strengthened in favorable parts of the economic cycle by a countercyclical capital accumulation framework. The government's guarantee should only be called upon in the most extreme and limited of circumstances. Further, this guarantee should be on specific securities, not on the entities that create them. A smaller, and more targeted role for government in the mortgage market would be in marked contrast to today's mortgage market for new loans, where virtually all the credit risk is being borne by taxpayers through the FHA, the VA, the GSEs or other government mortgage financing programs.

3. The government guarantee should be financed in advance through fees charged on mortgage securitizations that receive the guarantee. This approach corrects one clear defect of implied guarantees, which by their nature cannot be financed in advance. In addition to building reserves for covering a remote risk of loss, an incremental fee should be collected to fund proper administration of this new securitization program so it is self-financing. Finally, we propose this new guarantee program include an explicit fee to fund affordable housing programs. Supporting affordable housing through fees that can reduce mortgage costs for financially disadvantaged but credit-worthy borrowers, or to assist rental housing, is preferable to mandates such as housing goals, that can distort underwriting discipline.

The time has come for the policy process to find a practical and achievable path forward that delivers to the U.S. homebuyer an affordable, 30-year fixed rate mortgage, but limits the role of government and exposure to taxpayers. This will require a larger and more central role for real private enterprise providing dedicated and adequate capital to take and manage mortgage credit risk.

Where We Differ from Other Proposals

Instead of starting with the current GSE model as a basis for change, our approach builds on the successful structure of the Government National Mortgage Association ("Ginnie Mae") securitization program. Since the 1960s, this program has provided the capital markets with a full-faith and credit mortgage security, and has done so without portfolios or "hybrid" structures faced with conflicting mandates. This model is currently serving about 25% of new U.S. mortgage originations. This guarantee permits investors around the globe who invest in these mortgage securities to focus on managing interest rate and prepayment risk rather than credit risk. In this program, FHA (which also enjoys the full faith and credit backing of the United States), writes mortgage insurance that takes the vast majority of the credit losses when mortgages default. Lenders must underwrite and service mortgages in accordance with the requirements of FHA in order to obtain their mortgage insurance, and borrowers must pay the FHA insurance premiums. Ginnie Mae provides the security guarantee when the loans are insured by FHA and other Ginnie Mae requirements are met. Ginnie Mae collects a fee for the guarantee, in addition to the fees charged by FHA.

In the Ginnie Mae/FHA secondary market model there are no GSEs and there are no investment portfolios of mortgage assets. There is only a clear and simple set of roles and responsibilities that enables this large sector of the mortgage market to function – a security guarantee that benefits investors and mortgage insurance that takes mortgage loan credit losses.

We believe that this precise framework can be replicated for the broader single-family mortgage market, albeit with one small but essential change: providing a government guaranteed securitization option in which the credit risk of each mortgage is borne by one of a group of fully private, adequately capitalized, competing private mortgage insurance companies that would insure the full risk of credit loss. This approach would not displace the role of FHA in providing mortgage insurance in those situations that Congress deems appropriate for full taxpayer risk. Rather, this proposal adds to the existing FHA "public option" a parallel "private option" for bearing the credit risk. This "private option" means having well-capitalized private mortgage insurance, rather than government-backed mortgage insurance, bearing the credit risk for those borrowers not appropriate for FHA insurance. An expanded role for private mortgage insurance can be met by a combination of the existing industry raising new capital and the entry of new competitors. This approach preserves FHA for a properly targeted role of subsidizing affordability for borrowers where private financing may not be offered or where the costs of private financing are deemed too high by Congress.

Public Benefits Achievable Through Our Proposal

Essent's approach to reform can produce attractive public policy outcomes that should be given bipartisan consideration. These include:

1. Preserving an affordable and accessible 30-year fixed rate mortgage in a highly liquid mortgage market that can attract global investment capital.
2. Bringing private capital and private enterprise back into the housing finance system to price, manage and bear credit risk, creating a path to an appropriately smaller credit risk

bearing role for government - limited to the risks of the most extreme and unlikely economic outcomes or those taken on behalf of borrowers where full taxpayer risk bearing is deemed appropriate to achieve societal goals.

3. Reforming the system without creating new "hybrid entities," which we define to be entities that mix private profit objectives with social goals and mandates. The creation of new hybrids creates significant risks of new implicit guarantees and entities that become "too big to fail."
4. Avoiding very substantial transition risks in an already weak housing market by using existing mortgage market capabilities and putting them together in a more logical way for new mortgage securities.
5. Allowing for an orderly wind-down of the GSE legacy portfolios and continued support for troubled borrowers through the existing GSE and FHA modification and refinance programs.
6. Funding affordable housing with explicitly allocated cash flows that can reduce costs to lower income borrowers and renters, while avoiding the distortions of underwriting discipline that mandates such as housing goals can encourage.
7. Maintaining a system that allows small community banks and mortgage bankers to compete, because they will not need large volumes or large capital bases to access this system (*n.b.*, a Ginnie Mae "pool" today can be created from a single loan).

While these outcomes may not be the perfect answer for any single policy maker or industry participant, we believe the overall result of adopting our proposal will best serve our citizens – both as homeowners and as taxpayers.

Concerns Regarding Reform Proposals that Create New "Hybrids"

When evaluating reform alternatives, we urge policy makers to be aware of the risks inherent in creating new "hybrid" entities at the center of the mortgage securitization process. Reform proposals risk creating new hybrids, rather than real private enterprises, when they include characteristics such as: (1) mortgage portfolios held to earn a spread, (2) mandates that will need to be funded by lower returns, (3) excess leverage or special benefits, or (4) special or limited numbers of charters.

Even if the government does not guarantee these entities, new hybrids will eventually be viewed as implicitly guaranteed and can become "too big to fail" by virtue of having been given a special and central role in housing finance. Further, any wholly new entities with central roles for mortgage securitization would require years to become operational from a *de novo* start unless these entities are simply a reconstituting of the two existing GSEs, with minor modifications. If past conflicts of interest are to be eliminated from the mortgage finance system, then reforms must be faithful to the concept of "no hybrids" and committed to changes that are organized around real, private market entities competing to bear credit risk with strong capital and sound risk management without special burdens or benefits.

The existing GSEs should be allowed to focus on the orderly management and runoff of their existing legacy assets, and continuing to work with troubled borrowers. Fire sales of assets and disorderly transitions regarding the GSEs can be avoided. To the maximum extent possible, the

skilled people, operating abilities and specialized systems of the GSEs should be utilized to support the securitization process for a reformed market, not as risk takers, but as processors, much as Master Card and Visa serve the credit card markets without portfolios or bearing of credit or interest rate risk.

Rationale for Role of Private Capital

We realize that our proposal requires rethinking some firmly entrenched presumptions regarding the housing finance system. Many find it difficult to visualize a new housing finance system without multifunction GSEs (*e.g.*, mortgage portfolio holder, mortgage insurer, securitizer, affordable housing subsidy provider) at the center of the system. Our approach breaks these distinct functions into logical components that require clarity as to roles - none more important than drawing a bright line between the role of private enterprise and the role of government.

Importantly, our approach requires recognition that private mortgage insurance is not limited to bearing credit risk for low down payment borrowers. Yes, for over 50 years private mortgage insurance has helped low down payment borrowers achieve home ownership by insuring lenders and investors from credit losses when these borrowers default. We are proud of supporting low down payment borrowers and our industry can continue to serve this vital market segment regardless of the structure of secondary market reform. But, our industry doesn't exist solely for bearing credit risk on low down payment borrowers and has provided mortgage investors protection on mortgage loans with larger down payments when investors have sought such protection.

Private mortgage insurance is an insurance contract that pays benefits to mortgage lenders or investors for insured mortgage loans that default regardless of the percentage of down payment. Private mortgage insurance companies - there are 8 currently active - deploy private capital to take mortgage credit risk and pay claims from their revenues and capital. In Canada, where the housing finance system has been credited with unique stability through the recent crisis, private mortgage insurance insures 100% of the risk of credit loss on insured loans, in contrast to the U.S. tradition of partial insurance coverage -- generally 25% of the loan amount.

Some outside the mortgage finance industry may not appreciate the role that private mortgage insurance plays in enabling homeownership, or the degree to which private mortgage insurance has served to protect the taxpayer during the crisis. Perhaps unique among industry segments heavily exposed to mortgage credit risk, private mortgage insurance companies have survived the mortgage crisis without a taxpayer bailout. In fact, rather than receive taxpayer funds, private mortgage insurance will actually dramatically lessen the taxpayer's burden from the mortgage crisis. As our housing market struggles to recover from the crisis, private mortgage insurance companies are estimated to pay out $35-50 billion in claims, all from private capital. The largest recipients of private mortgage insurance payments have been the taxpayers, through the conservatorship of Fannie Mae and Freddie Mac who are the largest beneficiaries of the private mortgage insurance industry. Importantly, our industry has raised additional private capital since the crisis began, increasing the capacity to pay claims and write new insurance to support the nascent housing recovery.

The performance of the private mortgage insurance industry is an example of countercyclical and trapped private capital doing the job that was intended from a strong capital framework for bearing risk. This strong capital regime was put in place from the lessons learned in prior housing and mortgage crisis, when state regulators implemented reforms which led to the modern structure of the private mortgage insurance industry. Our industry is an example of competitive private enterprises without special Federal charters, none "too big to fail," relying on private capital - not taxpayers - to take credit losses and weather an extraordinary economic crisis. Individual companies within our industry were challenged and substantial losses were suffered, but without posing a systemic risk to the housing finance system or the broader economy.

We do not suggest that our industry does not have lessons to learn from this crisis, as it has from prior episodes of economic and housing stress. One firm went into "run-off" and some strained to write new insurance as capital was depleted by credit losses. Constructive action by state regulators, the GSEs and FHFA contributed to the ability of the private mortgage insurance industry to weather the crisis. Insureds and policy beneficiaries would also benefit from greater clarity and consistency regarding the contractual enforcement of loan origination representations and warranties, which is a broad issue in the mortgage industry and not one confined to mortgage insurance. But, few industries engaged in mortgage risk management through this crisis could have come through the crisis with no issues or questions, but we believe the fundamental value proposition of mortgage insurance was reaffirmed through the crisis.

Essent recognizes that the industry can be made an even safer and more reliable segment of the housing finance system, and that reforms will be necessary to implement our proposal. But, we believe the necessary changes are eminently achievable and, working constructively with policy makers and regulators, we would provide leadership to achieve them.

We also do not propose an exclusive role for private mortgage insurance as the sole entities to provide the necessary credit risk bearing in a reformed system. While other approaches to private credit risk bearing should be assessed, there are a number of policy considerations that should be applied to potential risk bearing alternatives. First, because the private mortgage insurance industry is in place today, reform efforts in the direction we have proposed can be implemented much more quickly than most alternatives. Second, alternative risk bearing approaches should enhance competition, but without sacrifice to adequate, trapped and countercyclical capital and sound regulation. Third, alternative forms of risk bearing should avoid issues of concentrations of risk that would reinforce "too big to fail" concerns already inherent in the system. Finally, alternative forms of risk bearing should preserve ready access by small community banks and mortgage bankers, allowing smaller entities to compete and effectively serve their markets with competitive 30-year fixed rate mortgage loans.

Private mortgage insurance is here now and ready to serve. By using the existing private mortgage insurance industry, and likely other new entrants to our industry, a new housing finance system can be put in place more quickly, rather than continuing to increase the amount of business being done by a system that is bankrupt due to a lack of adequate capital and the conflicts inherent in "hybrids."

Economics of Reform

Essent has completed a preliminary quantitative analysis to assess the level of private capital necessary to withstand all but catastrophic economic conditions and to measure the mortgage interest rate impacts resulting from a system structured as we propose. Essent would be pleased to share further details of our analysis upon request. This analysis concludes that:

1. If the new private system has claims paying resources of between 4 and 5% of mortgage balances originated by the new system, the government will be protected from credit losses in all but the most extreme economic downturns.
2. Mortgage costs to borrowers on new loans will rise only modestly from those of a GSE-based system of mortgage finance, less than a 3/8% estimated total cost increase. The increase primarily reflects the undercapitalization of the GSE system and the collection of fees by the government that were not collected for the implicit guarantee provided the GSE system.
3. The program could produce substantial revenues to the government for loss reserves in the event of a future severe home price decline resulting in the unlikely call on the government guarantee, funding for affordable housing and revenues to finance strong program administration.

Credit risk is not free, as this housing and mortgage crisis has so painfully reminded us all. Credit risk has to be supported by appropriate capital and adequate pricing up front or these costs will be extracted afterwards by the market in lost value for homeowners, investors or taxpayers alike. Now is the time to begin the process of transitioning to a new and more sustainable system of housing finance.

Conclusion

We have presented a new approach to reform the single-family secondary mortgage market. An affordable and widely available 30-year fixed rate mortgage can be preserved while establishing clearly separate roles and responsibilities between private enterprise and government. Increasing the role of private enterprise while reducing the role of government – without abandoning affordable housing – is the right direction for the future. These results can be achieved without creating new hybrids that will come to be viewed as implicitly guaranteed and "too big to fail."

We recognize that there are many details that need to be resolved and that transition issues will loom large for a housing finance system of the size and complexity of the U.S. mortgage market. However, the transition issues are manageable if the long term vision is clear and correct and an appropriate regulatory structure is in place. Transition issues should, appropriately, affect the pace of change to allow time for private enterprise and private capital to build its capacity and step into the risk bearing role government is currently playing. Essent has previously suggested that private capital backed risk sharing could be increased now, within the existing GSE system, as an important transition step in the right direction. But, transition issues should not deter the building of a new secondary mortgage market on a sound and principled foundation that will serve our nation well for decades to come.

RANIERI PARTNERS

September 29, 2010

The Honorable Chairman Barney Frank
House Committee on Financial Services
2129 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Frank,

I respectfully submit this letter for you to add to the hearing record of ***Future of Housing Finance – A Review of Proposals to Address Market Structure and Transition.*** On August 17th, I participated in the Administration's Treasury/HUD conference on the future of housing finance. During my remarks in August, I mentioned the benefits of a "rent-to-own" program in this current housing market environment.

I recommended that Treasury and HUD consider deploying and encouraging a rent-to-own program because of the current record-low home values and prices across the country. A rent-to-own program would be extremely beneficial to both troubled homeowners who cannot afford their current mortgage, ***and***, future homebuyers who find it difficult to come up with a down payment. Seldom do we have an opportunity to solve a couple of policy problems with one solution, and I believe a viable rent-to-own program is such an alternative.

Under a rent-to-own program, a troubled homeowner could stay in his or her home, and convert the loan obligation over to a lease of three to five years. The owner (mortgagee) could not sell the property for the duration of the lease, unless they sell it to the renter. The renter makes market rent payments to the mortgagee for the duration of the lease, and at the expiration of the lease term, the renter has the first right of refusal to buy the house. Whether or not the renter is the purchaser, the renter benefits from a 20% share of any upside in value of the property at point of sale (the renter benefits from the increase in value, whether or not he/she is the purchaser of the property at the end of the lease term). While not the perfect situation for everyone, a rent-to-own scenario makes the best of a difficult situation.

The benefits of a rent-to-own program in the current housing environment are most evident for the struggling homeowner – they get to keep their home; they are afforded the time to regain financial stability as renters; through time they repair their credit; their occupancy avoids the cycle caused by foreclosure and vacant properties decreasing the value of homes in a neighborhood; and can provide a clear path to final resolution of their financial troubles.

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Less apparent, the rent-to-own solution provides value to the lenders as well: immediate cash flow; reduced pressure from over capacity at the servicer level; avoids headline risk of putting families out on the street; provides rental income to cover carrying costs – rather than expensive foreclosure actions; defers sale of a home to a time when real estate prices stabilize; and keeps the home tenant motivated to continue up-keep and maintenance.

A rent-to-own solution does have limitations and can only play a part in the broader housing recovery. Incorporating a rent-to-own alternative in any future housing policy shift will require the federal government to do something about other lien holders on the property. Also, the challenge to the homebuyer can be twofold: first, overcoming a homeowner's sense of entitlement to a property they cannot currently afford; and second, availability of mortgage financing for the renter to re-purchase the property at the end of the lease.

Nonetheless, a sound rent-to-own program will be a very effective tool in this housing market to help both troubled homeowners and prospective future homebuyers who are finding it difficult to come up with a down payment. Policy makers -- and those in the lending industry -- should consider deploying a rent-to-own program in the months ahead. Congress and the Administration need multiple solutions to tackle the collapse of the housing market, and I appreciate the opportunity to share my thoughts on how a rent-to-own program might make a sound contribution to the effort.

Sincerely,

Lewis S. Ranieri
Ranieri Partners, LLC

cc: The Honorable Spencer Bachus
Ranking Member
House Financial Services Committee

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Subprime Lending and House Price Volatility

First draft: January 4, 2007

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Subprime Lending and House Price Volatility

This paper establishes a theoretical and empirical link between the use of aggressive mortgage lending instruments, such as interest only, negative amortization or subprime, mortgages, and the underlying house price volatility. Such instruments, which come into existence through innovation or financial deregulation, allow more borrowing than otherwise would occur in previously affordability constrained markets. Within the context of a model with endogenous rent-buy decision, we demonstrate that the supply of aggressive lending instruments temporarily increases the asset prices in the underlying market because agents find it more attractive to own or because their borrowing constraint is relaxed, or both. This result implies that the availability of aggressive mortgage lending instruments magnifies the real estate cycle and the effects of fundamental demand shocks.

We empirically confirm the predictions of the model using recent subprime origination experience. In particular, we find that counties and cities that receive a high concentration of aggressive lending instruments experience larger price increases and subsequent declines than areas with low concentration of such instruments. This result holds in the presence of various controls and instrumental variables.

Introduction

This paper establishes a link between the availability of aggressive mortgage lending instruments and underlying asset market prices. Industry sources suggest that aggressive lending instruments, such as interest only loans, negative amortization loans, low or zero equity loans, and teaser-rate ARMs, accounted for nearly two-thirds of all U.S. loan originations since 2003.[1] We demonstrate theoretically that the introduction of aggressive lending instruments increases asset prices in the underlying market because agents find it more attractive to switch from renting to owning and take advantage of the low-cost financing and/or because they find their credit constraint relaxed. Aggressive instruments, which come into existence through innovation or financial deregulation, allow more borrowing than otherwise would occur. The greater initial affordability of aggressive instruments relative to traditional mortgages implies that these instruments will be in higher demand in less affordable markets.

The lending sector acquired this new ability to offer aggressive products through financial innovation and deregulation. In particular, risk based pricing became possible through the implementation of automated underwriting models and lending for riskier mortgages became widespread in the late 1990's with the development of private label securitization of non-conforming loans. At the same time, deregulation allowed banks to originate and securitize these mortgages without recourse, that is, without having to

[1] FDIC Outlook: Breaking New Ground in U.S. Mortgage Lending. December 18th, 2006 <http://www.fdic.gov/bank/analytical/regional/ro20062q/na/2006_summer04.html> Nonprime mortgage originations rose at an even pace from 2001 through 2003 to reach between $25 billion and $30 billion in January 2004. Originations accelerated in 2004 before peaking in March 2005 in a range between $60 billion to $70 billion.
http://www.fdic.gov/bank/analytical/regional/ro20062q/na/2006_summer04_chart03.html

account for the buyback provisions imbedded in these securities. This additional source of funding at the borrower level increases demand for housing that is then translated into higher market prices, with the effect greatest in markets of fixed or inelastic supply.

Because aggressive mortgage instruments are distributed non-uniformly over space, we are able to test for the impact they have on the property markets. We use cross-section data to compare outcomes across neighborhoods and cities with different concentrations of aggressive mortgage instruments to test for the implications of the model. We further are able to test for the mechanism of the model by linking the market share of aggressive mortgages over time to price dynamics over time and through the use of two separate instrumental variables.

We use county-level origination data to empirically investigate the hypothesized links. We find that neighborhoods and cities with high concentrations of aggressive lending instruments experience larger price run-ups during rising markets, and deeper crashes during down markets. This basic finding holds even when we control for the contemporaneous changes in household income, use lead-lag relationships, and two separate instrumental variables: affordability and share of minority households. Both of these instrumental variables are highly correlated with the use of subprime but are uncorrelated with future price changes in the market. Yet, the subprime share of originations predicted by each of these two instruments is highly significant and explains a great deal of the cross-sectional variation of real estate market price changes.

We proceed as follows: Section 1 is a literature review. Section 2 develops the link between lending and asset markets in a theoretical model. Section 3 presents the data and empirical results, including our robustness checks and instrumental variable estimation. Section 4 concludes with a brief summary.

1. Literature Review

Ours is not the first study to investigate the link between lending and asset markets. Allen and Gale (1998 and 1999), Herring and Wachter (1999), and Pavlov and Wachter (2002, 2005) show that underpricing of the default risk in bank lending leads to inflated asset prices in markets of fixed supply. Furthermore, Pavlov and Wachter (2002, 2005, 2006) show that underpricing of the default risk exacerbates asset market crashes.

One unifying feature of this prior literature on the link between lending and asset markets is that the asset-backed loans are mispriced, either rationally or not. Our point of departure in this paper is that lenders react to current information on risks which may change over the cycle. In other words, the pricing of loans can be rational. Yet, asset prices increase because some borrowers see their borrowing constraint relaxed. If loans are underpriced, this effect is magnified, because then even previously unconstrained borrowers optimally choose to buy rather than rent. It is the time variation of this constraint or loan underpricing, or both that generates our finding that aggressive lending magnifies the effect of negative demand shocks.

A handful of empirical investigations directly study the impact of aggressive lending on real estate, whether these instruments are priced correctly or not. Hung and Tu (2006) find that the increase in the use of adjustable rate mortgages in California is associated with an increase in median home prices. They make no comment on whether this increase is temporary and will reverse with the business cycle or whether it is a one-time permanent positive shock. Similarly, the September 2004 IMF report on World Economic Issues suggests that countries with higher use of adjustable-rate mortgages have more volatile housing markets (Chapter II, page 81). The mechanism they conjecture to explain this finding is that higher use of ARM-like instruments makes real estate markets more sensitive to interest rate changes. This report, however, does not consider the fluctuation in availability of ARMs and other aggressive instruments throughout the real estate market cycle. Even though the empirical findings of both studies do not provide a direct test of our model, they are indeed consistent with its implications. Coleman, LaCour-Little, and Vandell (2007) provide an additional test for the role of mortgage instruments using data from the recent US experience. They regress price change on fundamentals and a variety of mortgage indicators, with mixed findings.

This study is distinct from a related literature which estimates the fundamental price of an asset directly and detects asset price inflation by comparing the estimated to the observed price, such as Himmelberg, Mayer, and Sinai (2005).[2] Rather we develop here an

[2] For others, see instance Smith, Smith, and Thompson (2005) for a direct estimation of real estate values in Los Angeles. Other studies of the fundamental real estate values include Case and Shiller (2003), Krainer and Wei (2004), Krugman (2005), Leamer (2002), McCarthy and Peach (2004), Shiller (2005), Edelstein (2005) and Edelstein, Dokko, Lacayo, and Lee (1999).

observable implication and mechanism for a specific cause of asset price volatility and potentially a credit induced bubble.

2. Model

This section presents a model of borrower demand and lending behavior in the presence of both traditional mortgages and aggressive lending instruments in the context of a competitive real estate market. The quantity of housing services consumed by each household is fixed and exogenous to our model. The borrower can rent or purchase the housing services for each period. The evolution of wealth for the borrower is given by:

$$W_t = \begin{cases} W_{t-1} + Y_t - \delta P_{t-1} & \text{if rent} \\ W_{t-1} + Y_t - rP_{t-1} + P_t - P_{t-1} & \text{if own} \end{cases} \quad (1)$$

where t denotes the time period, W_t denotes the total wealth at time t, Y_t is the stochastic income at time t, δ denotes the rent payment, r is the non-stochastic interest rate, and P_t is the equilibrium price of housing. Each period the agent chooses to rent or purchase the housing services in order to maximize the expected utility of terminal wealth:

$$U(W_T) = \frac{W_T^{1-\gamma}}{1-\gamma}, \gamma > 1 \quad (2)$$

where γ denotes the risk-aversion parameter and T denotes the final period. If at any point in time the wealth of the agent becomes zero or negative, then the agent is in

default. Note that this is the total wealth of the agent, not just equity in the home. This is consistent with the lack of ruthless default as discussed in Stegman and Quercia (1992), Pavlov (2001), and Deng, et.al. (2007).

If the agent defaults, their wealth resets to a small amount above zero and their credit score, C, goes down to 500.[3] Each period the agent maintains wealth above zero, their credit score increases by 30, to a maximum of 850. Therefore in addition to maximizing expected utility of terminal wealth the agent considers the probability that they have to default in the future, and the negative consequences of default, namely, the inability to purchase a home in the future until the credit score improves.

Lenders require a minimum credit score to fund a mortgage. This constraint is analogous to the wealth and loan-to-value (LTV) constraints. These three constrains are conceptually similar because they all can eliminate a particular set of agents from becoming home owners regardless of their optimal choice. For numerical tractability in what follows we only consider the credit score constraint. Adding the LTV constraint directly would require modeling consumption of non-housing services, which is beyond the scope of this paper. For evidence of the importanee of the credit score constraint, as well as wealth and income constraints, see Calem, Firestone, and Wachter (2009). The credit score represents the constraint in our model, and thus the rent-versus-buy decision, and the resulting equilibrium price of ownership, is solved through constrained optimization. When minimum credit score requirements are lowered through aggressive

[3] The score of 500 is purely arbitrary and is designed to match the FICO score for illustration purposes only.

lending practices, the entire group of borrowers with credit scores above the new constraint, but below the original one, would then be considered unconstrained, and thus be able to purchase housing at the prevailing equilibrium price.

This mechanism is also the source of endogenous cycles in the economy. Incomes are stochastic, and real estate prices respond to changes in income. On top of this response, if lenders relax and tighten the minimum credit score requirements pro-cyclically and/or if they re-price their products pro-cyclically, we get a magnified real estate cycle above and beyond what could be justified by shifts in incomes.

Our model further assumes that the stock of owner-occupied homes is constant and rental properties cannot be converted to owner-occupied. In reality, these two assumptions would not hold perfectly. However, we justify their use in our model by the fact that when lending rates fall the demand for both rental and owner-occupied housing increases either through increased household formation and/or through increased demand for second homes. We do not explicitly model these effects here.

2.1 Solution Methodology

The main mathematical complication of the above model lies in the ability of the agent to predict the future price distribution of property prices and choose whether to rent or buy given this future price distribution. In our model agents account for the fact that incomes fluctuate, and, therefore prices fluctuate. However, the mistake borrowers make is that

they do not foresee if, when, and by how much lenders will withdraw credit. Since an explicit solution for the future real estate price distribution is not available we employ a version of the Longstaff and Shwartz (2004) Least Squares Simulation approach. First we generate simulation paths for future personal income. We assume future income follows a zero-mean Brownian motion of the form:

$$dY_{t+1} = \sigma_Y dZ \tag{3}$$

where σ_Y denotes the volatility of income. We start by assigning random wealth levels for each simulation path and time period. We then assume that the terminal real estate price level is half of the terminal wealth. We justify this last assumption by appealing to the stylized fact that at retirement people tend to spend half of their total wealth, including present value of expected future retirement payments, on housing, and the other half they use for consumption. We have solved our model for various other levels of final prices, and while the level of real estate prices change, the comparative statics we report below remain unchanged.

At each time period between *t-1* and 2, going backwards, we regress the future price on each path on the income and wealth level on that path. In our base model we utilize regression of the form:

$$\log(P_{t+1}) = \alpha_0 + \alpha_1 Y_t + \alpha_2 Y_t^2 + \alpha_3 W_t + \alpha_4 W_t^2 + \varepsilon . \tag{4}$$

We then use the estimated regression for each period to derive a distribution of prices for period $t+1$ conditional on the state variables at time t.

The conditional future distribution of real estate prices allows us to determine the current price, P_t, that numerically equates the expected utility of renting (which is certain) to the expected utility of buying (which involves price risk). Once we have the price P_t which equates the utilities of rent and own, we can solve for the current level of wealth, W_t, using the evolution of wealth given in Equation (1). Given this new levels of current wealth, W_t, we repeat the regression estimation (Equation (4)) and re-compute current wealth levels until we reach a fixed point for which current wealth levels do not change anymore.

We then repeat the above described algorithm until time 2. At the first time period we have only one level of income and wealth, so we do not estimate regression equation (4) but rather use the prices in period 2 to compute the price in period 1 that equates the expected utilities of renting and buying.

We then go forward through our simulation and set the credit score to 500 for any path for which wealth level falls below zero. We also increase the credit score by 30 for every period the agent maintains wealth above zero. If the wealth level does fall below zero, it is reset to a small positive amount. For numerical tractability we cannot set the wealth level exactly at zero. The agent is then not allowed to purchase on that path until their credit score improves above the pre-determined minimum. In our solutions we do not re-

set the price in that period if some paths result in negative wealth. Nonetheless, credit scores do impact prices because they impact the ability of the agent to purchase real estate on that path until their credit score improves.

By following the above methodology the initial wealth level is different on each path. We then alter the final period wealth and repeat the entire procedure until the initial wealth level on all simulation paths equals the original wealth level, set to 100 in our case. Once this is achieved, we have a solution of the model in which wealth levels are consistent on each path and for each time period and prices on each path and time period are set to equate the utility of renting and owning.

2.2 Model Solution

Table 1 reports the base parameters we use in our numerical solution. In additional to the parameters already mentioned above, we set the number of time periods to 10, each one representing roughly 3 to 5 years of the agent's life, and we set the number of simulations to 10,000. While we would have like to increase the number of simulations paths, the above procedure is computationally very demanding and increasing the simulation paths greatly increases the time to find a solution.

Figure 1 reports the equilibrium real estate price at time 1 as a function of the lending rate for minimum credit score requirement of 600 and 700. In both cases, higher borrower cost relative to the cost of renting results in lower prices today. In other words, with high

borrowing costs, agents require high expected future price appreciation to make the decision to buy.

Furthermore, the high minimum credit score requirement of 700 places a potential future burden on homeowners as it increases the penalty if they are forced into default in the future. The penalty is increased because it would take longer for an agent to recover their credit score and borrower again.

Importantly, the minimum credit score requirement has a relatively larger impact for very low interest rates because the penalty of not being able to borrow in the future is larger when homeownership is relatively more attractive.

Figure 2 focuses on the effect of minimum credit score requirement on initial prices for three levels of the borrowing rate: 3, 4, and 5 percent. The higher the minimum credit score requirement, the more reluctant are agents to borrow and own. This is particularly true if interest rates are low relative to the cost of renting, in which case the penalty of being unable to buy real estate is significant and very restrictive.

The overall conclusion of the above analysis is that eased lending terms, either in the form of low borrowing costs, low credit score requirements, or both, has a positive impact on the real estate markets and pushes prices higher.

3.0 Empirical evidence

The theoretical model described above links deterioration of credit standards to real estate price increases. The deterioration of credit standards can take the form of lower credit score requirement, lower cost of borrowing relative to the rental cost, or both. In this section we test these empirical implications using a dataset of subprime originations. In particular we show that asset prices rise more and decline more in markets with high concentrations of aggressive instruments and that the use of aggressive instruments declines the most for markets that experience the largest price declines.

In our empirical analysis we utilize county-level subprime share of total mortgage originations (percent of dollar volume of loans) from HMDA. We also use the county-level Economy.com home price indices, and Census median household income.

Table 2 reports the impact of county-level share subprime originations on real estate market price changes, controlling for change in median household income. Panel A reports the results using lagged originations, and Panel B reports the results using contemporaneous originations. Each cross-sectional regression is based on subprime originations and real estate price changes in 336 counties. The results reported in both tables are consistent with our hypothesis that subprime loans, as an example of aggressive lending, induce higher price appreciation in up markets, and larger price depreciation in down markets. For instance, subprime originations, either contemporaneous (Panel B) or lagged (Panel A) have a strongly positive impact on price appreciation in all years of

rising property markets (2001 to 2005). Subprime originations, on the other hand, have a strong negative impact on the real estate markets in 2007, which is the only full year of price declines in our sample. These relationships are strongly significant, even when controlling for the contemporaneous change in household income in a county.

To address a potential endogeneity problem due to persistency in subprime originations through time, we replace subprime originations in the above regression with two separate instruments that are highly correlated with subprime originations but uncorrelated with future price changes. The first instrument we use is housing affordability. Affordability is highly correlated with subprime originations because borrowers in less affordable markets are more likely to resort to aggressive lending instruments so that they can enter the housing market. At the same time, affordability has no implications for future house price appreciation. In the first stage estimation, reported in Table 3, we regress the share of subprime originations on the on the NAHB/Well Fargo Housing Opportunity Index. The housing opportunity index (HOI) reports the percent of sold homes in an MSA that can be purchased by a median income family. Our data includes 93 MSAs. Low levels of the index indicate low affordability and are associated strongly with higher use of subprime mortgages. In the second stage estimation, reported in Table 4, we use the predicted share of subprime originations based on the contemporaneous level of the HOI to explain house price appreciation, controlling for the contemporaneous change in household income. Both the lagged (Panel A) and contemporaneous (Panel B) instrumental variable (predicted subprime originations) are related to higher price appreciation during up markets and larger price depreciation during down markets.

We further use percent minority (Black and Hispanic) population as an alternative instrument for subprime originations. Analogously to the HOI index, percent minority population is highly correlated with subprime originations but has no implications for contemporaneous or future house price appreciation. Table 5 reports the first stage cross-sectional regression estimation of subprime originations on percent minority (Black and Hispanic) population, one per year. While the explanatory power of these regressions is relatively low, between 18 and 20%, the percent minority population is a highly significant variable in all regressions.

The second stage estimation uses the predicted subprime origination to explain house price appreciation, controlled for change in personal income. The results of this estimation are reported in Table 6. During up markets, the predicted subprime originations have a positive and significant impact on the underlying real estate markets. The regressions for 2006 provide mixed and insignificant results because 2006 was a pivotal year, with positive appreciation during the first 6 to 9 months, and house price declines late in the year. The regressions for the only down market in this sample, the year 2007, result in negative and significant coefficient of predicted subprime originations on house price changes.

The overall implications of both the direct and the IV estimation is consistent with aggressive lending, in the form of subprime mortgages, having an impact on the underlying real estate markets and ultimately exacerbating their cycle. Note that this

result holds even before we observe large default levels, which did not occur until late 2007 and early 2008. This implies that it is the fluctuation in the supply of aggressive lending instruments that increases the long-term house price volatility rather than default experience.

4.0 Conclusion

In this paper we show, both theoretically and empirically, that the presence of aggressive lending instruments magnifies real estate market cycles. Markets with high concentrations of aggressive lending instruments are at a risk of relatively larger price declines following a negative demand shock. At the same time, markets that decline the most following a negative demand shock tend to suffer greater withdrawal of aggressive lending. These two findings are consistent with the prevalence of aggressive instruments that enables recent realizations of the market and magnifies the effects of negative demand shocks.

This magnifying effect on the downside is present even in the absence of sizeable default rates. In other words, it is the fluctuation of the use of aggressive instruments that exacerbates market downturns, not necessarily the fact that such instruments generate relatively higher default rates. Of course, this effect is magnified if the aggressive instruments generate higher levels of default. Either way, the impact of the initial share and subsequent repricing of aggressive lending exacerbates the cycle. In fact, the

markets that have highest concentration of aggressive lending instruments are currently experiencing the largest price declines.

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Table 1: Base model parameters

Variable	Base Level
Risk-aversion γ	5
Rent yield δ	5%
Mortgage interest rate r	5%
Volatility of Income	30%
Credit score after default	500
Credit score improvement if no default	50
Minimum credit score to borrow	700
Number of time periods	10
Number of simulations	10000

Table 2: Subprime lending and real estate markets

A. Lagged Originations

	2002	2002	2003	2003	2004	2004	2005	2005	2006	2006	2007	2007
Intercept	**4.29**	**3.99**	**4.43**	**4.37**	1.54	1.14	**5.27**	**4.43**	**2.96**	**3.80**	**3.02**	**2.97**
Std Error	0.83	0.83	0.74	0.75	1.11	1.10	1.54	1.56	0.54	0.66	0.72	0.69
Subprime Originations	**0.31**	**0.32**	**0.29**	**0.28**	**0.78**	**0.78**	**0.48**	**0.44**	**0.10**	**-0.08**	**-0.69**	**-0.72**
Std Error	0.06	0.06	0.05	0.05	0.08	0.08	0.09	0.09	0.03	0.03	.04	.04
Change in Income		15.5		7.57		**32.2**		**32.4**		**23.3**		13.5
Std Error		7.59		9.57		9.80		12.3		10.3		9.1
Adj R2	7.02	8.18	9.34	9.52	23.3	25.7	7.90	9.80	3.03	4.50	28.2	28.9

B. Same Year Originations

	2001	2001	2002	2002	2003	2003	2004	2004	2005	2005	2006	2006
Intercept	**5.13**	**5.00**	**3.08**	**2.74**	**2.79**	**2.81**	-1.13	-1.39	**3.44**	2.75	**2.12**	**2.78**
Standard Error	0.50	0.49	0.80	0.81	0.73	0.74	1.25	1.23	1.53	1.54	0.49	0.61
Subprime Originations	**-0.04**	**-0.04**	**0.38**	**0.39**	**0.42**	**0.42**	**0.81**	**0.80**	**0.59**	**0.55**	**0.09**	**-0.09**
Standard Error	0.04	0.04	0.05	0.05	0.05	0.05	0.07	0.07	0.09	0.09	.03	.03
Change in Income		**13.2**		**17**		-1.51		**29.3**		**28.9**		**21.1**
Standard Error		3.81		7.56		8.86		9.59		12.1		9.8
Adj R2	0.34	3.81	13.1	14.5	16.9	16.9	27	29	11.7	13.2	4.8	5.6

Table 2 reports the impact of county-level share subprime originations on real estate market price changes, controlling for change in median household income. Panel A reports the results using lagged originations, and Panel B reports the results using contemporaneous originations. The subprime share originations by county is available from HMDA, and was provided to us by economy.com. We use the Economy.com house price change by county. Changes in median household income are available from the census. Each cross-sectional regression is based on subprime originations and real estate price changes in 336 counties. The results reported in both tables are consistent with our hypothesis that subprime loans, as an example of aggressive lending, induce higher price appreciation in up markets, and larger price depreciation in down markets. The relationship is strongly significant, even when controlling for the contemporaneous change in household income in a county.

Table 3: Affordability as an instrument for subprime lending

	2001	2002	2003	2004	2005	2006
Intercept	22.085	26.445	25.980	28.650	25.125	24.251
Std Error	1.557	1.402	1.186	0.967	0.844	0.941
HOI	-0.131	-0.180	-0.173	-0.177	-0.144	-0.164
Std Error	0.024	0.021	0.018	0.015	0.015	0.016
Adj R2	0.257	0.460	0.531	0.621	0.514	0.490

Table 3 reports the results of a single-variable regression, one per year, of subprime origination on the Housing Opportunity Index (provided by NAHB and Wells Fargo). The housing opportunity index (HOI) reports the percent of sold homes in an MSA that can be purchased by a median income family. Our data includes 93 MSAs. Low levels of the index indicate low affordability, and are associated strongly with higher use of subprime mortgages. We use the predicted subprime originations as an instrument in the regressions reported in Table 4.

Table 4: Affordability and subprime lending

A. Lagged Originations

	2002	2002	2003	2003	2004	2004	2005	2005	2006	2006	2007	2007
Intercept	5.72	**-7.45**	0.78	0.77	**-11.9**	**-12.5**	3.79	2.16	**6.98**	**6.59**	4.56	4.31
Standard Error	3.15	3.14	2.29	2.29	3.49	3.48	5.19	5.26	1.60	1.80	2.58	3.31
Subprime Originations	**1.03**	**1.13**	**0.57**	**0.53**	**1.76**	**1.76**	**0.69**	**0.66**	**-0.36**	**-0.37**	**-1.12**	**-1.13**
Standard Error	0.22	0.22	0.15	0.15	0.22	0.22	0.28	0.28	0.09	0.09	.19	.19
Change in Income		**37**		24.1		37.5		50.4		31.3		33.4
Standard Error		15.5		22.5		23.7		32.5		28.4		29.1
Adj R2	19.1	24.5	14.1	15.3	42.4	44.1	6.61	9.19	15.7	15.9	46.2	48.5

B. Same Year Originations

	2001	2001	2002	2002	2003	2003	2004	2004	2005	2005	2006	2006
Intercept	**4.23**	**5.29**	-3.81	-4.34	-3.91	-3.76	**-16.1**	**-16.6**	-7.65	-9.13	-3.20	-3.31
Standard Error	2.10	2.05	2.19	2.21	2.01	2.02	3.65	3.64	5.25	5.35	2.18	2.21
Subprime Origination	0.03	-0.05	**0.83**	**0.85**	**0.89**	**0.86**	**1.72**	**1.71**	**1.34**	**1.32**	**-0.49**	**-0.52**
Standard Error	0.05	8.69	0.27	0.29	0.36	0.36	0.46	0.47	0.18	0.20	0.13	0.14
Change in Income		**21.4**		20.1		16.5		31.4		39.0		49.4
Standard Error		7.41		14.7		20.2		22.4		30		35.0
Adj R2	0.05	8.69	27.5	29	36.5	37	46.7	48	19	20.5	18.3	19.1

Table 4 reports the results of the cross-sectional two-stage regression for each year in our sample. The first stage regresses the HMDA-reported subprime originations on the Housing Opportunity Index (provided by NAHB and Wells Fargo). The housing opportunity index (HOI) reports the percent of sold homes in an MSA that can be purchased by a median income family. Our data includes 93 MSAs. Low levels of the index indicate low affordability, and are associated strongly with higher use of subprime mortgages. In the second stage, we use the predicted share of subprime originations based on the contemporaneous level of the HOI to explain house price appreciation, controlling for the contemporaneous change in household income. Both the lagged (Panel A) and contemporaneous (Panel B) instrumental variable (predicted subprime originations) are related to higher price appreciation during up markets and larger price depreciation during down markets.

Table 5: Minority concentration as an instrument for subprime lending

	2001	2002	2003	2004	2005	2006
Intercept	10.52	11.35	10.64	13.06	13.39	12.2
Std Error	0.51	0.56	0.51	0.52	0.52	0.51
% minority	**8.60**	**9.90**	**12.08**	**13.53**	**11.70**	**12.9**
Std Error	1.93	2.12	1.93	1.97	1.97	1.94
Adj R2	0.09	0.09	0.16	0.18	0.14	0.17

Table 5 reports the results of a single-variable regression, one per year, of subprime origination on minority (Black and Hispanic) share of the CBSA population, as provided by the 2000 census. Our data includes 215 CBSAs. While the explanatory power of these regressions is relatively low, the percent minority is a highly significant predictor of subprime originations. We use the predicted subprime originations as an instrument in the regressions reported in Table 6.

Table 6: Minority concentration and subprime lending

A. Lagged Originations

	2002	2002	2003	2003	2004	2004	2005	2005	2006	2006	2007	2007
Intercept	0.55	0.94	2.84	1.59	-0.36	0.09	3.66	2.11	0.86	2.86	.76	2.21
Standard Error	3.02	3.02	2.83	2.86	3.79	3.77	4.52	4.57	1.79	1.90	2.66	3.18
Subprime Originations	**0.54**	**0.50**	0.38	**0.42**	**0.94**	**0.86**	**0.62**	**0.63**	0.05	0.05	**-.39**	**-.41**
Standard Error	0.25	0.25	0.21	0.21	0.29	0.29	0.28	0.28	0.11	0.11	.13	.13
Change in Income		13.2		**29.6**		**31**		32.5		**-43.6**		33.1
Standard Error		9.08		13.3		14.6		17.8		15.4		24.4
Adj R2	0.76	4.34	0.55	2.90	1.47	4.48	1.18	1.41	0.15	0.16	4.2	4.8

B. Same Year Originations

	2001	2001	2002	2002	2003	2003	2004	2004	2005	2005	2006	2006
Intercept	**4.04**	**4.72**	1.04	1.39	3.75	2.59	-1.32	-0.80	2.17	0.59	1.20	2.83
Standard Error	1.70	1.71	2.80	2.80	2.33	2.36	4.08	4.06	5.20	5.24	4.8	3.54
Subprime Origination	0.01	-0.05	**0.46**	**0.42**	0.32	0.35	**0.84**	**0.77**	**0.71**	**0.73**	0.06	0.06
Standard Error	0.14	0.14	0.21	0.21	0.18	0.18	0.26	0.26	0.33	0.33	0.11	0.12
Change in Income		10.3		13.2		**29.6**		**31**		32.5		**-43.4**
Standard Error		4.60		9.08		13.3		14.6		17.8		15.3
Adj R2	0.01	2.34	0.76	4.35	0.56	2.91	1.47	4.48	1.19	1.41	0.16	0.16

Table 6 reports the results of the cross-sectional two-stage regression for each year in our sample. The first stage regresses the HMDA-reported subprime originations on the percent minority population (as reported by the 2000 census). The results of the first stage are reported in Table 11. In the second stage, we use the predicted share of subprime originations based on the percent minority to explain house price appreciation, controlling for the contemporaneous change in household income. Both the lagged (Panel A) and contemporaneous (Panel B) instrumental variable (predicted subprime originations) are related to higher price appreciation during up markets and larger price depreciation during down markets.

Figure 1: Equilibrium Prices and Lending Rates

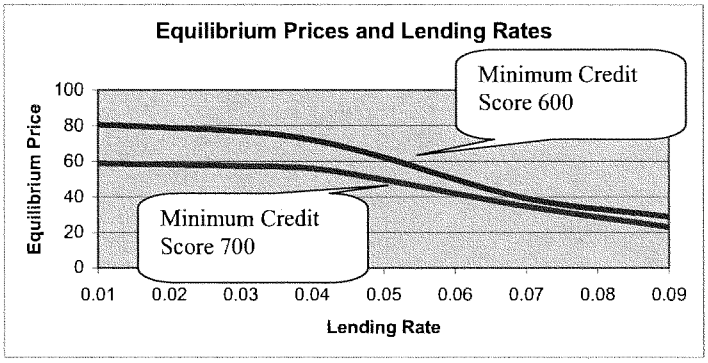

Figure 1 depicts the equilibrium real estate prices as a function of the lending rate for two cases: minimum required credit score of 600 and 700. As expected, prices increase with lower lending rates and are uniformly higher for lower minimum credit score requirements.

Figure 2: Equilibrium Prices and Minimum Credit Score Requirements

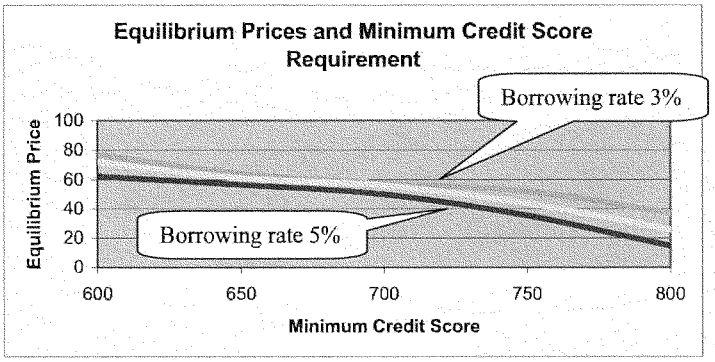

Figure 2 depicts the evolution of equilibrium real estate prices as a function of the minimum credit score required to obtain a loan. The three cases depicted are for interest rates of 3, 4, and 5%. As expected, reducing the minimum required credit score increases the equilibrium price of real estate. Furthermore, prices are uniformly higher for lower cost of borrowing.

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Explaining the Housing Bubble

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EXPLAINING THE HOUSING BUBBLE

ADAM J. LEVITIN[†]

SUSAN M. WACHTER[‡]

There is little consensus as to the cause of the housing bubble that precipitated the financial crisis of 2008. Numerous explanations exist: misguided monetary policy; government policies encouraging affordable homeownership; irrational consumer expectations of rising housing prices; inelastic housing supply. None of these explanations, however, is capable of fully explaining the housing bubble, much less the parallel commercial real estate bubble.

This Article posits a new explanation for the housing bubble. It demonstrates that the bubble was a supply-side phenomenon, attributable to an excess of mispriced mortgage finance: mortgage finance spreads declined and volume increased, even as risk increased, a confluence attributable only to an oversupply of mortgage finance.

The mortgage finance supply glut occurred because markets failed to price risk correctly due to the complexity and heterogeneity of the private-label mortgage-backed securities (MBS) that began to dominate the market in 2004. The rise of private-label MBS exacerbated informational asymmetries between the financial institutions that intermediate mortgage finance and MBS investors. The result was overinvestment in MBS that boosted the financial intermediaries' profits and enabled borrowers to bid up housing prices.

Despite mortgage securitization's inherent informational asymmetries, it is critical for the continued availability of the long-term fixed-rate mortgage, which has been the bedrock of American homeownership since the Depression. The benefits of securitization, therefore, must be reconciled with the need for economic stability. The Article proposes the standardization of MBS to reduce complexity and heterogeneity in order to rebuild a sustainable, stable housing finance market based around the long-term fixed-rate mortgage.

[†] Associate Professor, Georgetown University Law Center. The authors would like to thank William Bratton and Sarah Levitin for their comments and encouragement, Manuel Adelino for sharing proprietary data, and Crystal Lu, Grant MacQueen, Anthony W. Orlando, Michael Shaheen, Eric Virbitsky, and the Georgetown Law Library for research assistance. This paper has benefited from presentations at the Philadelphia Federal Reserve's conference on Reinventing Older Communities and at the Tobin Project's Workshop on Behavioral/Institutional Research and Financial Institutions. Comments? AJL53@law.georgetown.edu.

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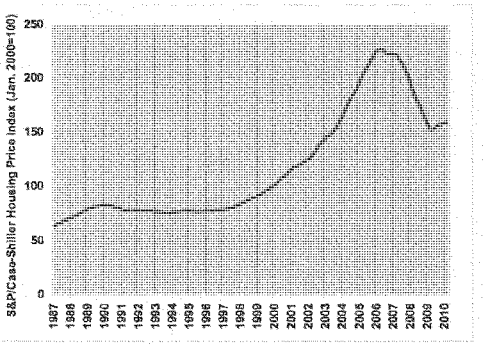
INTRODUCTION

This Article explains the historic U.S. housing bubble. From 1997 to 2006, nominal U.S. housing prices rose 188%.[1] By mid-2009, however, housing prices had fallen by 33% from peak.[2] (See Figure 1.)

Figure 1. U.S. Housing Prices (Nominal), 1987-2010[3]



There is little consensus about what caused the bubble,[4] or even on what part of the housing price appreciation between 1997 and 2006 was in fact a bubble.[5] Some explanations, based on macroeconomics, posit that the bubble was caused by excessively easy monetary policy. Thus, economist John Taylor has argued that the bubble was the result of the Federal Reserve holding interest rates too low for too long, resulting in artificially cheap mortgage credit and thereby stoking housing demand.[6] Several commentators have fingered federal government fair lending and affordable housing policies as encouraging mortgage lending to less-creditworthy consumers.[7] Other scholars have emphasized the sharp deterioration in lending standards as contributing to the rise in

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[1] S&P/Case-Shiller Housing Price Index (Composite-10) (nominal prices). When adjusted for inflation, the increase in housing prices was still an astounding 135%.

[2] *Id.* On an inflation-adjusted basis, the peak-to-trough price decline was 38%.

[3] S&P/Case-Shiller Housing Price Index (Composite-10) (non-inflation adjusted).

[4] *See* Edward L. Glaeser *et al.*, *Can Cheap Credit Explain the Housing Boom?*, NBER Working Paper, No. 16230, July 2010.

[5] *See infra*, section II.B.

[6] JOHN B. TAYLOR, *GETTING OFF TRACK: HOW GOVERNMENT ACTIONS AND INTERVENTIONS CAUSED, PROLONGED, AND WORSENED THE FINANCIAL CRISIS* (2009).

[7] *See, e.g.*, Edward Pinto, *Acorn and the Housing Bubble*, WALL ST. J., Nov. 12, 2009; Peter Wallison, *The True Origins of the Financial Crisis*, AM. SPECTATOR, Feb. 2009; Peter Wallison, *Cause and Effect: Government Policies and the Financial Crisis*, AEI ONLINE, Nov. 2008;THOMAS SOWELL, *THE HOUSING BOOM AND BUST* (2009).

housing prices,[8] as well as the importance of changes to the mortgage market institutional structure.[9]

Other explanations of the bubble have been demand-side explanations, meaning that the bubble was caused by excessive consumer demand for housing. Housing economist Robert Shiller has propounded a mass psychology explanation, arguing that the bubble was the result of irrational consumer demand, encouraged by a mistaken belief that housing prices could only move upwards.[10] Economists Markus Brunnermeir and Christian Julliard have presented an alternative behavioral theory of the housing bubble, suggesting that consumers' failure to disentangle real and nominal interest rates results in an overestimation of the value of real estate in times of falling inflation.[11] And urban economists Edward Glaeser, Joseph Gyourko, and Albert Saiz have argued that inelastic housing supply resulted in population growth

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[8] Giovanni Dell'Ariccia *et al. Credit Booms and Lending Standards: Evidence from the Subprime Mortgage Market*, Int'l Monetary Fund Working Paper (2008) (noting that "lending standards declined more in areas with higher mortgage securitization rates"); Yuliya Demyanyk & Otto Van Hemert, *Understanding the Subprime Mortgage Crisis*, REV. FIN. STUDIES (2008). Geetesh Bhardwaj & Rajdeep Sengupta, *Where's the Smoking Gun? A Study of Under- writing Standards for U.S. Subprime Mortgages*, Fed. Reserve Bank of St. Louis Working Paper No. 2008-036A; Patricia A. McCoy *et al., Systemic Risk through Securitization: The Result of Deregulation and Regulatory Failure*, 41 CONN. L. REV. 493 (2009) (arguing the ability to pass off risk allowed lenders who lowered standards to gain market share and crowd out competing lenders who did not weaken credit standards); Kurt Eggert, *The Great Collapse: How Securitization Caused the Subprime Meltdown*, 41 CONN. L. REV. 1257 (2008-2009) (arguing that securitization encouraged market participants to weaken underwriting standards); Christopher Peterson, *Predatory Structured Finance*, 28 CARDOZO L. REV. 2185 (2007).

[9] Benjamin J. Keys *et al., Financial Regulation and Securitization: Evidence from Subprime Mortgage Loans*, 56 J. MONETARY ECON. 700 (2009); Benjamin J. Keys *et al., Did Securitization Lead to Lax Screening? Evidence from Subprime Loans*, 125 Q. J. ECON. 307 (2010); Atif Mian *et al., The Political Economy of the US Mortgage Default Crisis*, NBER Working Paper No. 14468, November (2008) (finding correlation between increase in mortgage securitization and expansion of mortgage credit in subprime ZIP codes, unassociated with income growth); Atif Mian & Amir Sufi, *The Consequences of Mortgage Credit Expansion: Evidence from the U.S. Mortgage Default Crisis*, 122 Q. J. ECON. 1449 (2009) (homequity borrowing accounts for a large share of the rise in household leverage during the bubble as well as defaults); Atif Mian & Amir Sufi, *Household Leverage and the Recession of 2007 to 2009*, NBER Working Paper No. 15892, April 2010. *But see* Ryan Bubb & Alex Kaufman, *Securitization and Moral Hazard: Evidence from a Lender Cutoff Rule*, Fed. Reserve Bank of Boston Public Pol'y Discussion Paper, No. 09-5, Sept. 2009 (arguing that securitization did not result in riskier lending); Amir Khandani *et al., Systemic Risk and the Refinancing Ratchet Effect*, NBER Working Paper No. 15362, Sept. 2009 (easy refinancing facilitated widespread home equity extraction resulted in an inadvertent coordination of leverage and default cycle among homeowners); Jack Favilukis *et al., Macroeconomic Implications of Housing Wealth, Housing Finance, and Limited Risk-Sharing in General Equilibrium*, May 7, 2010, SSRN Working paper, *available at* http://ssrn.com/abstract=1602163 (boom was a response to a relaxation of credit constraints and a decline in transaction costs for home purchases and refinancings).

[10] ROBERT J. SHILLER, *IRRATIONAL EXUBERANCE* (2d ed. 2006). *But see* Christopher J. Mayer & Todd Sinai, "U.S. House Price Dynamics and Behavioral Finance," in *POLICY MAKING INSIGHTS FROM BEHAVIORAL ECONOMICS* 266, 290 (Christopher L. Foote *et al.*, eds.) (2009) (suggesting that fundamental factors like long-term interest rates, rather than psychological factors were dominant in the housing bubble of the 2000s).

[11] Markus K. Brunnermeier & Christian Julliard, *Money Illusion and Housing Frenzies*, 21 REV. FIN. STUD. 135 (2008) (arguing that because consumers cannot disentangle real and nominal changes in interest rates and rents, consumers fail to recognize that when expected inflation falls, future price and rent appreciation, not just nominal interest rates, will also fall).

placing upward pressures on housing prices, thereby explaining some of the geographic variation in the housing bubble.[12]

In this Article, we challenge the existing explanations of the housing bubble and set forth a new, and we believe more convincing, explanation. We argue that the bubble was, in fact, a *supply-side* phenomenon, meaning that it was caused by excessive supply of housing finance. The supply-glut was not due to monetary policy, however, or government affordable housing policy. Instead, it was the result a fundamental shift in the structure of the mortgage finance market from regulated to unregulated securitization.

From 1997, when housing prices began to rise, through 2003, the appreciation in the housing market can be explained by economic fundamental values—the cost of home purchase relative to renting and interest rates—meaning that houses prices were not overvalued. After 2003-2004, however, fundamentals cease to explain housing prices. A major change occurred in the market in 2003-2004. The market shifted from financing mortgages using regulated securitization to the use of unregulated securitization. The unregulated securitization market featured serious informational asymmetries between financial intermediaries and investors that resulted in investors underpricing risk and oversupplying mortgage finance. An oversupply of underpriced mortgage credit boosted financial intermediaries' volume-based profits and enabled borrowers to bid up housing prices, thereby fueling a bubble.

Securitization—the pooling of loans and issuance of securities backed by the cashflow from those loans—provides the financing for the vast majority of mortgages in the United States. Mortgage securitization involves a chain of financial institutions intermediating between the capital markets, which supply mortgage credit, and borrowers, who consume mortgage credit. The financial institutions that originate and securitize loans serve as economic (but not legal) agents for the end borrowers and lenders. In their intermediation role, these financial institutions do not hold more than a temporary interest in the mortgages they facilitate, so they have very different (and often adverse) incentives than borrowers and investors, the economic principals in mortgage loan transactions.

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[12] Edward L. Glaeser *et al*, *Housing Supply and Housing Bubbles*, 64 J. URBAN ECON. 198 (2008), *available at* http://www.economics.harvard.edu/faculty/glaeser/files/bubbles10-jgedits-NBER version-July_16,_2008.pdf. *See also* Thomas Davidoff, *Supply Elasticity and the Housing Cycle of the 2000s*, working paper, Mar. 2, 2010, *at* http://ssrn.com/abstract=1562741.

Prior to 2003-2004, most mortgage-backed securities (MBS) were issued by regulated government-sponsored entities[13] (GSEs) Fannie Mae[14] and Freddie Mac[15] and the federal agency Ginnie Mae[16] (collectively with the GSEs, the "Agencies"). In 2003-2004, the market shifted radically toward MBS issued by unregulated private-label securitization conduits, typically operated by investment banks. The shift occurred as financial institutions sought to maintain earnings levels that had been elevated during 2001-2003 by an unprecedented refinancing boom due to historically low interest rates. Earnings depended on volume, so maintaining elevated earnings levels necessitated expanding the borrower pool using lower underwriting standards and new products that the Agencies would not (initially) securitize. Thus, the shift from Agency securitization to private-label securitization also corresponded with a shift in mortgage product type, from traditional, amortizing, fixed-rate mortgages (FRMs) to nontraditional, structurally riskier, nonamortizing, adjustable-rate mortgages (ARMs), and in the start of a sharp deterioration in mortgage underwriting standards.

The growth of private-label securitization resulted in the oversupply of underpriced housing finance. As we demonstrate empirically, starting in 2003-2004, risk premiums for housing finance fell and the market expanded even as risk was rapidly rising. This set of circumstances—a decrease in risk-adjusted price coupled by an increase in quantity—can occur only because of an increase in the supply of housing finance that outpaces any increase in demand. In other words, demand-side factors like irrational consumer demand and inelastic housing supply may have played a role in the bubble, but their total effect on increased consumer demand was less than the increase in the supply of housing finance.

Private-label mortgage-backed securities (PLS) facilitated overinvestment because they are informationally opaque. PLS and the nontraditional mortgages they finance are heterogeneous, complex products. The structure of these products made it very difficult to accurately gauge their risk and hence price. In the presence of such informational opacity, informational asymmetries between the financial institution sellers of PLS and PLS investors abound.

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[13] Historically, the GSEs were federal agencies, but since 1968, they have been private-owned, but chartered by the federal government and subject to federal regulation.

[14] Fannie Mae is a portmanteau for Federal National Mortgage Association.

[15] Freddie Mac is a portmanteau for the Federal Home Loan Mortgage Corporation.

[16] Ginnie Mae is a portmanteau for the Government National Mortgage Association.

Financial institutions exploited these informational asymmetries to boost mortgage origination and securitization volume and thus their profits, which derive from fees taken at every stage of the origination and securitization process. In this fee-driven business model, increased volume meant increased profit, so financial institutions were incentivized to make and securitize as many mortgages as possible.

Increasing the mortgage product for securitization necessitated to expanding the pool of mortgage borrowers. This required lowering underwriting standards and promoting nontraditional mortgage products with initially affordable payments. The easy mortgage credit that resulted from the growth of PLS enabled housing prices to be bid up, thereby creating a bubble that collapsed, like a pyramid scheme, once the market could no longer be expanded.

Correcting the informational problems in housing finance is critical for preventing future bubbles. Real estate is an area that is uniquely prone to bubbles because of lack of short pressure. For either markets or regulators to prevent bubbles, real time information about the cost of credit is required, as asset bubbles are built on the shoulders of leverage. The two components of the cost of credit are the interest rate and risk premium. The former is easily observable, but the latter—which includes underwriting standards—cannot currently be observed in real time. For markets and regulators to prevent bubbles, they must be able to observe the total cost of financing.

Greater disclosure alone is insufficient to reveal the character of credit in the housing finance market because of the difficulties in modeling credit risk for heterogeneous, complex products with little track record. Correcting the informational problems in housing finance requires not only better disclosure about the mortgage loans backing MBS, but also substantive regulation, including standardization, of mortgage underwriting practices, mortgage forms, and MBS credit structures in order to make disclosures effective. Put differently, disclosure-based regulation in the housing finance market can only be effective when it is coupled with regulation of substantive terms in order to make risks salient and therefore priceable.[17] Product standardization

[17] Traditionally, securities have been regulated through a disclosure-based regime; there is little regulation of the substantive terms and structures of securities. (A major exception is the Trust Indenture Act of 1939, which imposes some substantive requirements for publicly issued debt securities. Other substantive requirements are necessary for qualifying for various securities registration and disclosure exemptions.) Our argument that disclosure-based regulation requires substantive term regulation in order to be effective represents a major departure from previous approaches to financial regulation. Rather than substantive term regulation being a parallel regulatory approach to disclosure regulation, it is a complementary approach. While this Article focuses on the need to combine disclosure and substantive term regulation for MBS, this combined regulatory approach has potential for other products as well. We

makes risks salient by focusing analysis on narrow parameters for variation.

Standardization of MBS would not mean that financial institutions could not make nontraditional mortgages, only that they could not sell them into capital markets. There are appropriate niches for nontraditional products, but the informational asymmetries and principal-agent problems endemic to securitization counsel for restricting these exotic products to banks' books. Instead, secondary market standardization facilitates the transparency of the character of credit and therefore is critical to the prevention of future real estate bubbles and ensuring a stable and sustainable housing finance system.

* * * * *

Part I of the Article begins with discussion of the importance of homeownership as a policy goal and the critical role of the long-term, fixed-rate, fully-amortized[18] mortgage in achieving sustainable homeownership and housing market stability. The Article then explains why absent securitization the long-term, fixed-rated, fully-amortized[19] mortgage would not be widely available. Next, the Article turns to a consideration of the changes in the securitization market that begat the housing bubble, in particular the rise of PLS and nontraditional mortgage products.

Part II of the Article presents a new explanation of the housing bubble. It demonstrates that the bubble was a supply-side phenomenon that began in 2003-2004, and that it corresponded with a shift in the mortgage securitization market from Agency securitization of traditional FRMs to private-label securitization of nontraditional ARMs. This section presents new data on PLS pricing that shows that risk-adjusted spreads on PLS over Treasuries declined even as PLS volume rose during the bubble. In other words, the price of mortgage finance decreased while the quantity was increasing. This phenomenon is only consistent with an outward (rightward) shift in the housing finance supply curve that outstripped any shift in the demand curve.

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emphasize, nonetheless, that we are not proposing substantive term regulation for all securities; housing finance is different because of the systemic risk inherent in the housing finance system.

[18] In a fully-amortized mortgage loan, part of every monthly payment is applied to the principal balance of the loan. In a non-amortized mortgage loan, monthly payments are only applied to interest and the entire original principal balance remains outstanding until the end of the loan's term.

[19] Monthly payments on a fully-amortized mortgage are applied to both interest and principal; the principal balance is thereby steadily reduced on a fully-amortized mortgage. A non-amortized mortgage has payments of interest only until the final payment, when the entire principal is due as a "bullet." A mortgage can also be partially amortized, meaning that only some periodic payments are applied to principal, or the mortgage can be amortized over a longer period than the term of the loan, meaning that every periodic payment pays down principal, but there is still a larger "balloon" payment of principal due at the end of the loan.

Part III turns to a consideration of other theories of the housing bubble—irrational exuberance, inability of consumers to distinguish real and nominal interest rates resulting in excess consumer demand, housing supply inelasticity, affordable housing policies, and monetary policy. It shows that they are at best incomplete, and, at worst, contrary to all evidence.

Part IV argues that the oversupply of mispriced mortgage finance was the result of the shift from regulated Agency securitization to unregulated private-label securitization. The informational asymmetries that exist in nontraditional mortgages and PLS resulted in investors mispricing risk and oversupplying mortgage capital, thereby boosting financial institution intermediaries' profits and encouraging further expansion of the PLS market.

Part IV also shows how, in the PLS market, the normal constraints on declining mortgage and MBS underwriting quality—regulation, credit ratings, debt market discipline (including limited risk appetite from savvy subordinated debt investors), and short pressures—all failed, thereby enabling a bubble. Part IV includes consideration of the parallel commercial real estate bubble, which occurred in a market where there has always been only private-label securitization.

Part V concludes with a call for standardization of MBS and a proposal for restricting securitization to a limited set of proven traditional mortgage products.

Our Article makes five novel contributions to the literature on the housing bubble and the financial crisis. First, we present new empirical evidence that proves the bubble to have been a supply-side, rather than a demand-side phenomenon. Pinpointing the cause of the housing bubble is critical for evaluating whether and how future asset bubbles, particularly in housing, can be prevented.

Second, we present a failure-to-regulate theory of the housing bubble that explains the oversupply of underpriced mortgage credit. The bubble grew because housing finance was permitted to shift from a regulated to an unregulated space, where financial institutions were able and incentivized to exploit informational asymmetries. The bubble was not the result of regulation, but of *lack* of regulation. Our theory explains why normal market constraints on excessive risk failed, why the bubble grew when it did, and why it collapsed when it did. Existing theories of the housing bubble have thus far been incapable of explaining the timing of the bubble or accounting for the dramatic shift in the mortgage market's structure.

Third, our work is the first, to our knowledge, to incorporate an analysis of both the housing and the commercial real estate bubbles. Prior work has focused almost entirely on the residential housing bubble; virtually no scholarship exists on the commercial real estate bubble that paralleled the residential bubble. We believe that an explanation of the residential bubble must also be capable of explaining the contemporaneous commercial real estate bubble. Thus, the commercial real estate bubble presents a shibboleth for evaluating theories of the residential bubble.

Fourth, our Article is the first to present a systematic analysis of the housing bubble that evaluates the competing theories and presents a coherent, empirically-driven narrative of the bubble's development and collapse. The existing literature is comprised of expositions of various theories that largely ignore competing theories,[20] debunkings of theories that do not propound alternative theories,[21] or empirical studies that attempt to establish micro-points, but do not attempt to present a larger theory of the housing bubble.[22]

Finally, our Article presents a clear prescription for ensuring future stability in housing finance that has profound implications for the restructuring of the housing finance market and the fate of the government-sponsored entities Fannie Mae and Freddie Mac.

I. THE EVOLUTION OF THE U.S. HOUSING FINANCE MARKET

A. Sustainable Home Ownership and the Fixed-Rate Mortgage

The United States has a long history of supporting homeownership as a public policy goal. Public policy has favored homeownership because homeownership offers many social benefits. Historically,

> there has been widespread agreement in the U.S. that homeownership is the preferred model for the vast majority of the population, both for reasons of "economic thrift" and "good citizenship," and for reasons of better health, recreation and family life expressed through the physical form of the detached single-family house and garden.[23]

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[20] *See, e.g.*, Taylor, *supra* note 6, Pinto, *supra* note 7; Wallison, *supra* note 7.

[21] *See, e.g.*, Ben S. Bernanke, *Monetary Policy and the Housing Bubble*, 100 AM. ECON. REV. ___ (forthcoming 2010), *available at* http://www.federalreserve.gov/newsevents/speech/bernanke20100103a.htm; Glaeser *et al.*, *supra* note 3.

[22] *See, e.g.*, Atif & Sufi, *supra* note 9; Keys *et al.*, *supra* note 9.

[23] Marc A. Weiss, *Own Your Own Home: Housing Policy and the Real Estate Industry* 7 (June 11, 1998) (unpublished paper presented to the Conference on Robert Moses and the Planned Environment at Hofstra University).

Some of the arguments in favor of homeownership developed in reaction to the condition of renters in urban slums and tenements,[24] or to fear of urban proletariat unrest,[25] but there are good modern reasons to support homeownership as the preferred model of residency when it is within a consumer's economic means. Rental markets are incomplete markets; leases on particular properties are not available for every or even most possible durations. Instead, the typical lease is for one-year; longer term rental tenancies are rarely guaranteed. This means that renters must routinely renegotiate their leases, which presents regular possibilities of financial shock due to rent increases. Homeowners are protected against this sort of shock;[26] while their property taxes may go up, they are unlikely to be priced out of a neighborhood because of neighborhood improvement and gentrification.

Homeownership is also a major investment that homeowners want to protect. Homeowners have an incentive to care for their homes. As the famous Larry Summers adage has it, "In the history of the world, no one has ever washed a rented car." So too has no one ever put a new roof on their rental unit or fixed its furnace.

These benefits for the individual homeowner have important positive externalities on neighbors and communities. When homeowners take care of their homes, it improves the value of their neighbors' homes.[27] Homeowners also tend to move less frequently than renters, so higher homeownership levels contribute to more stable communities, whose social and civic benefits have been widely documented.[28] Homeowners' incentive to care for their homes also extends to caring for their neighborhood and being concerned with issues like zoning, schools,

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[24] *See* Paul Matthew Stoner, *The Mortgage Market- Today and After WWI*, 19 J. LAND & PUB. UTIL. ECON., 224, 225 (1943); EDWARD L. GLAESER & JOSEPH GYOURKO, *RETHINKING FEDERAL HOUSING POLICY: HOW TO MAKE HOUSING PLENTIFUL AND AFFORDABLE* 48-49 (2008).

[25] *See* Marc A. Weiss, *Marketing and Finance Home Ownership: Mortgage Lending and Public Policy in the United States, 1918-1989, in* 18 BUS. & ECON. HISTORY 2D. SERIES 109 (WILLIAM J. HAUSMAN ED., 1989).

[26] *See* Todd Sinai & Nicholas Souleles, *Owner-Occupied Housing as a Hedge Against Rent Risk*, 120 Q. J. ECON. 763 (2005).

[27] Dan Immergluck & Geoff Smith, *The External Costs of Foreclosures: The Impact of Single-Family Mortgage Foreclosures on Property Values*, 17 HOUSING POL'Y DEBATE 57, 58 (2006); William C. Apgar *et al*, *The Municipal Cost of Foreclosures: A Chicago Case Study* (Homeownership Pres. Found., Hous. Fin. Pol'y Research Paper No. 2005-1, 2005, *available at* http://www.995hope.org/content/pdf/Apgar_Duda_Study_Full_Version.pdf; Jenny Schyuetz *et al.*, *Neighborhood Effects of Concentrated Mortgage Foreclosures*, (N.Y.Univ. Ctr. For Law & Econ. Law & Econ. Research Paper Serieis, Working Paper No. 08-41, 2008), *available at* http://ssrn.com/abstract=127021; Zhenguo Lin *et al.*, *Spillover Effects of Foreclosures on Neighborhood Property Values*, 38 J. Real Est. Fin. & Econ. (2009); Charles W. Calomiris, *et al.*, *The Foreclosure-House Price Nexus: Lessons from the 2007-2008 Housing Turmoil* (July 4, 2008).

[28] Robert D. Putnam, Bowling Alone: America's Declining Social Capital, 6 J. DEMOCRACY, 65 (1995); ROBERT D. PUTNAM, *BOWLING ALONE: THE COLLAPSE AND REVIVAL OF AMERICAN COMMUNITY* (2000).

traffic, and crime. In a community of homeowners, there is a rich set of positive cross-externalities and positive network effects. Homeownership thus has welfare enhancing effects for homeowners, communities, and the nation.

Homeownership comes with risks, though. Homes are expensive. Few individuals are able to purchase their homes outright. Most people need to borrow funds to purchase a home, typically with a mortgage. Mortgage finance has risks, just like any leveraged investment. The homeowner has the upside of the property's appreciation, but also the downside of the property's depreciation, to the extent of the equity stake in the home. Owning a home also typically involves committing a large portion of household wealth into a single, non-diversified asset that cannot be hedged.[29] And as political scientist Jacob Hacker has noted the risk involved in regular debt payments is compounded in an age of growing income insecurity.[30]

Despite these risks, homeownership is, on balance, socially beneficial, so long as it is sustainable. There is little point in policies that promote homeownership, unless the ownership is sustainable. The public benefits that come from homeownership only flow from long-term, sustainable homeownership.

The form of financing is critical for sustainable homeownership. Home mortgages divide, on the most generic level, into two types of products—fixed-rate mortgages (FRMs) and adjustable-rate mortgages (ARMs), depending on whether the interest rate is fixed for the life of the mortgage or adjusts periodically in reference to a public index rate such as LIBOR or the Federal Funds rate. Some ARMs are so-called hybrid or "rollover" ARMs; these mortgage have an initial fixed-rate period, after which the rate varies with an index.

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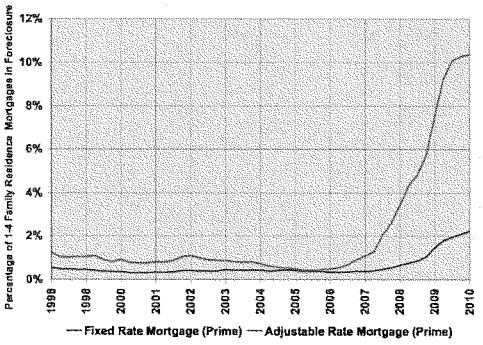
[29] Robert J. Shiller has suggested that housing derivatives could be used to hedge home price fluctuations. *See* Robert J. Shiller, *Derivative Markets for Home Prices*, *HOUSING MARKETS AND THE ECONOMY: RISK, REGULATION AND POLICY: ARTICLES IN HONOR OF KARL E. CASE* 17-32 (2009). Shiller has suggested that housing futures are not used as a hedging device by homeowners either because the do not want to face the fact that they might lose money or because the consumption value of housing is itself a hedge against its market value. *Id.* at 27-30. While both of these factors may be at play, we believe there is a simpler one: housing derivatives are poor hedges against home price decline. Housing derivates only exist for metropolitan statistical areas (MSA), not for particular neighborhoods or blocks. There is only weak correlation between price changes in a MSA and for a particular house. For example, housing prices in Chevy Chase, Maryland bear little if any correlation to those in Loudon County, Virginia, Prince George's County, Maryland, Frederick, Maryland, or Southeast Washington, D.C., although all are with in the same MSA. In theory, there could be housing futures on a particular neighborhood or block, but such narrowly focused futures would be very thin, illiquid markets and thus poor hedges, as the derivative's value might not move in time with housing values.

[30] JACOB S. HACKER, *THE GREAT RISK SHIFT: THE NEW ECONOMIC INSECURITY AND THE DECLINE OF THE AMERICAN DREAM* (2006).

ARMs are the dominant mortgage product in every country except the United States, Denmark, and Germany.[31] While the ARM has prevailed in much of the world, it has been able to do so in recent decades because of a very hospitable macroeconomic environment. Since the early 1980s, global interest rates have generally been declining. When they have risen, it has been by relatively small amounts and slowly.

When interest rates are declining, an ARM is a borrower-friendly product; mortgage payments decrease as interest rates decline. If interest rates go up sharply, however, monthly payments on an ARM can shoot up and quickly become unaffordable for the borrower.[32] Thus, as Figure 2 shows, foreclosure rates have thus been consistently higher for ARMs than for FRMs, even before the housing bubble, and during the financial crisis the discrepancy has been dramatic.

Figure 2. Home Mortgage Foreclosure Rate by Mortgage Type[33]



Housing finance via ARMs thus always poses the risk of an asset-liability duration mismatch for homeowners. Homeowners'

[31] *See* European Mortgage Federation, *Study on Interest Rate Variability in Europe*, July 2006. Denmark has a unique system of housing finance that dates back to the Great Fire of Copenhagen in 1795. *See* Michael Lee, *Alternative Forms of Mortgage Finance: What Can We Learn From Other Countries?* Working paper, 2010; Realkreditradet, *The Traditional Danish Mortgage Model*, 2009; M. Svenstrup & S. Willeman, *Reforming Housing Finance: Perspectives from Denmark*, 28 J. R.E. RESEARCH, 2 (2006). Germany has long-term fixed-rate mortgages, but, unlike the U.S. and Denmark, these mortgages are not callable for their first ten years absent prepayment penalties that render refinancing uneconomic.

[32] Indeed, this problem occurred in the UK in the early 1990s. Glen Bramley, *An affordability crisis in British housing: Dimensions, causes and policy impact*, 9 HOUSING STUDIES 103 (1994) (noting that a cause of the UK housing crisis in the 1990s was that most UK mortgages are ARMs without rate caps); David Miles, *The UK Mortgage Market: Taking a Longer-Term View, Final Report and Recommendations*, May 2004 (report to the Chancellor of the Exchequer), at 23, 91; *see also* RAY P. FORREST *ET AL.*, *HOME OWNERSHIP IN CRISIS?: THE BRITISH EXPERIENCE OF NEGATIVE EQUITY* (1999).

[33] Mortgage Bankers Association National Delinquency Surveys.

income tends to be fixed, but with an ARM, their mortgage expenses—often their largest single expense—are variable and can exceed their income if the ARM's rates go up. Therefore, while the ARM has been a vehicle for increasing homeownership in recent decades, it has the inherent potential to undermine the homeownership goal.

B. Securitization as a Solution to Asset-Liability Duration Mismatches

The United States' savings and loan (S&L) crisis of the 1980s and early illustrates the danger of asset-liability mismatches due to adjustable-rate obligations. Since the New Deal, most mortgages in the United States have been long-term, fully-amortized FRMs.[34] Pre-New Deal mortgages were frequently short-term, adjustable-rate "bullet loans"—non-amortized, interest-only loans with a the entire principal due as a "bullet" at the end. These loans were designed to be refinanced, but that was only possible if the homeowner had sufficient equity in the property and housing finance markets were functioning. Bullet loans exposed homeowners to significant refinancing and interest rate risk. The collapse of the mortgage market during the Depression showed just how fragile a housing market constructed of short-term, ARMs could be, and subsequent federal housing policy strongly encouraged the use of the long-term, fully-amortized FRM as a means of ensuring both affordability and systemic stability.

S&Ls are depository institutions restricted largely to consumer lending activities. They had, by the late 1970s, become dominant in the mortgage markets. Most of S&Ls' assets were the long-term, fully-amortized FRM loans encouraged post-New Deal. This meant that S&Ls had a fixed income stream. S&Ls' main liabilities—and source of operating funds—were deposits, which could be withdrawn with little notice.

In the 1970s, S&Ls were restricted in the interest rates they could pay on savings accounts. As interest rates rose in the late 1970s, S&Ls quickly lost deposits to money market mutual funds, which did not have regulated returns. Congress responded to this disintermediation in 1980 by phasing out the savings account interest rate restriction,[35] but this only meant that in order to compete for consumer savings with money market funds, S&Ls had to offer increasingly high interest rates on deposits. As a result, the cost of funds for S&Ls soared, but their

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[34] *See* Adam J. Levitin & Susan M. Wachter, *Rebuilding Housing Finance*, working paper (2010) for a more detailed history of U.S. housing finance.

[35] Depository Institutions Deregulation and Monetary Control Act of 1980, 12 U.S.C. § 1735f-7a (2010).

income—from the FRMs—remained constant. The S&Ls were quickly decapitalized, and a drawn-out banking crisis ensued.[36]

The asset-liability mismatch played out on the depositories' balance sheets in the S&L crisis, but it could just as easily on the household balance sheets because of ARMs.[37] In periods of interest rate volatility, there is an inevitable risk to relying on fixed rate income—either from employment or from fixed-rate assets—to service adjustable rate debt. The lesson from the S&L crisis was that depositories could not hold long-term FRMs in their portfolios without assuming significant interest rate risk.

In the United States, in the wake of the S&L crisis, two solutions emerged to the asset-liability mismatch problem. One was increased use of ARMs. ARMs grew in popularity in the 1980s, as interest rates fell, but risk-averse consumer tastes generally prefer FRMs because of the predictability of payments and because FRMs tend to be cheaper than ARMs on an option-adjusted basis.[38] ARM market share has thus remained limited when competitively priced FRMs are available.[39]

The other solution was securitization. Mortgage securitization involves the pooling of numerous mortgage loans, which are then sold to a special purpose vehicle, typically a trust. The trust pays for the loans by issuing debt securities. The debt service on these securities is paid for by the cash flow from the mortgages. Thus, the securities are called mortgage-backed securities (MBS).[40]

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[36] FDIC, *HISTORY OF THE EIGHTIES—LESSONS FOR THE FUTURE*, Vol. I , pin (1997); LAWRENCE J. WHITE, *THE S&L DEBACLE: PUBLIC POLICY LESSONS FOR BANK AND THRIFT REGULATION* (1991); WILLIAM K. BLACK, *THE BEST WAY TO ROB A BANK IS TO OWN ONE* (2005).

The S&L crisis was subsequently exacerbated by regulatory forbearance, as regulators allowed insolvent S&Ls to continue operating by letting them count "regulatory goodwill" toward their capital. Insolvent S&Ls were attracted to high risk investment strategies because there was no risk capital at stake. Accordingly, S&Ls successfully lobbied to be allowed to invest in commercial real estate and moved aggressively into that market, where their losses were exacerbated, as the decapitalized S&LS made risky, double-down bets because equity, which chose management, was out of the money and gambling with creditors' funds.

[37] *See supra* note 32.

[38] The typical US FRM is freely callable, meaning that it includes a prepayment option, which can be quite valuable, as the mortgage can be refinanced at a lower rate when interest rates fall. It is possible to price FRMs on an option-adjusted basis, meaning calculating the price of the mortgage if there were no prepayment option. On an option-adjusted basis, US FRMs are actually slightly cheaper than ARMs. James Vickery, *Interest Rates and Consumer Choice in the Residential Mortgage Market*, Fed. Reserve Bank of N.Y. Working Paper, Sept. 16, 2007, at 27-28, 42 Table 8 (finding that in the U.S., on an option-adjusted basis FRMs are 9 basis points cheaper than ARMs).

[39] We note that covered bonds, a mortgage financing method popular in some European countries—still pose an asset-liability mismatch problem for depositories and are done primarily with adjustable-rate mortgages.

[40] For a more detailed explanation of mortgage securitization, *see* Anna Gelpern & Adam J. Levitin, *Rewriting Frankenstein Contracts: Workout Prohibitions in Residential Mortgage-Backed Securities*, 82 S. CAL. L. REV. 1075 (2009).

Securitization moved mortgage loans—and rate risk—off of depositories' balance sheets and placed the risk with investors better suited for bearing long-term rate risk, like insurance companies and pension funds. The use of secondary markets for mortgage financing ensured that FRMs remained widely available even after the S&L crisis.

Securitization is thus central to American housing finance. Despite its starring role in the recent debacle, it is essential for assuring the continued widespread availability of the long-term, fixed-rate mortgage, which has been the bedrock of American homeownership since the Depression, and the prevalence of which is critical for rebuilding a sustainable housing finance system.

Securitization, in its modern form, had been used for housing finance since 1971.[41] In the early 1990s, the secondary market at the time consisted primarily of the GSEs, Fannie Mae and Freddie Mac, and Ginnie Mae. The GSEs are privately-owned corporations, chartered and regulated by federal government.[42] Ginnie Mae is a US government agency involved in the securitization of mortgages insured by the Federal Housing Administration or guaranteed by the Veterans Administration.[43] Fannie and Freddie were regulated entities and would purchase only mortgages that conformed to their underwriting standards (until the bubble years), which generally required prime, amortizing mortgages. Moreover, statute limited the GSEs' exposure on any particular loan to the conforming loan limit and restricted the GSEs to purchasing only loans with LTV ratios under 80% absent private mortgage insurance or seller risk retention.[44] Further, the GSEs were expected (although not mandated) to operate nationally, creating geographic diversification in their underwriting. Likewise, the FHA and VA mortgages that went into Ginnie Mae pools were required to conform to FHA and VA underwriting standards and were geographically diverse.

The GSEs would securitize most of the mortgages they purchased, meaning that they would sell the mortgages to legally separate, specially created trusts, which would pay for the mortgages by issuing MBS. The GSE would guarantee timely payment of principal and interest to investors on the MBS issued by the securitization trusts.

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[41] Kenneth A. Snowden, *Mortgage Securitization in the United States: Twentieth Century Developments in Historical Perspective*, in ANGLO-AMERICAN FINANCIAL SYSTEMS: INSTITUTIONS AND MARKETS IN THE TWENTIETH CENTURY, MICHAEL D. BORDO & RICHARD SYLLA, EDS. 261 (1995). *See also* William N. Goetzmann & Frank Newman, *Securitization in the 1920s*, NBER Working Paper No. 15650 (Jan. 2010).

[42] The GSEs originated as part of the federal government, but were privatized in 1968.

[43] In additional to Fannie Mae and Freddie Mac, there were the 12 Federal Home Loan Banks, another smaller GSE system. *See* Mark J. Flannery & W. Scott Frame, *The Federal Home Loan Bank System: The "Other" Housing GSE*, FED. RESERVE BANK OF ATLANTA ECON. REV., 33 (QIII, 2006).

[44] 12 U.S.C. §§ 1454(a)(2)), 1717(b)(2).

Similarly, Ginnie Mae would guarantee the timely payment of principal and interest on MBS collateralized by FHA and VA mortgages. Fannie, Freddie, and Ginnie thus linked long-term FRM borrowers with capital market investors, such as insurance and pension funds, that were willing to assume long-term interest rate risk because they did not have the short-term liabilities of depositaries. Securitization thus ensured the continued widespread availability of the FRM in the wake of the S&L crisis as depositaries shied away from holding interest rate risk.

C. Private-Label Securitization

For Fannie and Freddie MBS, investors assumed the interest rate risk on the underlying mortgages, while the GSEs assumed the mortgages' credit risk. Investors in GSE MBS did incur credit risk—that of Fannie and Freddie—but also, indirectly that of the mortgages guaranteed by the GSEs, because the GSEs' financial strength was heavily dependent upon the performance of the mortgages. Because Fannie and Freddie were perceived as having an implicit guarantee from the federal government,[45] investors were generally unconcerned about the credit risk on the Fannie and Freddie, and hence on the MBS.[46] This meant that investors did not need to worry about the quality of the GSE underwriting. Therefore, investors did not need information about the default risk on the mortgages; what they cared about was information that could help them anticipate prepayment speeds so they could gauge the MBS' convexity risk—the risk of losses resulting from adverse changes in the market price of the MBS relative to their yield.[47] This was information that was fairly easy to obtain, particularly on standardized mortgage products.

Because the GSEs bore the credit risk on the mortgages, they were incentivized to insist on careful underwriting.[48] Moreover, the

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[45] *See* Brent Ambrose & Arthur Warga, *Measuring Potential GSE Funding Advantages*, 25 J. REAL ESTATE FIN. & ECON. 129 (2002) (finding GSE to Treasuries spread was 25-29 basis points less than AA rated banking sector bonds); Frank Nothaft, *et al.*, *Debt Spreads Between GSEs and Other Corporations*, J. REAL ESTATE FIN. & ECON. 151 (2002) (finding 22-30 basis point funding advantage relative to AA rated bonds). The GSEs are now in federal conservatorship, and their obligations carry an "effective guarantee" from the federal government, but do not enjoy a full faith and credit backing. *See* 12 U.S.C. § 1719(c) (explicit statement that GSE debts are not government debts), *but see, e.g.*, Dawn Kopecki, *Fannie, Freddie Have "Effective Guarantee, FHFA Says*, Bloomberg, Oct. 23, 2008, *at* http://www.bloomberg.com/apps/news?pid=20601087&sid=aO5XSFqEISZA&refer=home. The difference, if any, between the "effective guarantee" and "full faith and credit" is unclear.

[46] Investors would be concerned only to the extent that defaults affected prepayment speeds.

[47] Admittedly, defaults affect prepayment speed, but in GSE securitized pools, the GSEs replace defaulted loans with performing ones, so prepayment speed should be largely unaffected.

[48] The possibility of a federal bailout by being too-big-to-fail did raise potential moral hazard problems for the GSEs, which could have undermined their underwriting quality. It is notable, however, that the GSEs' failure was not due to shoddy underwriting on the mortgages they purchased, but to losses in their investment portfolio. The GSEs were major purchasers of PLS. Robert Stowe England, *The Rise of Private Label*, Mortgage Banking, Oct. 1, 2006 ("In the subprime RMBS category, for example, Fannie

GSEs were subject to regulatory oversight and statutory constraints on underwriting. By statute, the GSEs were limited to purchasing only loans with less than 80% loan-to-value (LTV) ratios, unless there was private mortgage insurance on the loan. [49]The GSEs competition for market share was primarily with each other, and consistently applied regulatory standards ensured that neither could increase market share by lowering underwriting standards. Thus, as long as GSE securitization dominated the mortgage market, credit risk was kept in check through underwriting standards, and there was not much of a market for nonprime, nonconforming, conventional loans.

Beginning in the 1990s, however, a new, unregulated form of securitization began to displace the standardized GSE securitization. This was private label securitization (PLS), was supported by a new class of specialized mortgage lenders and securitization sponsors.[50]

Whereas the GSEs would purchase only loans that conformed to their underwriting guidelines, there were no such guidelines for the investment banks that served as PLS conduits. The only constraint was whether a buyer could profitably be found. Thus, PLS created a market for nonprime, nonconforming conventional loans.[51]

As with GSE securitization, PLS involved the pooling of thousands of mortgage loans that were then sold to specially created trusts that would then issue MBS to pay for the mortgage loans. Unlike the GSEs, however, the PLS deal sponsors did not guarantee timely

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Mac and Freddie Mac are big buyers of AAA-rated floating-rate securities. Indeed, Fannie and Freddie are by far the biggest purchasers of subprime RMBS."). As of 2004, they held 33% of subprime MBS outstanding. Alan Greenspan, *The Crisis*, BROOKINGS PAPERS ON ECONOMIC ACTIVITY 38-40, *available at* http://www.brookings.edu/~/media/Files/Programs/ES/BPEA/2010_spring_bpea_papers/spring2010_greenspan.pdf.

The GSEs only invested in highly-rated tranches of subprime and alt-A MBS, but these tranches were vulnerable to ratings downgrades. As AAA-subprime MBS were downgraded, the GSEs were forced to recognize large losses in their trading portfolios. Because the GSEs were highly leveraged, these losses ate heavily into the GSEs' capital, which undermined their MBS guaranty business; the GSEs' guaranty is only valuable to the extent that the GSEs are solvent.

[49] *See supra*, text accompanying footnote 44.

[50] Although PLS can trace their pedigree back to a 1977 deal by Bank of America, *see* 1977 SEC No-Act. LEXIS 1343, they remained a niche market for some time because of their unproven risk profile.

[51] Financial institutions' ability to make nontraditional loans was facilitated by federal legislation and regulations. Congressional legislation began the deregulation of mortgages in the 1980s with two key federal statutes, the Depository Institutions Deregulation and Monetary Control Act of 1980, Pub. L. No. 96-221, 94 Stat. 161 (codified at 12 U.S.C. §§ 1735f-7(a)-1735f-7a(f) (2006)) and the Alternative Mortgage Transaction Parity Act of 1982, Pub. L. No. 97-320, 96 Stat. 1545 (codified at 12 U.S.C. § 3803(a)(3)). These statutes preempted state usury laws for first-lien mortgages and state regulation of nontraditional mortgages. The statutes did not replace the state regulation with alternative federal regulation. Federal regulatory agencies expanded the scope of federal preemption of state regulations again without substituting federal regulation, Adam J. Levitin, *Hydraulic Regulation: Regulating Credit Markets Upstream*, 26 YALE J. ON REG. 143, 154 (2009), and the Federal Reserve failed to act on its regulatory authority under the Home Ownership and Equity Protection Act (HOEPA) to regulate high-cost mortgages. *See also* McCoy *et al.*, *supra* note 8.

payment of interest and principal on the PLS. PLS investors, therefore, assumed both credit risk and interest rate risk on the MBS, in contrast to GSE MBS, where investors assumed only interest rate risk.

Investors in PLS were familiar with rate risk on mortgages, but not with credit risk. Thus, the PLS market initially developed with low credit risk products, particularly jumbo mortgages—loans that were larger than the GSEs' conforming loan limit. Jumbos were essentially prime, conventional mortgages, just for larger amounts than conforming loans. While PLS investors did face credit risk on jumbos, it was low, in part because only high-quality jumbos were securitized, as bond rating agencies initially insisted that jumbo securitizations follow GSE underwriting guidelines in order to be rated.[52] Loss rates on jumbos have been less than .5% since 1992.[53]

Credit risk for jumbos was mitigated on both the loan level, through high down payments (low LTVs) and private mortgage insurance, and at the MBS level also through credit enhancements, particularly credit tranching in a senior-subordinate structure. Jumbo PLS settled on a largely standardized form—the "six pack" structure, in which six subordinated tranches supported a senior, AAA-rated tranche that comprised well over 90 percent of the MBS in a deal by dollar amount.[54] Indeed, jumbo PLS became sufficiently standardized to trade in the To Be Announced (TBA) market, meaning that the mortgages are sold even before they are actually originated because it is sufficiently easy to find a mortgage that meets the sale delivery requirements.[55] This is only possible when there is a liquid secondary market for the mortgages and necessitates mortgage standardization as well.

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[52] DAVID S. MURPHY, *UNRAVELLING THE CREDIT CRUNCH*, 133 (200?) ("the first private label MBS deals were backed by very high qualify mortgages: it took some years for investors to become comfortable with lower quality pools."). *See also* Lewis Ranieri, comments at conference on the Future of Housing Finance, U.S. Department of Treasury, Aug. 17, 2010.

[53] *MBS Basics*, Nomura Fixed Income Research 22, Mar. 31, 2006.

[54] *Id.* at 22-23.

[55] In the TBA market, a mortgage originator enters into a forward contract with a GSE or Ginnie Mae, in which the originator promises to deliver in the future a package of loans meeting the GSE's or Ginnie Mae's requirements in exchange for GSE or Ginnie Mae MBS to be identified in the future. *See* OFHEO, *A Primer on the Secondary Mortgage Market*, Mortgage Market Note 08-3, July 21, 2008 at 9-10.

Because the originator is able to resell the loan to the GSE or Ginnie Mae for a guaranteed rate *before* the closing of the loan, the originator is not exposed to interest rate fluctuations between the time it quotes a rate and closing. Without the TBA market, originators would have to bear the risk that the market value of the loan would change before closing due to fluctuations in market rates. The commodity nature of GSE and Ginnie Mae MBS means that they are sufficiently liquid to support a TBA market that allows originators to offer borrowers locked-in rates in advance of closing.

Originators of non-conforming (non-GSE-eligible) loans, particularly prime jumbos, are able to piggyback on the TBA market to hedge their interest rate risk, by purchasing in the TBA market to offset the risks of the loans they originate.

The success of PLS depended heavily on the ability to achieve high investment grade-ratings for most securities because fixed-income investor demand is highest for high investment-grade products.[56] For jumbos, it was relatively easy to achieve AAA-ratings because of the solid underlying collateral.[57] As the PLS market later moved into nonprime mortgages, however, greater credit enhancements and structural creativity were necessary to obtain the credit ratings that made the securities sufficiently marketable. For example, the mean number of tranches in nonprime PLS in 2003 was approximately 10, compared with 7 for jumbo six-packs.[58] By 2007, the mean number of tranches for PLS had increased to over 14. Other types of internal and external credit enhancements were also much more common in nonprime PLS: overcollateralization,[59] excess spread,[60] shifting interest,[61] reserve accounts,[62] and pool and bond insurance.[63] Nonprime PLS thus involved

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[56] PLS investors are almost entirely institutional investors. Many institutional investors want to purchase AAA-rated securities. Sometimes this is just because these securities are perceived as being very safe investments, albeit with a higher yield than Treasuries. Often, though, institutional investors are either restricted to purchasing investment grade or AAA-securities (by contract or regulation) or received favorable regulatory capital treatment for AAA-rated assets. Only a handful of corporate securities issuers have a AAA-rating, so structured products were the major source of supply for the AAA-securities demand. As Lloyd Blankfein, CEO of Goldman Sachs noted, "[i]n January 2008, there were 12 triple A–rated companies in the world. At the same time, there were 64,000 structured finance instruments...rated triple A." Lloyd Blankfein, *Do Not Destroy the Essential Catalyst of Risk*, FINANCIAL TIMES (London), Feb. 8, 2009, at 7.

[57] For example, for Wells Fargo Mortgage-Backed Securities 2003-2 Trust, jumbo deal consisting of mainly prime or near prime (alt-A) jumbos, 98.7% of the securities by dollar amount were rated AAA. *See* Prospectus, dated Feb. 27, 2003, *at* http://www.sec.info.com/dsVsn.2h2.htm.

[58] Manuel Adelino, "Do Investors Rely Only on Ratings? The Case of Mortgage-Backed Securities" at 42 (2009), *at* http://web.mit.edu/%7Emadelino/www/research/adelino_jmp.pdf.

[59] Overcollateralization means that initial principal balance of the mortgages supporting the MBS is greater than the principal balance on the MBS. Richard Rosen, *The Role of Securitization in Mortgage Lending*, 244 CHIC. FED. LETTER, Nov. 2008 (61% of private label PLS issued in 2006 were overcollateralized). The cashflows generated by a larger pool balance are available to absorb losses due to defaults on the mortgage loans. Overcollateralization is an expensive form of credit enhancement because it ties up collateral that could otherwise be used for other deals, so PLS indentures sometimes provide for the periodic release of collateral if performance thresholds are met. Note that pool overcollateralization is in addition to the overcollateralization of mortgages with <100% LTV ratio.

[60] Excess spread is the difference between the income of the SPV in a given period and its payment obligations on the MBS in that period, essentially the SPV's periodic profit. Excess spread is accumulated to supplement future shortfalls in the SPV's cashflow, but is either periodically released to the residual tranche holder. Generally, as a further protection for senior MBS holders, excess spread cannot be released if certain triggers occur, like a decline in the amount of excess spread trapped in a period beneath a particular threshold.

[61] Shifting interest involves the reallocation of subordinate tranches' share of prepayments (both voluntary prepayments and the proceeds of involuntary liquidations) to senior tranches. Shifting interest arrangements are often stepped-down over time, with a decreasing percentage of prepayments shifted. Sunil Gangwani, *MBS Structuring: Concepts and Techniques*, 1 SECURITIZATION CONDUIT 26, 33 (1998). The affect is to make senior tranches share of a securitization larger at the beginning of the deal and smaller thereafter Manus J. Clany & Michael Constantino III, *Understanding Shifting Interest Subordination*, in *THE HANDBOOK OF MORTGAGE-BACKED SECURITIES* (2D ED.) (FRANK J. FABOZZI *ET AL.*, EDS.) 39, 42 (2000).

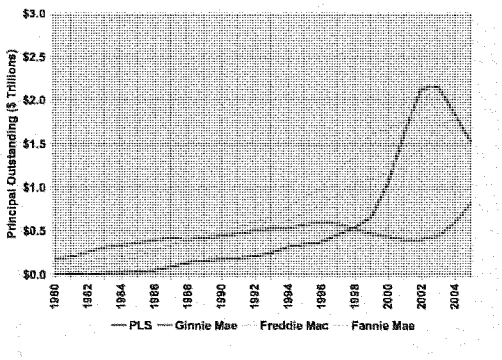
[62] A reserve account is a segregated trust account, typically invested in highly liquid, investment grade investments (money market or commercial paper). It provides a cushion for losses due to defaults on the underlying mortgage loans. Reserve accounts come in two types: pre-funded cash reserves

inevitably more complex and heterogeneous deal structures to compensate for the weaker quality of the underlying assets.

D. A Tale of Two Booms

Nonprime PLS remained a small share of the market from their origins in 1977 through the 1990s. Nonprime PLS did not take off in force until 2004, at which point they grew rapidly until the bursting of the housing bubble. (See Figures 3 and 4.) The inflection point came with the introduction and spiraling growth of nonprime mortgages in 2003-2004, as PLS jumped from being 22% of MBS issuance in dollar volume in 2003 to 46% in 2004. (See Figure 4.)

Figure 3. MBS Outstanding by Securitization Type[64]

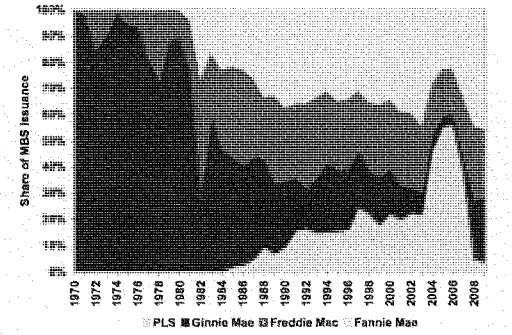


and excess spread. Pre-funded reserve accounts are funded in full at the deal's closing, typically by the originator or depositor, with a share of the deal's proceeds. The reserve account thus amounts to a holdback or a discount on the SPV's purchase price of the loans from the originator or depositor. This type of pre-funded reserve account is known as a cash collateral account. Reserve accounts are either required to be maintained at a specified level regardless of losses or permitted to be drained in accordance with losses. In the former case, the credit enhancement of the reserve account actually increases as the principal and interest due on the PLS decreases.

[63] Pool level insurance covers either losses or provides cash-flow maintenance up to specified levels for the entire pool owned by the SPV. Pool-level insurance is typically provided by private mortgage insurance companies. Bond-level insurance involves a monoline bond insurance company guaranteeing the timely payment of principal and interest on a tranche of bonds. *See* Gangwani, *supra* note 61, at 35.

[64] Inside Mortgage Finance, 2010 Mortgage Market Statistical Annual.

Figure 4. Share of MBS Issuance by Securitization Type[65]



The nonprime mortgage market (and nonprime PLS market) boomed as the consequence of the tapering off of a preceding prime refinancing boom. 2001-2003 was a period of historically low interest rates. (See Figure 5.) These low rates brought on an orgy of refinancing. (See Figure 6.) 2003 was a peak year for mortgage originations, 72 percent of which (by dollar volume) were refinancings.[66] Virtually all of the refinancing activity from 2001-2003 was in prime, fixed-rate mortgages. (See Figure 7.) The prime refinancing boom meant that mortgage originators and securitizers had several years of increased earnings.

[65] *Id.*
[66] *Id.*

Figure 5. Selected Interest Rates, 2000-2008[67]

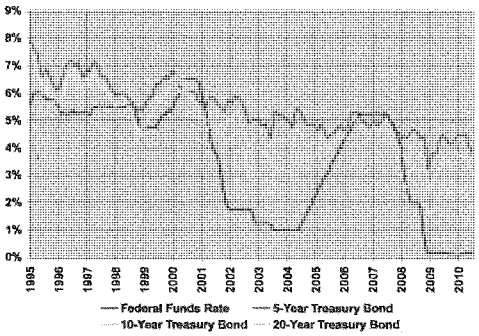
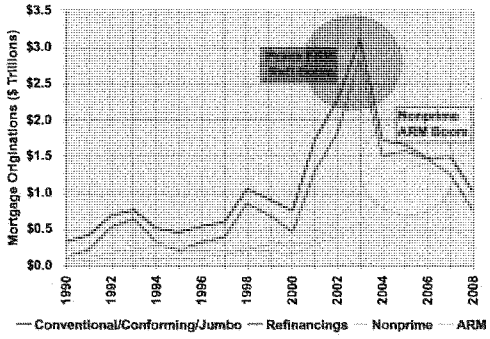


Figure 6. Refinancing and Purchase Money Originations[68]



By 2003, however, long-term interest rates had started to rise (short-term rates moved up starting in 2004), and the refinancing boom ended. This meant that the mortgage industry was hard-pressed to maintain its earnings levels from 2001-2003.[69] The solution was to find more "product" to move in order to maintain origination volumes and hence earnings. Because the prime borrowing pool was exhausted, it was necessary to lower underwriting standards and look to more

[67] Federal Reserve Statistical Release H.15, *available at* http://www.federalreserve.gov/releases/h15/data.htm.

[68] Inside Mortgage Finance, *supra* note 66.

[69] *See* William W. Bratton, Jr. & Michael L. Wachter, *The Case Against Shareholder Empowerment*, 158 U. PA. L. REV. 653, 719 n.198 (2010).

marginal borrowers to support origination volume levels. This meant a growth in subprime and alt-A (limited documentation) mortgages, as well as in second mortgages (termed "home equity loans"). (See Figure 7). As a result, loan-to-value ratios increased and borrowers income was more poorly documented (if at all). (See Figure 8).

Figure 7. Origination Volume by Mortgage Type, 1990-2009[70]

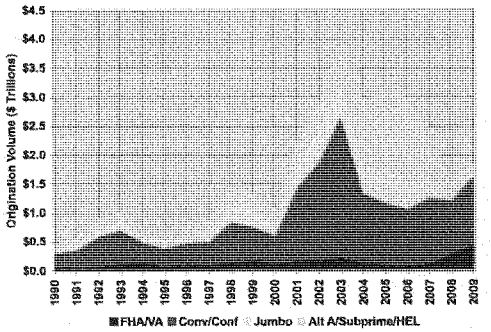
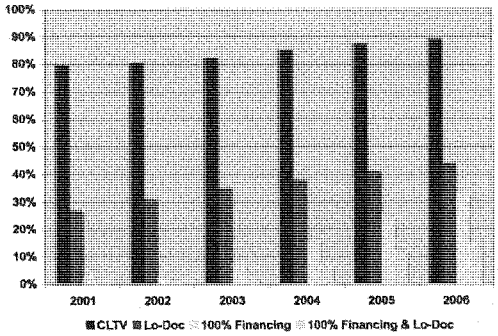


Figure 8. Erosion of Residential Mortgage Underwriting Standards[71]



The decline in underwriting standards was also reflected in a shift in product type. Nontraditional mortgage products are generally structured for initial affordability; the costs are back-loaded, either with

[70] Inside Mortgage Finance, 2010 Mortgage Market Statistical Annual.
[71]

balloon payments or increasing interest rates. Table 1, below, illustrates the relative initial affordability of various mortgage products. It shows that various ARM products, particularly nontraditional ARMs with balloon payments due to limited or extended amortization could drastically reduce initial monthly payments for borrowers.

Table 1. Relative Affordability of Mortgage Products[72]

Mortgage Product	Monthly Payment	Payment as Percentage of FRM Payment
FRM	$1,079.19	100%
ARM	$903.50	83.7%
Extended Amortization ARM	$799.98	74.1%
Interest Only ARM	$663.00	61.4%
Negative Amortization ARM	$150.00	13.9%
Payment Option ARM	<$150.00	<13.9%

Thus, as Figure 6, above, shows, ARMs supplanted more FRMs (which are more expensive on a non-option adjusted basis[73]), even as interest rates were rising from historic lows, which made ARMs a poor financing choice given that rates were likely only to adjust upwards in the foreseeable future.

Moreover, at this same point, the yield curve—the relationship between interest rates and loan maturities—was flattening. When the yield curve is upward sloping, meaning that the cost of long-term borrowing is greater than the cost of short-term borrowing, as reflected in initial rate, ARMs are rationally chosen by borrowers because it costs more to borrow with a FRM. As Figure 9 shows, in 2000, the yield curve was flat, shifting to an upward slope from 2001-2003.[74] As Figures 9-10 show, the yield curve began to flatten out in 2004-2005, and was then flat in 2006-2007.

[72] Bernanke, *supra* note 21, Fig. 7. These figures assume a prime borrower with a $180,000 mortgage securing a $225,000 property (20% down), 6% APR FRM and 4.42% APR.

[73] *See supra* note 38.

[74] Figures 7 and 8 display the yield curves on Treasuries. While these are not the same as mortgage yield curves, where no equivalent data exists, mortgage yield curves tend to track Treasuries, and Treasuries are frequently used to hedge interest rates on mortgages with similar weighted average lives.

Figure 9. Annualized Treasury Yield Curves, 2000-2004[75]

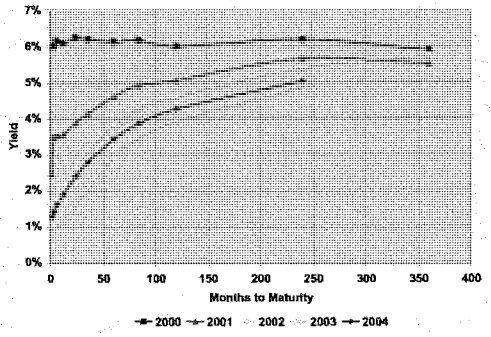
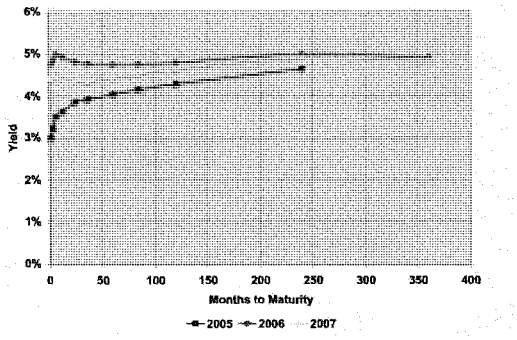


Figure 10. Annualized Treasury Yield Curves, 2005-2007[76]



Prior to 2005, at every point in recent history when yield curves have flattened, borrowers have shifted from ARMs to FRMs in order to lock in lower long-term rates.[77] Despite the flat yield curve during the peak of the housing bubble, borrowers increasingly chose ARMs.

The explanation for the shift to ARMs cannot be found in the cost over the full term of the mortgage; rationally, borrowers considering

[75] Curves were calculated by taking the average daily yield for each duration for each year.

[76] Curves were calculated by taking the average daily yield for each duration for each year.

[77] Michael Tucker, *Adjustable-Rate and Fixed-Rate Mortgage Choice: A Logit Analysis*, 4 J. R.E. FIN. 82, 86 (1989) ("High T-Bill Rates are associated with a decrease in the probability of borrowers selecting ARMs.").

the full term cost would have gravitated to FRMs. Instead, the explanation has to be found in the relative initial payments of the ARMs.

This means that there were two possible, nonexclusive reasons for the expansion of ARM market share. First, ARM market share growth could be explained by a drop in the price of the implicit put option on nonrecourse mortgages. The implicit put option refers to homeowners' ability to walk away from a nonrecourse (or functionally nonrecourse) mortgage without personal liability, just by surrendering the house. If the cost of the put option—included in the cost of mortgage finance—was getting cheaper relative to renting, it would mean that consumers were more willing to speculate on rising housing prices with nonrecourse mortgages.[78] Thus, cheaper mortgage credit made it easier to gamble on housing. Second, ARM share growth could be because it was an affordability product, into which financial institutions were able to underwrite weaker borrowers.

There is reason to believe that both explanations are correct. The phenomenon of house flipping—treating houses as pure (or primarily) investment, rather than mixed investment/consumption assets—became pronounced during the bubble. A cheaper put option due to underpriced mortgages would have encouraged this sort of investment.

There also reason to believe that the growth in ARMs reflected their role as an affordability product that enabled market expansion, both in terms of number of borrowers and size of loans. Deterioration of underwriting standards and the shift in mortgage products had the same effect as falling interest rates—all of these factors reduced the initial cost of mortgage credit, thereby increasing the quantity of mortgage credit consumed.[79] The annual price of housing finance has two components—a cost of funds and a risk premium. The cost of funds is a function of long-term interest rates, while the risk premium is a function of underwriting (including product type). A decline in either component reduces the cost of housing finance and thus allows borrowers to borrow more and bid up home prices.[80]

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[78] *See* Andrey Pavlov & Susan M. Wachter, *Mortgage Put Options and Real Estate Markets*, 38 J. R.E. ECON. 89 (2009).

[79] During 2004-2006, the Fed forced up the cost of short-term credit, but the effect on mortgage lending was offset by the shift in the product mix and the decline in underwriting standards. While the Fed could observe rates in real time, neither it, nor anyone else, could observe the decline in underwriting and the shift in product mix in real time. The deterioration in lending standards also left the housing finance system vulnerable to correlated shocks; any decline in housing prices would inevitably result in a market crash because of an increased reliance on housing price appreciation in the credit model.

[80] While housing economists have noted that interest rate changes do not explain the bubble, *see* Glaeser *et al.*, *supra* note 4, they neglect to fully explore the impact of the decline in underwriting standards. (Glaeser *et al.* examine underwriting in a very cursory fashion; their finding that loan approval

Much of the growth in ARMs (and in mortgages generally), particularly in nonprime mortgages, was in nontraditional products, [81] such as interest-only mortgages,[82] payment-option mortgages,[83] 40-year extended amortization balloons mortgages,[84] or hybrid ARMS.[85] (See Figure 11.) Borrowers were generally approved based on their ability to pay the initial below-market teaser rate, rather than their ability to pay for the product through its full term.

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rates were constant during the bubble misses the critical point that loan application volume rose dramatically.) This problem can also be seen in Charles Himmelberg *et al.*, *Assessing High House Prices: Bubbles, Fundamentals and Misperceptions*, 19 J. ECON. PERSPECTIVES 67, 68 (2005), which argues that as of 2004 there was no housing bubble. While Himmelberg, Mayer, and Sinai take pains to point out that housing prices are not the same as the annual cost of owning a house, they do not internalize this lesson, as they neglect to consider whether the shift in mortgage product mix was reducing the (initial) affordability of housing.

[81] Christopher Mayer *et al.*, *The Rise in Mortgage Default s*, 23 J. ECON. PERSPECTIVES, 27 (2009).

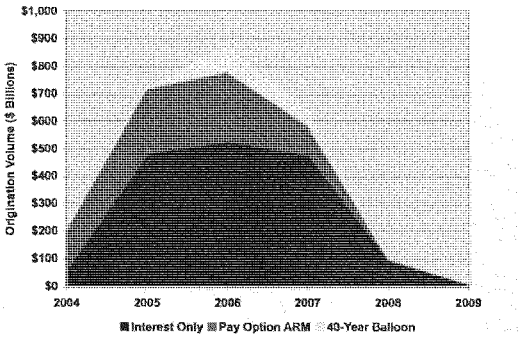
[82] Interest-only mortgages have non-amortized periods during which the borrower pays only interest, and the principal balance is not reduced. The interest-only period can range from a few years to the full term of the loan. Once the interest only period expires, the principal is then amortized over the remaining (and shorter) period, meaning that monthly mortgage payments increase substantially upon the expiration of the interest-only period, including the possibility of a "bullet" payment of the entire principal balance at the end of the mortgage's term.

[83] Payment-option mortgages permit borrowers to choose between a number of monthly payment options. Typically, the choices are a payment equivalent to that if the mortgage were amortized over 30 years, to that if the mortgage were amortized over 15 years, an interest-only payment, and a negative amortization payment that does not even cover the interest that accrued in the past period. Because of the negative amortization option, the balance owed on a payment-option mortgage can actually increase. Payment-option mortgages generally have a negative amortization limit; once too much negative amortization has accrued, the loan resets to being fully amortized over the remaining term. Likewise, the pick-a-pay period is often restricted to a limited number of years, after which the loan resets to being fully amortized over the remaining term. Both types of resets can result in the borrower's monthly payments increasing substantially.

[84] A 40-year balloon mortgage or "40/30" is a 30-year loan that is amortized over 40 years, meaning that there is a balloon payment due at the end of the 30th year. The mismatch between term and amortization periods reduces monthly payments before the balloon payment.

[85] A hybrid ARM has an initial fixed-rate period, usually at a teaser rate that is lower than those available on standard FRMs. After the expiration of the fixed-rate teaser period, the loan resets to being adjustable-rate. Typically these loans were structured as 2/28s or 3/27s, with two or three year fixed-rate periods and 28- or 27-year adjustable-rate periods. The rate reset after the expiration of the teaser can result in substantial increases in monthly payments.

Figure 11. Growth of Nontraditional Mortgage Products[86]



Nontraditional mortgages were gifts that kept giving. The back-loaded cost structure of these mortgages created an incentive for borrowers to refinance when monthly payments increased, thereby generating future refinancing origination business. In essence, then the exotic products that marked the housing bubble were just the reincarnation of pre-New Deal bullet loans—nonamortizing products designed to be frequently refinanced.

Nontraditional products also fueled their own proliferation as part of a home buyers' "arms race." The expansion of the borrower base and borrower capacity because of loosened underwriting standards also increased demand for housing supply and drove real estate prices upwards. As housing prices rose, non-traditional "affordability" products became increasingly attractive to borrowers who saw their purchasing power diminish. Thus, nontraditional mortgage products generated additional purchase money origination business. The growth of nontraditional products supports an interpretation of the shift to ARMs as being driven by their use as initial affordability for market expansion.

Ultimately, the expansion of PLS and nontraditional mortgages was its own undoing. PLS based on nontraditional mortgages enabled more mortgage credit, which bid up housing prices, and those increased housing prices then became part of the underwriting that enabled further expansion of mortgage credit. During the bubble, however, housing price appreciation, depended on the continued expansion of the borrower base, much like a pyramid scheme. Not all consumers are looking to purchase homes, and the increase in house prices eventually priced out

[86] Inside Mortgage Finance, *supra* note 66.

other potential homeowners, even with loosened (or even fraudulent) underwriting standards. The inability to keep expanding the borrower base made price increases unsustainable. Without home price appreciation, homeowners could not refinance their way out of highly leveraged nontraditional mortgages as payment shocks—large increases in monthly mortgage payments upon the expiration of teaser interest rates—occurred. The recognition that this was so may also have played a part in the bubble's collapse, as mortgage credit supply tightened, becoming a self-fulfilling prophecy. The result was a cycle of foreclosures and declining housing prices: the bubble had burst.

II. A Supply-Side Explanation of the Housing Bubble

A. Evidence from RMBS Yield Spreads

We believe that the cause of the bubble is to be found in the changes in the structure of the housing finance market in 2003-2004, as the market moved from Agency securitization of traditional FRMs to private-label securitization of nontraditional ARMS. It is unquestioned that securitization was the funding mechanism for the housing bubble, but no previous work has examined its pricing in relation to the bubble. We examined the pricing of PLS deals from 2003-2007. Our examination reveals a remarkable trend: even as mortgage risk and PLS issuance volume *increased*, the spread on PLS over Treasuries that represents their additional risk premium *decreased*. (See Figures 12 and 13.)

What's more, spreads on AAA-rated PLS fell during 2004-2007, even as yield spreads on AAA-rated corporate bonds held steady. (See Figure 14.) In other words, the change in spreads was specific to PLS, and did not reflect a general movement in the AAA-rated bond market.

Declining PLS spreads meant that investors were willing to accept more risk for lower returns. In other words, housing finance was becoming relatively cheaper, even as it became riskier. The risk-adjusted price was dropping and quantity was increasing during 2004-2007!

Moreover, from 2004-2007, yields on AAA-rated PLS were below those on AAA-rated corporate bonds, indicating that there was greater demand for AAA-rated PLS than for AAA-rated corporate bonds, *even though MBS have an interest rate risk that does not exist with corporate bonds* because of the negative convexity associated with mortgages—when interest rates fall, mortgages are likely to be refinanced, whereas corporate bonds are typically not prepayable. Thus, yield spreads should be *lower* on corporate bonds with the same credit risk as PLS. For PLS to have a lower yield spread than corporate bonds

implies a perceived default risk that is less than corporate bonds, but with a AAA rating, this is not possible. Therefore, other factors must be sought to explain the difference in yield spreads between AAA PLS and AAA corporate bonds.

Figure 12. PLS Issuance and Weighted Average PLS Spreads, 2003-2007[87]

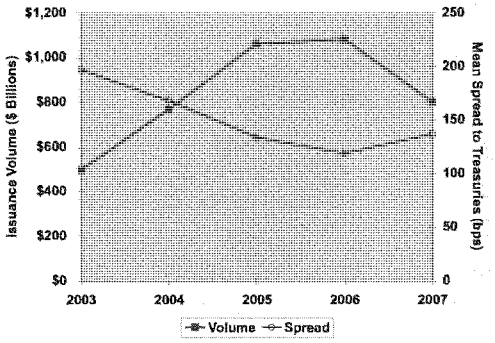
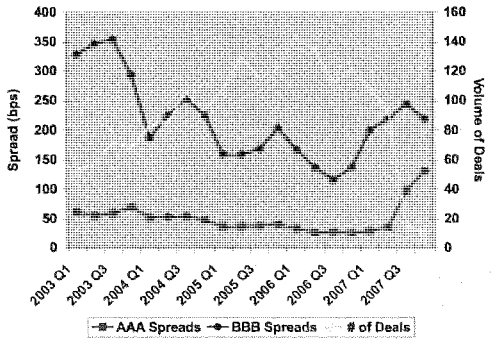


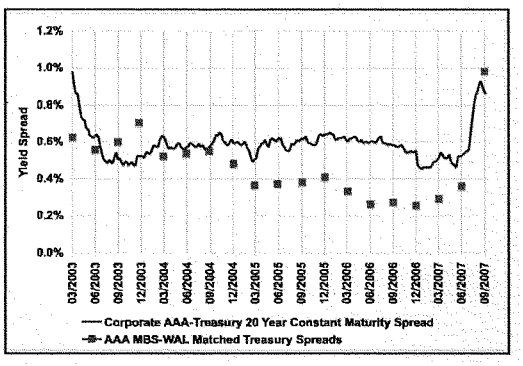
Figure 13. PLS Issuance and Spreads 2003-2007 for AAA and BBB Rated Tranches[88]



[87] Adelino, *supra* note 58, at 42. Adelino's data does not cover the entire universe of PLS issuance, so issuance numbers are necessarily lower than industry-wide figures from Inside Mortgage Finance's Mortgage Market Statistical Annual. The mean spread is to maturity-matched Treasuries.

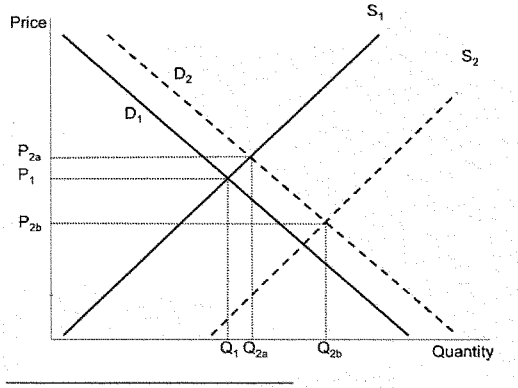
[88] Data provided by Manuel Adelino from proprietary data set.

Figure 14. Comparison of AAA PLS and Corporate Yield Spreads Over Maturity-Matched Treasuries[89]



The movement in PLS spreads and volume—that spreads fell and volume increased even as risk increased, that the spreads fell below corporate bond spreads, and that PLS spread fell while corporate bonds spreads remained static—points to a supply-side explanation of the housing bubble, rather than a demand-side explanation. Simultaneously falling price (spreads) and increasing quantity (volume) means that there had to be an outward (rightward) shift in the housing financing supply curve (from S_1 to S_2, in Figure 15).

Figure 15. Shifts in Housing Finance Supply and Demand Curves



[89] Federal Reserve Board (corporate spreads); Manuel Adelino (MBS spreads).

There may also have been an outward (rightward) shift in the housing finance demand curve (from D_1 to D_2, in Figure 15), as irrationally exuberant consumers sought ever more financing to cope with escalating prices. Such a shift would have resulted in both greater supply (Q_{2a}) *and* higher prices (P_{2a}), and thus larger PLS spreads. But PLS spreads decreased, even as supply increased. This means that the housing finance supply curve must have shifted outwards (from S_1 to S_2) enough to offset any outward shift of the demand curve in terms of an effect on price ($P_{2b}<P_{2a}$). Put differently, even if there was an increase in housing finance demand, there was a greater increase in housing finance supply. Investors' demand for PLS was outstripping the supply of mortgages.[90]

B. Timing the Bubble

Our supply-side explanation of the bubble is also consistent with evidence regarding the bubble's timing. Determining when the real estate bubble began is critical for evaluating competing explanations. There is little consensus among commentators. National housing prices marched upwards from 1997-2006. Thus, some commentators place the start of the bubble in 1997, when the period of unabated appreciation began.[91] Others place the start of the bubble in 2001-2002, when the Federal Reserve lowered short-term interest rates significantly.[92]

We believe the actual bubble was much shorter: it began in 2004 (or possibly 2003) and burst in 2006. Economists define an asset bubble as when asset prices, driven by expectations of future prices, exceed the asset's fundamental value.[93] At what point did housing prices depart from fundamentals?

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[90] *See* MICHAEL LEWIS, THE BIG SHORT: INSIDE THE DOOMSDAY MACHINE 143 (2010) ("There weren't enough Americans with shitty credit taking out loans to satisfy investors' appetite for the end product.").

[91] *See, e.g.*, Edward Pinto, *Acorn and the Housing Bubble*, WALL. ST. J., Nov. 12, 1999 ("Most agree that the housing bubble started in 1997."); Dean Baker, *East Asia's Economic Revenge*, MANCHESTER (UK) GUARDIAN, Mar. 9, 2009. Robert Shiller argues that there were regional housing bubbles as early as 1998, but how these regional bubbles would have become national bubbles is not clear. Robert J. Shiller, *Understanding Recent Trends in House Prices and Homeownership*, Proceedings, Fed. Reserve Bank of Kansas City 89, 89 (2007).

[92] *See, e.g.*, Lawrence H. White, *Federal Reserve Policy and the Housing Bubble*, 29 CATO J. 115 (2009); Ironman [pseudonym], *A Better Method of Detecting Bubbles*, SEEKING ALPHA, Feb. 25, 2010, *at* http://seekingalpha.com/article/190753-a-better-method-of-detecting-housing-bubbles (dating bubble to 2001); James Hagerty, *Who's to Blame for the Housing Bubble?*, WALL ST. J., Nov. 16, 2009 (citing housing economist Tom Lawler, positing 2002 as the start of the bubble.).

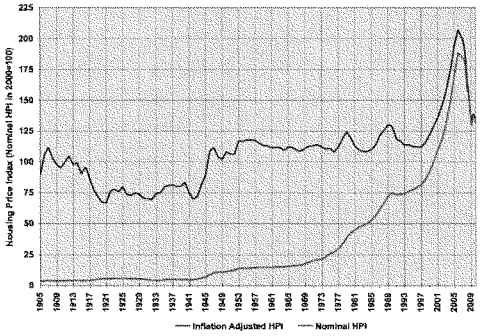
[93] Joseph E. Stiglitz, *Symposium on Bubbles*, 4 J. ECON. PERSPECTIVES 13 (1990) ("[I]f the reason that the price is high today is only because investors believe that the selling price is high tomorrow—when "fundamental" factors do not seem to justify such a price—then a bubble exists. At least in the short run, the high price of the asset is merited, because it yields a return (capital gain plus dividend [here, the housing price appreciation plus consumption value of housing]) equal to that on alternative

While there was significant housing price appreciation from 1997-2003, that appreciation can be explained relative to fundamentals—the cost of home ownership relative to renting and interest rates. Only starting in 2004 do fundamentals lose their explanatory power for housing prices.

1. 1997-2000

Although housing prices began to appreciate in 1997, that alone does necessarily indicate a bubble. To get a true sense of the bubble, we need to examine inflation-adjusted housing prices, presented in Figure 16, rather than the nominal housing prices shown in Figure 1. Figure 16 shows that while housing prices moved upwards from 1997 until 2007, inflation-adjusted housing prices did not pass their previous peak level until 2000. The increase in housing prices from 1997-2000 was within the regular historic range of inflation-adjusted housing price fluctuations, indicating that they were not necessarily part of a bubble.

Figure 16. U.S. Nominal and Inflation-Adjusted Housing Price Indexes[94]



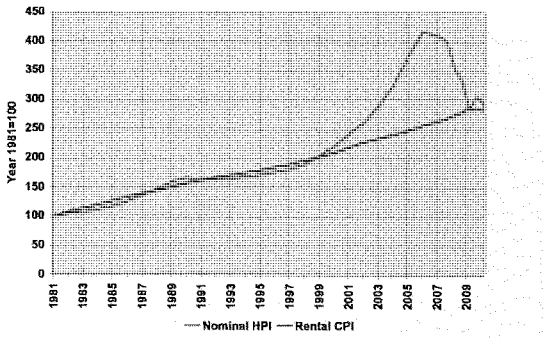
Housing prices also kept pace with rental prices during the period from 1997-2000, as Figure 17 shows. The rate of appreciation of both housing and rental costs remained basically identical, as they had since at least 1981, when the Bureau of Labor Statistics began to compile

assets."). Stiglitz's definition is not tautological, as it might appear at first glance, as fundamental value is based on expected discounted value of future cash flows from the asset.

[94] Robert J. Shiller, *irrationalexuberance.com*, http://www.econ.yale.edu/~shiller/data/Fig2-1.xls. Inflation adjustment is based on the Consumer Price Index. Housing Price Index is a combination of the S&P/Case-Shiller HPI for 1987-present and four other sources for different historical data.

a rental price index. This indicates that into 2000, housing prices were not straying from fundamental values.

Figure 17. Nominal US Housing Price Index and Rental Consumer Price Index[95]



2. 2001-2003

Starting in 2000, housing prices began to appreciate at a much faster rate than rental prices, as Figure 17, above, shows. This divergence in rates of appreciation does not, however, necessarily indicate the existence of a bubble. Instead, the years 2001-2003 were marked by historically low interest rates. (See Figure 5, above.) Low interest rates explain the faster increase in housing prices than rental prices from 2001-2003.

With fully-amortized FRMs—the overwhelming bulk of the mortgage market prior to 2004—the cost of homeownership is heavily dependent upon interest rates.[96] With low mortgage interest rates during this period, the cost of homeownership fell, while the cost of renting did not. Accordingly, it follows that housing prices would rise faster than rental prices. Indeed, real estate economists Charles Himmelberg, Chris Mayer and Todd Sinai have shown that the increase in housing prices through 2004 was not a bubble, but in fact reflected fundamentals, as shown by the imputed annual rental cost of owning a house.[97]

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[95] S&P/Case-Shiller Housing Price Index (HPI); Bureau of Labor Statistics, Rent of Primary Residence (Rental CPI).

[96] From 2000-2003, fixed-rate mortgages made up over 75% of conventional loans. Inside Mortgage Finance, 2010 Mortgage Market Statistical Annual. In 2004, fixed-rate mortgages dropped to a 66% market share. *Id.*

[97] Himmelberg *et al.*, *supra* note 80, at 68. While Himmelberg *et al.* were ultimately comparing imputed rental costs with ownership costs, which they acknowledge are not the same as the housing prices.

3. 2004-2006

From 2004 onwards, real estate fundamentals did not support any further price increases, as interest rates were rising, thereby reducing the attractiveness of homeownership relative to renting, yet these increases occurred. Corresponding with this, Figure 14, above, shows PLS spreads diverging downward from corporate bond spreads as of late 2004, while Figures 3 and 4 show a massive expansion of PLS occurring in 2004. This indicates that a supply glut was only forming as of 2004; before then, mortgage credit was properly priced in light of interest rates, and housing prices reflected fundamentals. It is possible, however, that the bubble actually started in 2003, as mortgage originations predate PLS issuance, and mortgage originations increased significantly in 2003-2004 in regions with heavy subprime concentration.[98]

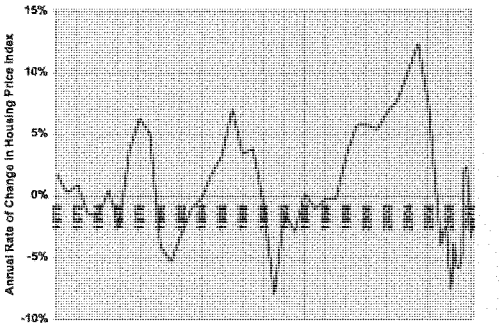
The annual rate of change in inflation-adjusted housing prices, displayed in Figure 18, also shows that 2003-2004 was an inflection point. While the rate of housing price appreciation jumps positive starting in 1997, it stayed steady at around 6% until 2001. In the recent historical context, this level of annual appreciation was unremarkable; it has occurred twice since 1970 and nine other times in the 20th century.

The years 2001-2002 saw slightly higher rates of housing price appreciation, but the extraordinary jump in appreciation rates occurred in 2003-2005. By 2005, the rate of appreciation more than doubled to over 12%, only falling negative again in 2007. The 2005 peak surpassed all levels of housing price appreciation since 1946, when housing prices soared as rapid demographic growth from GIs returning home to a baby boom ran up against a housing supply that had been frozen during WWII.

Id. With a non-traditional mortgage, ownership costs of housing could be quite low, even with high housing prices. *See also* Chris Mayer & Todd Sinai, *Bubble Trouble? Not Likely*, WALL ST. J. Sept. 19, 2005. Himmelberg, Mayer, and Sinai's argument assumes continuation of housing price appreciation at historic rates. *Id.* In 2004, it was unlikely that prices would continue to appreciate at historic rates because they were at an all-time high relative to imputed rents, suggesting that a bubble might have already been forming in 2004.

[98] *See* Andrey Pavlov & Susan M. Wachter, *Subprime Lending and Real Estate Prices*, 39 R.E. ECON. (forthcoming 2010).

Figure 18. Annual Rate of Change in U.S. Inflation-Adjusted Housing Price Index, 1970-2010[99]



Ultimately, a bubble is marked by a rise and then subsequent collapse in an asset price. The collapse of housing prices post-2006 might not yet be complete (or it might have overcorrected), but based on current market prices, it has returned not to 1997 levels or even 2000 levels, but to 2003 levels. (See Figure 16, above.) This too suggests that the housing bubble only began in 2003-2004.

The weight of the evidence shows that the housing bubble was a supply-side phenomenon that began in 2003-2004. The movement of yield spreads on PLS can only be explained if the bubble was supply-side driven, while fundamentals explain housing price increases until around 2004, thereby precluding the existence of a bubble. This timing is critical both because it helps rule out alternative explanations of the bubble, as discussed in Part III, below, and because it points to the factors behind the oversupply of mortgage credit, as explored in Part IV.

III. ALTERNATIVE THEORIES OF THE HOUSING BUBBLE

There are several existing theories on the cause of the housing bubble, but there is little consensus about their explanatory power.[100] Some theories are demand-side theories, meaning that the housing bubble was caused by a growth in consumer demand for housing, which pushed up housing prices. Others are supply-side theories, meaning that the housing bubble was caused by a growth in the supply of housing

[99] Robert J. Shiller, *irrationalexuberance.com*, http://www.econ.yale.edu/~shiller/data/Fig2-1.xls, and authors' calculations.

[100] Glaeser *et al.*, *supra* note 4.

finance, thereby enabling consumers to make more heavily leveraged bids for housing and bid up home prices.

This section of the Article reviews the leading theories of the housing bubble and points out their deficiencies. It is important to underscore that we believe there were multiple contributing factors to the housing bubble. Monetary policy, irrational consumer behavior, inelastic housing supply, and regulatory policy all contributed in some way to the bubble. None of these factors alone, or even in combination, however, can provide a sufficient explanation for the bubble. At best, the previous explanations of the bubble are incomplete, and in the case of arguments about the Community Reinvestment Act, demonstrably wrong.

A. Demand-Side Theories

1. Mass Psychology and Irrational Exuberance

The dominant explanations of the housing bubble to date have been demand-side explanations. Robert Shiller has argued that the bubble was driven by consumers' irrational exuberance and belief that real estate prices would continue to appreciate, stoking the demand for housing finance.[101]

We do not question the existence of irrational consumer expectations and behavior. There was undoubtedly a great deal of irrational or misguided consumer behavior in real estate investment. But this behavior required readily available financing. Shiller's demand-side theory cannot explain the movement in PLS yield spreads during the bubble and is, therefore, a necessarily incomplete explanation. Credit relationships are two-sided relationships, and the evidence from PLS spreads indicates that any increase in housing finance demand was outstripped by an increased in housing finance supply.

2. Consumers' Inability to Anticipate Inflation

An alternative psychological theory has been presented by Markus Brunnermeir and Christian Julliard.[102] Brunnermeir and Julliard argue that consumers are incapable of sorting between real and nominal changes in interest rates and rents. Therefore, consumers account for low nominal rates when making mortgage decisions, but fail to account

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[101] SHILLER, *SUPRA* note 10. *See also* Glaeser *et al.*, *supra* note 4 (concluding that Shiller's explanation is the most convincing); Ernan Haruvy *et al.*, *Traders' Expectations in Asset Markets: Experimental Evidence*, 97 AM. ECON. REV. 1901 (2007) ("We find that individuals' beliefs about prices are adaptive, and primarily based on past trends in the current and previous markets in which they have participated. Most traders do not anticipate market downturns the first time they participate in a market, and, when experienced, they typically overestimate the time remaining before market peaks and downturns occur.").

[102] Brunnermeier & Julliard, *supra* note 11.

for future appreciation of prices and rents falling commensurately with anticipated inflation. The result is that consumers overestimate the value of real estate when inflation is declining.

Brunnermeir and Julliard's theory may well be correct, but it too cannot explain the movement in MBS yield spreads during the bubble. Therefore, their theory, like Shiller's, is at best an incomplete explanation of the bubble, as the yield spread movement shows that any growth in demand was exceeded by a growth in supply.

3. Inelastic Housing Supply

A third demand-side quasi-hypothesis for the housing bubble, presented by urban economists Edward Glaeser, Joseph Gyourko and Albert Saiz, emphasizes the geographic variation in the housing bubble.[103] There was considerable regional and local variance; some metropolitan areas, such as Detroit and Cleveland, did not experience a bubble, while others experienced bubbles of greater or lesser size.

Glaeser, Gyourko and Saiz explain the variation based in part on variations in the elasticity of housing supply. In some parts of the country, local regulations and urban growth have been on a collision course for several decades. In these cases, with the inability of supply to expand, increased demand for real estate only resulted in higher prices. In other words, Glaeser, Gyourko and Saiz contend that in inelastic housing markets, the housing demand curve shifted rightwards. And because most consumers finance the purchase of their homes, the rightward shift in the housing demand curve would have also resulted in a rightward shift in the mortgage finance demand curve.

Glaeser, Gyourko and Saiz do not present supply constraints as the explanation for the bubble, although others do.[104] At most, Glaeser, Gyourko and Saiz see supply inelasticity as affecting variations in how the bubble played out regionally. They argue that supply inelastic regions are more likely to experience greater price volatility and bubbles and that the extent of the bubble was determined to some degree by housing supply inelasticity.[105] It is notable, though, that the bubble was

[103] Edward L. Glaeser *et al*, *Housing Supply and Housing Bubbles*, 64 J. URBAN ECON. 198 (2008), *available at* http://www.economics.harvard.edu/faculty/glaeser/files/bubbles10-jgedits-NBER version-July 16, 2008.pdf.

[104] Randall O'Toole, *How Urban Planners Cause the Housing Bubble*, Cato Institute Policy Analysis No. 646, Oct. 1, 2009.

[105] GLAESER & GYOURKO, *SUPRA* note 24, at 3, 124 (noting that home mortgage interest tax deduction pushes up housing prices in supply constrained markets).

the most extreme in highly supply elastic markets like Phoenix and Las Vegas.[106]

B. Supply Side Theories

1. Government Fair Lending and Affordable Housing Policy

Several conservative commentators have pointed to federal fair lending and affordable housing policies as being critical in inflating the housing bubble by encouraging financial institutions to lend improvidently to low or moderate income consumers.[107] These commentators focus on both the Community Reinvestment Act of 1977 (the "CRA") and the GSEs' affordable housing goals. Generally, these two distinct policies are lumped together in arguments, but they merit separate consideration.

a. The Community Reinvestment Act

Claims about the CRA's role in the bubble have been thoroughly considered elsewhere and largely debunked,[108] but because of the role of the CRA is such a politically charged issue, it is worthwhile presenting the evidence in a concise fashion.

The CRA was passed in 1977 in response to concerns about the discriminatory lending practice known as "red-lining"—the practice of not offering financial services in minority or low-income neighborhoods, sometimes indicated with a red line on a map. The CRA "encourages federally insured banks and thrifts to meet the credit needs of the entire communities that they serve, including low- and moderate-income areas, consistent with safe and sound banking practices."[109] The CRA does not require covered financial institutions to make loans. Rather, covered

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[106] Davidoff, *supra* note 4, at 2; Richard K. Green *et al.*, *Metropolitan-Specific Estimates of the Price Elasticity of Supply of Housing, and Their Sources*, 95 AM. ECON. REV. 334 (2005).

[107] *See supra* note 7.

[108] Financial Crisis Inquiry Commission, *The Community Reinvestment Act And The Mortgage Crisis, Preliminary Staff Report*, Apr. 7, 2010; Board of Governors of the Federal Reserve, Staff Analysis of the Relationship between the CRA and the Subprime Crisis (memo from Glenn Canner & Neil Bhutta to Sandra Braunstein), Nov. 21, 2008, [hereinafter Fed Staff Analysis] *available at* http://www.federalreserve.gov/newsevents/speech/20081203_analysis.pdf (HOEPA lending was less prevalent for CRA-subject institutions than for independent mortgage companies); Glenn B. Canner & Neil bhutta, *Did the CRA Cause the Mortgage Meltdown*, COMMUNITY DIVIDEND, FED. RESERVE BANK OF MINNEA. Mar. 2009; Ellen Seidman, *No, Larry, CRA Didn't Cause the Sub-Prime Mess*, *THE LADDER*, NEW AMERICA FOUNDATION, Apr. 15, 2008; Elizabeth Laderman & Carolina Reid, *CRA Lending During the Subprime Meltdown*, *REVISITING THE CRA: PERSPECTIVES ON THE FUTURE OF THE COMMUNITY REINVESTMENT ACT*, 115 (Fed. Reserve Banks of Boston & S.F. Feb. 2009) (finding that CRA-subject institutions were less likely to make subprime loans in California and that subprime loans made by CRA-subject institutions in CRA assessment areas outperformed these institutions' subprime loans made outside CRA-assessment areas).

[109] Michael S. Barr, *Credit Where It Counts: The Community Reinvestment Act and Its Critics*, 80 N.Y.U. L. REV. 513 (2006).

financial institutions are evaluated by regulators on how well they serve the needs of low-to-moderate income borrows in their CRA geographic assessment area. The evaluations are then used as a factor in determining whether to approve the institution's mergers with and acquisitions of other depositary institutions as well as whether to approve the expansion of bank holding companies into other types of financial activities.[110] CRA evaluation methods have remained constant since 1995.[111]

There is little evidence that the CRA contributed directly to the bubble. CRA subject institutions made a disproportionately small share of subprime mortgage loans.[112] Moreover, relatively few subprime loans even qualified for CRA credit either because they were made outside CRA assessment areas or were made to higher income borrowers.[113] It is possible, however, that depositaries were driven to purchase a greater volume of loans originated by independent mortgage companies in order to gain CRA credit; sufficient data do not exist on this point.

Ultimately, though, blaming the housing bubble on the CRA suffers from two fundamental logical flaws. First, the timing is wrong. The CRA greatly predates the bubble, so it is difficult to attribute housing price rises in 2004-2007 to a 1977 statute with a regulatory implementation that was last revised in 1995.[114]

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[110] 12 U.S.C. § 1831u(b)(3) (2006) (CRA requirement for interstate mergers); *see also* 12 U.S.C. § 1831y (CRA Sunshine Requirements); *Id.* § 1843(l)(2) (2006) (CRA requirement for financial subsidiaries engaging in expanded financial activities).

[111] Fed Staff Analysis, *supra* note 108 at 2.

[112] Robert B. Avery, *et al.*, *FFIEC; HMDA.The 2007 HMDA Data*, 94 FED. RESERVE BULL. A 07, A124, Table 11 (2008). Critically, not all financial institutions are subject to the CRA. Only federally insured banks and thrifts fall within its ambit. Depositaries' uninsured subsidiaries and affiliates are not subject to the CRA, but insured institutions are permitted to count their subsidiaries' and affiliates' activities toward CRA credit. Independent mortgage companies are not covered by CRA whatsoever.

The variation in CRA coverage enables a comparison of the mortgage lending of CRA-subject institutions with that of other institutions. Bank regulators do not specifically track subprime lending, but so-called HOEPA loans, high interest rate loans, as defined by the Owners Equity Protection Act of 1994, 15 U.S.C. § 1639(b); 12 CFR §§ 226.32, 226.34, that have to be reported separately under the Home Mortgage Disclosure Act, 12 U.S.C. §§ 2801-2811; 12 C.F.R. § 203, App. A, I.G.3. provide a strong proxy for subprime lending.

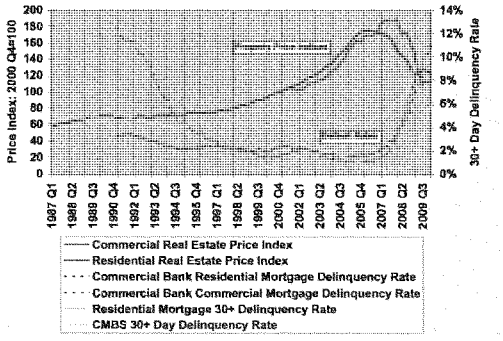
CRA-subject institutions made only a small percentage of HOEPA loans during the 2004-2006 period. Avery, *et al.*, *supra* note 112. While depositaries made over 40% of loans, they made less than 30% of HOEPA loans. *Id.* When their subsidiaries and affiliates are included, market share of all loans was around 70%, but HOEPA loan share was only around 50%. *Id.* In comparison, independent mortgage companies made up about 30% of the mortgage lending market, but around 50% of the HOEPA market. HOEPA lending was concentrated in institutions not subject to the CRA. *Id*

[113] Avery, *et al.*, *supra* note 112. Not all HOEPA loans even qualified for CRA credit. To qualify, a loan must be made to a low-to-moderate income borrower in the financial institution's CRA geographic assessment area. In 2006, only 10% of all loans made by depositaries and their affiliates qualified for CRA credit, and just 6% of HOEPA loans. Fed Staff Analysis, *supra* note 108, at 7.

[114] Proponents of a CRA-induced bubble must, therefore, date the bubble as of 1997, but this would attribute *any* housing price appreciation to CRA, and clearly not all housing price appreciation is a bubble.

Second, the residential housing bubble was mirrored almost exactly by a commercial real estate bubble (see Figure 19, below). While there is some interlinkage between residential and commercial real estate prices, the CRE bubble cannot be attributed to the residential bubble. As the CRA does not apply to commercial real estate lending, it cannot explain the existence of the CRE bubble. Yet, the synchronous growth and collapse of the residential and commercial real estate bubbles cannot be coincidental. In sum, the case that the CRA drove banks to improvident lending is not tenable.[115]

Figure 19. Commercial and Residential Real Estate Bubbles and Defaults[116]



b. GSE Affordable Housing Goals

In addition to the CRA, some commentators have argued that the GSEs' affordable housing goals also fueled imprudent provision of credit and thus drove the housing bubble.[117] Thus, Edward Pinto, has claimed

[115] We believe that the strongest argument that can be made about the role of the CRA is an indirect and non-falsifiable one: government policy, including the CRA sent a clear signal to the financial services industry that increases in homeownership were valued. Financial institutions took this as cover to loosen their underwriting standards across the board and develop economies of scale in subprime lending, as they knew regulators were cheering on looser lending practices. This sort of role for the CRA in the housing bubble is quite different from the "government made banks lend to unqualified borrowers" sort of argument. In this argument, CRA provides the cover for activities that financial institutions wished to engage in themselves.

[116] S&P/Case-Shiller Housing Price Index CS-10 (residential price index); Moody's/REAL Commercial Price Index (commercial price index); Mortgage Bankers Association, National Delinquency Surveys (residential delinquency rates); Commercial Mortgage Securities Association (CMBS delinquency rates); Federal Reserve (commercial bank delinquency rates).

[117] *See, e.g.*, Edward Pinto, *ACORN and the Housing Bubble*, WALL ST. J., Nov. 12, 2009, at ???; Peter Wallison, *The Price for Fannie and Freddie Keeps Going Up*, WALL ST. J., Dec. 29, 2009, at ???. Peter Wallison, *Cause and Effect: Government Policies and the Financial Crisis*, AEI ONLINE, Nov. 2008.

that the affordable housing goals "signaled to the GSEs that they should accept down payments of 5% or less, ignore impaired credit if the blot was over one year old, and otherwise loosen their lending guidelines."[118]

The GSEs have been subject to affordable housing goals since 1993.[119] These goals, set by the Department of Housing and Urban Development, are designed "to facilitate credit access and homeownership among lower-income and minority households."[120] If a GSE fails to meet the affordable housing goals and does not present and pursue an acceptable remedial plan, monetary penalties and injunctive relief are available to the regulator.[121] The goals consist of three general measures: low-to-moderate income, special affordable, and underserved areas, as well as special subgoals for special affordable multifamily and home purchase (as opposed to refinancing).[122] The goals are measured as the ratio of qualifying mortgages financed to total mortgages financed. High-priced "HOEPA" mortgages[123] are disqualified from counting toward affordable housing goals, as were mortgages for second residences, "mortgages with unacceptable terms," defined as including those with excessive fees, prepayment penalties, credit life insurance, or that did not adequately consider the borrower's ability to pay.[124]

As Figure 20 shows, the GSE affordable housing goals were raised in 1997, 2001, and 2005. The GSEs have generally met the goals.[125] In order to do so, the GSEs increased their proportion of loans made to target populations,[126] and expanded their underwriting criteria to

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[118] Pinto, *Acorn and the Housing Bubble, supra* note 7.

[119] Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (the "GSE Act"), 102 P.L. 550 § 1331, *codified at* 12 U.S.C. § 4561. From 1993 to 2008, the affordable housing goals were supervised by the HUD Secretary. Starting in 2009, they came under the supervision of the Federal Housing Finance Agency. Housing and Economic Recovery Act of 2008, July 30, 2008, P.L. 110-289, Div A, Title I, Subtitle B, § 1128(b), 122 Stat. 2700 (transferring authority from HUD to FHFA).

[120] Xudong An & Raphael W. Bostic, *GSE Activity, FHA Feedback, and Implications for the Efficacy of the Affordable Housing Goals*, 36 J. R.E. FIN. & ECON. 207, 207-208 (2008);

[121] 102 P.L. 550 §§1341, 1344, 1345, *codified at* 12 U.S.C. § 4566.

[122] 12 U.S.C. §§ 4562-65.

[123] 15 U.S.C. §§ 1601-1606. A HOEPA loan is a closed-end, non-purchase money mortgages (excluding reverse mortgages) secured by a consumer's principal residence that either have an APR of more than 800 bps above comparable maturity Treasury securities (for first liens) or 1000 basis bps above comparable maturity Treasury securities (for junior liens), or that have total points and fees payable by the consumer at or before closing that exceed the greater of 8% of the total loan amount or an annually adjusted dollar amount. 12 C.F.R. § 226.32(a) (Reg Z). HOEPA loans must be separately reported in Home Mortgage Disclosure Act data. 12 C.F.R. § 203.4(a)(13) (Reg C).

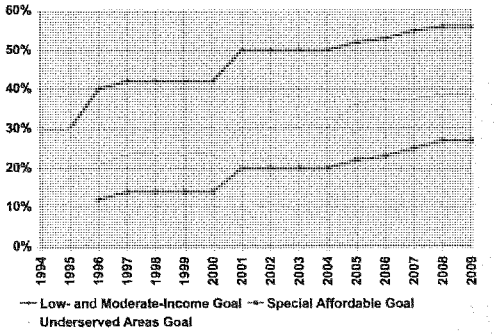
[124] 24 C.F.R. §§ 81.16(b)(8), 81.16(b)(12), 81.2 (defining "HOEPA mortgage" and "unacceptable terms").

[125] U.S. Dept. of Housing and Urban Development, *Overview of the GSEs'Housing Goal Performance, 1996-2003* (2005).

[126] H. L. Bunce, *The GSEs' Funding of Affordable Loans: A 2000 Update*, U.S. Dept. of Housing and Urban Development, Housing Finance Working Paper Series HF-013 (2002), H.L. Bunce &. M. Scheessele, *The GSEs' Funding of Affordable Loans*, U.S. Dept. of Housing and Urban Development, Research report, No. HF-001 (1996); Paul B. Manchester, *Characteristics of Mortgages Purchased by*

enable the purchase of riskier loans.[127] Yet there is little evidence that the GSE affordable housing goals increased the total amount of credit available to underserved communities.[128]

Figure 20. GSE Affordable Housing Goals



One possible explanation of this is that GSE activity crowded out the FHA for lending to underserved borrowers. Economists Xudong An and Raphael Bostic argue that the GSEs' affordable lending merely substituted for FHA affordable lending.[129] If so, the primary accomplishment of the GSE affordable housing goals was not to increase total mortgage credit, but to beggar the FHA.

The GSEs are permitted, however, to count their purchases of private-label MBS for affordable housing goals.[130] If the underlying mortgages in a PLS would count for affordable housing goal credit, the PLS can also count. This raises the possibility that the GSEs' pursuit of

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Fannie Mae and Freddie Mac, 1996-97 Update, U.S. Dept. of Housing and Urban Development, Housing Finance Working Paper Series HF-006 (1998).

[127] Xudong An & Raphael W. Bostic, *Policy Incentives and the Extension of Mortgage Credit: Increasing Market Discipline for Subprime Lending*, 28 J. POL'Y ANALYSIS & MGMT. 340 (2009); David L. Listokin & Elvin K. Wyly, *Making New Mortgage Markets: Case Studies of Institutions, Home Buyers, and Communities*, 11 HOUSING POL'Y DEBATE 575 (2000); Kenneth *et al. The Impact of Secondary Mortgage Market Guidelines on Affordable and Fair Lending: A Reconnaissance from the Front Lines*, 28 REV. OF BLACK POL. ECON. 29 (2001).

[128] Stuart A. Gabriel & Stuart S. Rosenthal, *Government-Sponsored Enterprises, the Community Reinvestment Act, and Home Ownership in Targeted Underserved Neighborhoods*, in HOUSING MARKETS AND THE ECONOMY: RISK, REGULATION, AND POLICY 202, 205 (EDWARD L. GLAESER & JOHN M. QUIGLEY, EDS.) (2009) (finding "essentially no evidence" that GSE affordable housing goals increase lending or homeownership); An & Bostic, *supra* note 127; An & Bostic, *supra* note 120,, at 207-208; Raphael W. Bostic & Stuart A. Gabriel, *Do the GSEs Matter to Low-income Housing Markets?* 59 J. URBAN ECON. 458 (2006); Brent W. Ambrose & Thomas G. Thibodeau, *Have the GSE Affordable Housing Goals Increased the Supply of Mortgage Credit?* 34 REGIONAL SCI. & URBAN ECON. 263-273 (2004).

[129] An & Bostic, *supra* note 120, at 207-208.

[130] 24 C.F.R. § 81.16(c)(2).

affordable housing goals fueled the market for PLS driving down yields. The GSEs' enormous investment portfolios included sizeable holdings of subprime and alt-A MBS, and their holdings undoubtedly contributed to the bubble by adding to demand for MBS. But it is notable that the size of the subprime MBS in the GSEs' portfolios, as well as their portfolio's absolute share of the subprime PLS market decreased after 2004, as PLS yield spreads declined.[131] This means that other investors were more than substituting for GSE demand of PLS.[132]

The GSEs certainly contributed to the housing bubble, but we do not know how much, and their contribution may have been due to factors other than the affordable housings goals, most notably competition with PLS. As long as the securitization field consisted predominantly of the GSEs and Ginnie Mae, a race to the bottom in underwriting standards was avoided. The growth of PLS, however, forced the GSEs to lower their underwriting standards in an attempt to reclaim lost market share in order to please their private shareholders. Shareholder pressure pushed the GSEs into competition with PLS for market share, and the GSEs loosened their guarantee business underwriting standards in order to compete. In contrast, the wholly public FHA/Ginnie Mae maintained their underwriting standards and ceded market share.

This situation resembles the classic insurance regulation problem of a rate war for market share that results in all participants becoming insufficiently capitalized because they fail to charge adequate premiums for the risk they assume. The GSEs' guarantee business is nothing more than an insurance operation, yet it was not regulated like a classic insurer, with regulators approving rate schedules (to prevent rate wars) and mandatory reserving. Instead, the GSEs were free to set their guarantee fees as they wished and to be highly leveraged, dividending out their guarantee business income to shareholders, rather than holding it in reserve against losses.

With loosened underwriting standards, the GSEs ended up partially replicating the PLS market,[133] and they paid dearly for it.[134] The

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[131] The reduction of PLS in the GSE portfolios is partially attributable to consent agreements with OFHEO after the revelation of GSE accounting irregularities. Financial Crisis Inquiry Commission, *Government Sponsored Enterprises and the Financial Crisis, Preliminary Staff Report*, Apr. 7, 2010 at 13.

[132] Therefore, the 2005 increase in GSE affordable housing goals did not result in an increase in the size of the GSEs' subprime MBS portfolio. Data is not available on GSE alt-A MBS holdings, but based on available evidence, affordable housing goals do not appear to have driven GSE investment strategy.

[133] Federal Housing Finance Agency, *supra* note 159.

[134] The proximate cause of the GSEs' failure was not from poor underwriting on the guarantee business for their securitizations, but rather from downgrades on PLS in their investment portfolios that left the GSE undercapitalized and therefore unable to carry on their MBS guaranty business. The GSEs were simply too highly leveraged to handle a major market downturn. The GSEs were already in

GSEs were insufficiently transparent for either their regulator, the Office of Federal Housing Enterprise Oversight (OFHEO, now rebranded as the Federal Housing Finance Agency, FHFA), or for their shareholders and creditors to monitor their activities and discipline them for these changes.[135] Moreover, the moral hazard from the implicit (and ultimately explicit) government guarantee of GSE debt meant that the GSEs' creditors had reduced incentive to monitor the GSEs' risk, although equity holders still did.

Regulation of GSE securitization failed to function during the housing bubble, and informational failures and moral hazard prevented market discipline from exerting itself. The GSEs' contribution to the bubble stemmed in part from informational failures that existed irrespective of the role of affordable housing goals.[136]

2. Monetary Policy

Macroeconomist John B. Taylor, the inventor of the eponymous Taylor Rule for setting monetary policy,[137] has argued that the housing bubble was the inevitable consequence of mishandled monetary policy.[138] Taylor's contention is that after 2000, the Federal Reserve held interest rates too low for too long. Low rates produced artificially cheap mortgage credit, which led to excessive demand for mortgages. Because mortgages are the largest form of leverage for consumers, housing was the asset class where a bubble was most likely to form. Because consumers were able to incur greater leverage for lower cost, their purchasing power increased, and therefore housing prices were bid up.[139] Taylor's counterfactual regressions suggest that housing prices would have been far less inflated if the Fed had adhered more closely to

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conservatorship by the time losses began to mount from their guarantee business. Given the decline in GSE underwriting standards, however, losses from the guarantee business would have been sufficient to lead to conservatorship.

[135] Moreover, even if shareholders had been able to discipline the GSEs for lowering underwriting standards, that might have been offset by shareholder discipline for loss of market share.

[136] The explanatory power of the affordable housing goals must also be questioned, as it cannot explain the commercial real estate bubble. There was a negligible amount of CRE in multifamily housing, which the GSE do purchase.

[137] John B. Taylor, *Discretion Versus Policy Rules in Practice*, 39 CARNEGIE-ROCHESTER CONFERENCE SERIES ON PUBLIC POL'Y 195 (1993).

[138] John B. Taylor, *Housing and Monetary Policy*, NBER Working Paper Series 13682 (2007); JOHN B. TAYLOR, *GETTING OFF TRACK: HOW GOVERNMENT ACTIONS AND INTERVENTIONS CAUSED, PROLONGED, AND WORSENED THE FINANCIAL CRISIS* (2009).

[139] *Id. See also* Pavlov & Wachter, *supra* note 98 (showing how housing price increases can result from either the removal of constraints on access to capital for borrowers via lower underwriting standards, the decline in the cost of credit via interest rates, or the decline in the cost of the mortgage put option—the availability of nonrecourse credit and demonstrating how these factors affected different geographic regions differently).

the Taylor rule in the wake of the 2000 stock market crash and the 9/11 attacks.

Monetary policy played a role in the housing bubble, but it is an incomplete explanation for several reasons. First, interest rates only have a weak affect on housing prices.[140] The Federal Funds rate—the rate that the Fed controls—is a short-term rate, which differs from the long-term rate that is charged on mortgages.[141] Thus, previous declines in the Fed Funds rate have not produced housing bubbles. For example, between late 1990 and 1993, the effective Fed Funds rate fell from around 8% to 3%, a similar sized drop to that between late 2000 and 2003, when the rate declined from around 6% to 1%. Yet no housing bubble ensued in the early 1990s. Likewise, the timing of the bubble does not track with interest rates. The bubble continued to grow even once the Fed started to raise rates in 2005.[142] (See Figure 21, below).

Second, while long-term interest rates do have an effect on housing prices, the decline in long-term rates was insufficient to explain the entirety of the bubble.[143] A one percent decline in the long-term rate results in roughly an eight percent increase in housing prices.[144] As 10-year Treasuries fell from a height of 6.66% in January 2000 to a low of 3.33% in June 2003, that would predict only a 26% increase in housing prices, not the 38% increase that occurred during that time period, much less the further 52% price increase that occurred once long-term rates started to rise (to 4.99% at the peak o the bubble).

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[140] Glaeser *et al. supra* note 4, at 2-6; Jane Dokko, *et al., Monetary Policy and the Housing Bubble,* Finance and Economics Discussion Series, Federal Reserve Board, Dec. 22, 2009; Marek Jarocinski & Frank R. Smets, *House Prices and the Stance of Monetary Policy*, 90 FED. RESERVE BANK OF ST. LOUIS REV. 339 (2008); Marco Del Negro & Christopher Otrok, *99 Luftballons: Monetary Policy and the House Price Boom across U.S.*, 4 J. MONETARY ECON. 1962 (2007).

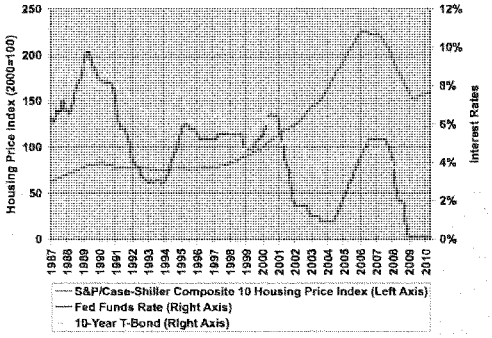
[141] Bernanke, *supra* note 21; Greenspan, *supra* note 48, at 38-40. Bernanke also contests Taylor's counterfactual regressions and argues that the Fed actually adhered closely to the Taylor rule as it should be applied, accounting for anticipated, rather than actual inflation. Bernanke, *supra* note 21.

[142] Depending on the application of the Taylor rule, the Fed Funds rate was either too low or was more or less correct during this period. Bernanke, *supra* note 21.

[143] Edward L. Glaeser, Joshua Gottlieb, and Joseph Gyourko, *Did Credit Market Policies Cause the Housing Bubble?* Harvard Kennedy School Pol'y Brief, May 2010, at 4.

[144] *Id.*

Figure 21. Housing Prices (Nominal) and Interest Rates



Third, and related, monetary policy doesn't explain why lenders mispriced risk. The cost of credit is always the risk-free rate—which is set by the Fed for short-term rates—*plus* a risk premium. Even if the risk-free rate was historically low, the risk premium should not have changed. And given that most of the mortgages in the bubble were ARMs, the risk-free rate was ultimately irrelevant. Why would yield spreads (the risk premium) drop even when risk was rising?

Nor does a monetary policy explanation explain why underwriting standards deteriorated or the product mix changed. Monetary policy might have made mortgage credit cheap, but declines in underwriting standards and shifts to initial affordability products made it even cheaper.

Finally, monetary policy does not explain the occurrence of mortgage bubbles in some countries outside the United States, but not in others. Adherence to or divergence from the Taylor rule seems to have had little impact on which developed countries experienced bubbles and which did not.[145] Countries like Canada, with very similar monetary policy to the U.S. did not have bubbles,[146] while countries like Spain that attempted counter-cyclical "dynamic provisioning" of capital had even worse bubbles.[147]

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[145] Bernanke, *supra* note note 21.

[146] Adam J. Levitin *et al.*, *North Star: Lessons for the U.S. from the Canadian Housing Finance System*, working paper, 2010.

[147] Richard Green *et al. Housing Finance in Developed Countries in a Time of Turmoil*, working paper, Aug. 2010 (examining why some developed countries experienced housing bubbles and others did not).

Monetary policy helps explain the refinancing boom that occurred in 2001-2003 and why housing prices appreciation exceeded rental cost appreciation. But it comes up short in explaining the rest of the housing bubble.

3. Market Relaxation of Underwriting Standards

A number of studies present what might be called a latent supply-side theory that emphasizes easier credit not because of monetary policy but because of changes in the mortgage market, particularly the growth of securitization. We call this a latent supply-side theory because it has yet to be fully articulated; it is often more implied than emphasized. Some of these studies merely point to relaxation of credit terms as critical in inflating the bubble, but they fail to explain *why* credit terms were relaxed.[148] A number of studies have pointed to securitization as being critical to the relaxation of credit terms and emphasize the principal-agent problem inherent in securitization.[149] These studies, however, do not attempt to provide complete explanations of the housing bubble, but instead test more focused propositions about whether securitization facilitated laxer lending standards. Accordingly, they do not explain the timing of the bubble and do not integrate the institutional changes in the mortgage market.

Our supply-side theory extends the latent relaxation of underwriting standards argument into a patent formal explanation of the housing bubble. It does so by connecting the relaxation of underwriting standards to the change in mortgage products, the mortgage market's institutional shift from regulated agency securitization to unregulated PLS securitization, and explains, in the next section, why this shift in products and securitization channels resulted in a bubble.

IV. EXPLAINING THE OVERSUPPLY OF UNDERPRICED MORTGAGE CREDIT

A. Exploiting Information Asymmetries

Evidence from PLS spreads makes clear that the bubble was a supply-side bubble, as housing prices were bid up due to an oversupply of underpriced mortgage finance. It is also clear that there was only a bubble for a relatively short window, from 2003-2004 until 2006. But what led to the oversupply of underpriced mortgage credit?

The answer, we believe, is the shift in the securitization market from regulated Agency MBS to unregulated PLS. The housing bubble was marked by the extraordinary growth of two types interrelated of

[148] *See* Khandani *et al.*, *supra* note 9; Favilukis *et al.*, *supra* note 9.
[149] *See* Keys *et al.*, *supra* note 9; Mian & Sufi, *supra* note 9; Mian *et al.*, *supra* note 9.

complex, heterogeneous products: nontraditional mortgages and PLS. The market share of both expanded dramatically in 2004 and continued to grow up to the height of the bubble in 2006. The growth of these products was inextricably linked, as PLS provided the funding for nontraditional mortgages. Nontraditional mortgages enabled the expansion of the mortgage borrower pool and thereby enabled more securitization.

PLS are unusually complex, heterogeneous products. Any particular securitization is supported by a unique pool of collateral and has its own set of credit enhancements and payment structure. Complexity and heterogeneity shrouded the risks inherent in PLS. As a result, investors failed to properly price for risk, as they did not perceive the full extent of the risk involved. The structure of PLS (including the underlying mortgages) allowed investors to underestimate the risks involved and therefore underprice the PLS by demanding insufficiently large yield spreads. The housing bubble was fueled by mispriced mortgage finance, and the mispricing occurred because of information failures. Thus, at the core of the housing bubble was an information failure. Investors lacked adequate information about the risks involved with PLS.

When markets work, costs and risks are signaled through prices and rates, which allows for efficient resource allocation based on this information. In markets in which information flows are shrouded or blocked, prices do not reflect costs and risks, and resources are allocated inefficiently. Complexity and heterogeneity shroud information and thereby make it more difficult to evaluate investments. Complexity overwhelms the computational capacity of the human brain and even standard pricing models, while heterogeneity defeats cross-product comparisons, an inductive method upon which much of our pricing behavior relies.[150] Therefore, as complexity and heterogeneity increase, mispricing becomes increasingly likely. Moreover, informationally shrouded markets also tend to create informational asymmetries that can be exploited by informationally advantaged parties to take advantage of mispricing by informationally disadvantaged parties.

Information failures exist in both the mortgage loan market and the MBS market. Both sides of the mortgage finance system are subject

[150] *See* Xavier Gabaix and David Laibson, *Shrouded Attributes, Consumer Myopia, and Information Suppression In Competitive Markets*, 121 Q. J. ECON. 505 (2006); Xavier Gabaix & David Laibson, *Competition and Consumer Confusion*, Econometric Society 2004 North American Summer Meetings, (2004) (arguing that firms with lower intrinsic quality utilize excess complexity to increase market share by confusing consumers); Marisa J. Mazzotta & James J. Opaluch, *Decision Making When Choices Are Complex: A Test of Heiner's Hypothesis*, 71 LAND ECON. 4, 513 (1995) (finding individuals resort to simplified decision-making rules when choices reach a certain level of complexity).

to informational asymmetries and principal-agent problems. In the mortgage loan market, there are lender/broker information advantages over borrowers, as well as borrower information advantages over lenders. Information asymmetries occur both between the borrower and broker/lender because the borrower lacks information on the loan product's risk as well as on the broker or lender's incentives to steer the borrower toward a riskier loan that will be more profitable because of the greater yield spread or servicing release premium paid upon the sale of the loan. At the same time, however, the lender lacks information on the risk posed by the borrower. These asymmetries can feed on each other to result in borrowers receiving unsuitable loans.[151]

Information asymmetries also exist in the MBS market. Both mortgage borrowers and mortgage lenders have informational advantages over securitizers, and they ultimately all have informational advantages over investors, because not all information on mortgage risk is imbedded in the disclosures to investors. PLS are sold without having to reveal the full nature of the underlying mortgages. Indeed, disclosure for many PLS took the form of disclosing the *lack* of information on loans bundled in these securities, such as listing the percentage of low or no-document loans (often not even broken down separately). On top of this, there is no independent verification of the disclosures.[152]

Principal-agent conflicts are rife in these informationally asymmetric markets. Mortgage brokers, perceived by many borrowers as their legal agents or at least owing them duties,[153] were compensated in part with "yield spread premiums"—payments made by the lender to the broker based on the difference between the yield on the mortgage the broker placed and the yield on the lowest rate mortgage for which the borrower qualified—which incentivized brokers to steer borrowers toward more expensive (and ultimately riskier) loans.[154]

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[151] *See* Adam Ashcraft and Til Schuermann, *Understanding the Securitization of Subprime Mortgage Credit*, 2 FOUNDATIONS AND TRENDS IN FINANCE 191-309 (2008); Oren Bar-Gill, *The Law, Economics and Psychology of Subprime Mortgage Contracts*, 94 CORNELL L. REV. 1073 (2009).

[152] Intentional falsification of information in disclosures would violate the securities laws, but the Private Securities Litigation Reform Act of 1996 makes it very difficult for investors to bring suit over such a problem. Investors would have to plead fraud with specific factual allegations, but it would be hard for investors to obtain such facts absent discovery, which they could only get if their pleading were sufficient. PLS trustees could, in theory, bring suit, and they would have greater access to information, but PLS trustees have no incentive to bring suit, and without the ability to plead specific facts, it is unlikely that PLS investors could force the trustee to bring suit. Tort reform has thus created a Catch-22 for PLS investors.

[153] Debbie Gruenstein Bocian *et al.*, *Unfair Lending: The Effect of Race and Ethnicity on the Price of Subprime Mortgages*, Center for Responsible Lending, May 31, 2006, at 21.

[154] Howell E. Jackson & Laurie Burlingame, *Kickbacks or Compensation: The Case of Yield Spread Premiums*, 12 STAN. J.L. BUS. & FIN. 289, 310-11 (2007). As of April 1, 201, yield spread premiums will be illegal under Regulation Z. [Fed. Reg. cite to be provided when available], *to be codified*

Likewise, securitization sponsors are incentivized to do more and larger deals because their income comes from fees based on deal volume and size, not the loan's performance. As James Grant has written, the securitization process "is a wondrous kind of machine that spits out fees for its owners at every step of the manufacturing process."[155] The bonus-driven incentives of employees at the entire spectrum of financial intermediaries, from mortgage brokers to securitization sponsors, to monoline insurance companies underwriting CDS all exacerbated this focus on short-term profits.

Securitization's fee-based business model and its inherent information asymmetries create a potential "lemons" problem, as securitizers are tempted to push ever more questionable product on investors.[156] If investors underprice, they will overpurchase. Thus, the information asymmetries between securitizers and investors allow securitizers to maximize volume and therefore fee income in the short-term. To be sure, the long-term implications of a short-run income maximization strategy were apparent, but preserving long-term reputation did little to address immediate earnings pressures, and was viewed by managements as their successors problem. Moreover, once one firm adopted this strategy, it place competitive pressure on other firms to follow suit.

Increasing fee revenue necessitated more deals, which necessitated greater production of mortgages. Indeed, the need for mortgage product to securitize led the investment banks that served as securitization conduits to purchase mortgage originators in order to guarantee a supply of product for securitization.[157] As John Kriz of Moody's noted in 2006, "If you have a significant distribution platform, there are many things you can do to move those assets—through securitization and outright resale, among other things. *What you need is product to feed the machine.*"[158] The fee-based business model of private-label securitization encouraged greater supply of mortgage credit

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at 12 C.F.R. § 226.36(c). The servicing release premiums paid to originators by secondary market institutions might also incentivize the steering of borrowers to riskier loans.

[155] JAMES GRANT, *MR. MARKET MISCALCULATES: THE BUBBLE YEARS AND BEYOND* 170 (2008).

[156] The potential for a "lemons" problem in securitization has long been noted. *See* Claire A. Hill, *Securitization: A Low-Cost Sweetner for Lemons*, 74 WASH. U. L.Q. 1061 (1996) (noting the potential for a "lemons" problem in securitization). The bubble and its aftermath play out George Akerlof's lemon's problem exactly as predicted. *See* George A. Akerlof, *The Market for "Lemons": Quality, Uncertainty, and the Market Mechanism*, 84 Q. J. ECON. 488 (1970). Once a market becomes a market for lemons, it contracts, which is just what happened starting in the fall of 2007, as the weakness of the mortgage market became apparent.

[157] Todd Davenport, *What's Behind Wall Street Players' Mortgage Deals*, AM. BANKER, Aug. 14, 2006.

[158] *Id.* (quoting John Kriz of Moody's) (emphasis added).

in order to generate mortgages for securitization to generate fee income for financial institution intermediaries.

Financial institutions play the role of economic (but not legal) agents in their intermediation between mortgage borrows and capital market mortgage funders. Potential principal-agent problems exists both between mortgage borrowers and financial intermediaries and between mortgage investors and the intermediaries. Regulatory standards, so long as they were in place, kept both types of principal-agent problems in check for GSE and Ginnie Mae securitization. In the PLS market, however, there were no such constraints, and the principal-agent problems resulted in a shift in mortgage products to unsustainable nontraditional products that boosted origination and securitization volume—and hence profits—in the short-term, albeit with disastrous longer-term effects. Insufficient regulation of the privately-owned GSEs meant that the GSEs found themselves under shareholder pressure to recapture market share lost to PLS, and they were only able to do this by lowering their underwriting standards and underpricing risk in their guarantee business.[159]

The combination of information asymmetries on both sides of the housing finance market meant that borrowers were mispricing risk and entering into overly leveraged purchases, while investors were making the leverage available too cheaply. The result was the growth of an unsustainable housing price bubble as artificially cheap credit from investors' mispricing increased mortgage demand, and increased mortgage quantity pushed up prices. Housing price appreciation concealed the risk in the lending by temporarily preventing defaults and inflating LTV ratios, which made PLS look like safer investments, fueling the cycle.

B. Failure of Normal Market Constraints

The "Fundamental Theorem of Asset Pricing" teaches that if an asset is overvalued, then investors will be against it, resulting in the asset's price falling.[160] Why didn't investors recognize PLS as overvalued and why didn't they bet against them on a sufficiently wide scale to raise the yields on PLS and thus on mortgage credit? Some investors certainly believed that PLS were overpriced. There were several potential market constraints on the level of default risk in PLS that could have assisted investors in ensuring proper valuation for PLS:

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[159] *See* Federal Housing Finance Agency, *Conservator's Report on the Enterprises' Financial Performance, Second Quarter 2010*, Aug. 26, 2010, at 6, 12.

[160] *See* Stephen Ross, *The Arbitrage Theory of Capital Asset Pricing*, 13 J. ECON. THEORY 341 (1976).

credit ratings, subordinated debt investors, and short investors. As this section explains, these constraints all failed due to PLS' complexity and problems with market structures.

1. Credit Ratings

An initial constraint on default risk in PLS should have been credit ratings. Most investors looked to rating agencies to serve as information proxies regarding credit risk. Credit rating agencies rate individual securities, such as distinct PLS tranches. The rating is an indication of default risk or loss risk, depending on the agency.[161] There are three major credit rating agencies, and most PLS were rated by at least one, if not two agencies.

Approximately 90 percent of PLS bore AAA-ratings, meaning that the risk of default or loss was negligible.[162] Investors in the AAA-rated securities market do not appear to have been informationally sensitive.[163] A study by economist Manuel Adelino found that investors in AAA-rated PLS did not demand higher yields for what turned out to be riskier deals.[164] In other words, AAA-rated PLS investors were not themselves capable of sorting between deals and determining which ones were riskier within the AAA-rating. Instead, these investors were simply purchasing the rating as a proxy for credit risk. Rating agencies thus played a critical informational intermediary role for the PLS market.

As it turned out, the rating agencies were inadequate informational proxies; many AAA-rated PLS were subsequently downgraded.[165] Several factors contributed to the failure of the rating agencies in the PLS market. Many commentators have pointed to the rating agencies' lack of liability for misrating and lack of financial stake

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[161] Fitch and S&P ratings measure the likelihood of default: they evaluate a borrower's capacity to meet its financial obligation. Ratings range from AAA, which is given to companies that are "reliable and stable" to companies, to C and D ratings which go to companies that have defaulted or are "highly vulnerable." In contrast, Moody's ratings reflect the "expected loss," which is an assessment of default risk plus loss severity upon default. Ratings range from Aaa, which is given to companies with the "smallest degree of risk" to a C rating, which is given to a company "typically in default" and from which "potential recovery values are low."

[162] Adelino, *supra* note 58, at 31.

[163] *Id.* Even very sophisticated AAA-investors seemed to have purchased by rating, rather than by risk. In 2006, Daniel Mudd, the CEO of Fannie Mae, explained that Fannie, one of the most sophisticated entities in the entire mortgage investment world, could not price the risks involved in private-label securities. He noted that "the credit characteristics reflected in the layering of products - products that typically get distributed through the private-label securities market - have risks that are difficult to quantify." Paul Muolo, *Fannie's Mudd Is Wary of Exotics*, NAT'L MTG. NEWS, July 24, 2006. Mudd made this comment at a time when Fannie Mae held over $85 billion in PLS, almost all of which were AAA-rated. Fannie Mae, Form 10-K, Aug. 16, 2007, at 120, Table 34.

[164] Adelino, *supra* note 58, at 22.

[165] *Id.* at 14-15, 43.

in any particular rating, beyond its long-term reputational effect.[166] While these factors surely contributed to the ratings problem, they are not unique to PLS. Lack of liability and financial stake in rated bonds' performance has long been the case with corporate bond ratings, where the ratings agencies have generally performed well. Similarly, issuers' ability to "shop" ratings by only providing business to the rating agencies that were willing to provide the highest ratings is a problem that also exists for corporate bonds.

PLS ratings, however, might have been different. The rating agencies became highly dependent on revenue from structured financing ratings, which commanded premium prices; by 2007, structured products like PLS accounted for 40% of their revenue and 50% of their ratings revenue.[167] Because the issuers of structured products were looking to manufacture as much investment-grade paper as possible, the rating agencies were under pressure to award investment grade ratings, even if it meant making "off-model" adjustments.[168] As Patrick Bolton, Xavier Freixas, and Jacob Shapiro have theorized, it is much easier for a rating agency to inflate ratings in a boom market because there is less of a chance of a rating being wrong in the short term, while the benefits of new business generation are larger.[169]

The rating agencies' problems went beyond misaligned incentives. The ratings agencies' historical strength has been rating corporate bonds, which are largely homogeneous products for which the ratings agencies have time-tested models going back over a century. PLS, however, lacked multi-cycle experience and are heterogeneous products; no two deals are alike. The underlying collateral, borrower strength, and credit enhancements vary across deals. The novelty, heterogeneity, and complexity of structured finance products made ratings much more speculative.

Moreover, the ratings agencies' models did not seem to adequately account for the possibility of a national housing price

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[166] *See, e.g.*, Matthew Richardson & Lawrence J. White, *The Rating Agencies: Is Regulation the Answer?* 101-116 in VIRAL V. ACHARYA & MATTHEW RICHARDSON, *RESTORING FINANCIAL STABILITY: HOW TO REPAIR A FAILED SYSTEM* (2009); Joseph R. Mason, *The (Continuing) Information Problems in Structured Finance*, 14 J. STRUCTURED FIN. 7-11 (2008); Jerome S. Fons, *Rating Competition and Structured Finance*, 14 J. STRUCTURED FIN. 11-15 (2008); Joseph Mason & Joshua Rosner, *Where Did the Risk Go? How Misapplied Bond Ratings Cause Mortgage Backed Securities and Collateralized Debt Obligation Market Disruptions* working paper (2007).

[167] Gretchen Morgenson, *Debt Watchdogs: Tamed or Caught Napping?* N.Y. TIMES, Dec. 7, 2008, at A1.

[168] Kia Dennis, *The Rating Game: Explaining Rating Agency Failures in the Buildup to the Financial Crisis*, 63 U. MIAMI L. REV. 1111, pin (2009) (discussing "off-model" adjustments).

[169] Patrick Bolton, *et al.*, *The Credit Ratings Game* 15 (SSRN, Working Paper No. 1342986, 2009), *available at* http://www.recercat.net/bitstream/2072/14564/1/1149.pdf.

decline.[170] The ratings agencies, just like investors, were not in a position to carefully analyze the underlying collateral of the PLS to identify the probability of default or price fluctuation.[171] A basic assumption of the rating agencies was that housing prices adequately represented fundamentals. This is implicit in the use of appraised values of collateral, which are based on comparable properties. This assumption made it unnecessary for rating agencies to evaluate the market-specific pricing risk of deviation from fundamentals that directly determines default risk.

Furthermore, rating agencies had no capacity to undertake such analysis. The ratings agencies received pool-level rather than loan-level information.[172] Therefore, the rating agencies, just like investors, often lacked sufficient information to adequately assess the default risk on the mortgages. PLS prospectuses disclosed information about the underlying collateral—percentage make-ups, weighted averages, and ranges for items such as loan balances, loan-to-value ratios, FICO scores, loan interest rates, state-by-state location, fixed vs. adjustable rate structures, property types, loan purpose, amortization type, lien priority, completeness of loan documentation, term to maturity, presence of prepayment penalties, etc.[173] The information disclosed, however, is aggregate data, not individual loan data. The data disclosed are not verified by an independent source, and do not include all material information for investors. While a great deal of information was being disclosed, rating agencies and PLS investors invariably knew less about the mortgage loan collateral backing the PLS than the financial institutions that originated the mortgages and sponsored the securitizations. Originators and securitization sponsors were able to exploit this informational asymmetry to sell more PLS at higher prices than they would otherwise have been able to do.

PLS heterogeneity and complexity also enabled issuers to "shop" for ratings. As economists Vasiliki Skreta and Laura Veldkamp have argued, increased complexity in products makes ratings more variable between agencies, which encourages issuers to shop for the most

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[170] *See, e.g.*, Gary Shorter & Michael V. Seitzinger, *Credit Rating Agencies and Their Regulation*, Cong. Research Service, Sept. 3, 2009 at 5, 11.

[171] GRANT, *SUPRA* note 155, at 183.

[172] LEWIS, *SUPRA* note 90, at 170. We have been told by others, but unable to verify, that the rating agencies did in fact receive loan-level data on RMBS, as they did on CMBS, where presale reports contain detailed discussions of individual underlying collateral properties. If so, then our case on information failures being driven by heterogeneity and complexity is even stronger.

[173] *See, e.g.*, Prospectus Supplement dated August 23, 2005 (to Prospectus dated June 23, 2005), Ace Securities Corp. Home Equity Loan Trust, Series 2005-HE5, S-21-S-33, *at* http://www.secinfo.com/dSej2.z5Tk.htm - 1kbi.

favorable rating.[174] The ratings agencies also made their models available to investment banks, which designed their products to game the ratings models.[175]

The ratings agencies' models for structured products proved inadequate. Thus, even if incentive alignment had been better, the rating agencies still would likely have failed in their PLS ratings.

2. Subordinated Debt Investors and CDOs: Residential Real Estate

Not all investors purchased based entirely off of ratings given by rating agencies. Some were more sophisticated. They understood a principle widely accepted in securities markets: ratings are but a veil; markets in fact do price securities very differently from ratings.[176] If anything, ratings respond to market conditions as opposed to revealing market risk. Ratings downgrades are frequently reactive, not predictive.

Some investors not only did not rely on the ratings, but they recognized the risks in PLS despite (or perhaps because of) PLS's complexity.[177] Why didn't the risk premium demanded by these investors or short pressure cause a price correction? If the PLS investors believed that the underlying real estate was overpriced, they would have demanded a risk premium in the form of higher yields on the PLS. In order to support the higher yields, PLS issuances would have to contain higher yielding mortgages, meaning mortgages with higher interest rates.[178] Higher interest rates on the mortgages would reduce consumer demand for mortgage finance and thus ability to purchase real estate. The end result would be for real estate prices to return to an equilibrium. Subordinated debt buyers thus should provide a natural limitation on risk, and restore correct asset prices according to the fundamental theorem of asset pricing.

Subordinated debt investors tend to be more circumspect about credit risk precisely because they are the most exposed to it by virtue of their subordination. Even with creative deal structuring, not all PLS tranches received AAA-ratings. The lower-rated, junior tranches had higher yields than the senior AAA-rated tranches, but even with these higher yields, it was not always easy for underwriters to place the junior tranches with investors. Economist Manuel Adelino has found that

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[174] Vasiliki Skreta & Laura L. Veldkamp, *Ratings Shopping and Asset Complexity* (SSRN Working Paper No. 1295503, 2009).

[175] Gretchen Morgenson & Louise Story, *Rating Agency Data Aided Wall Street in Deals*, N.Y. TIMES, April 23, 2010, at A1.

[176] GRANT, *SUPRA* note 155, at 181-83.

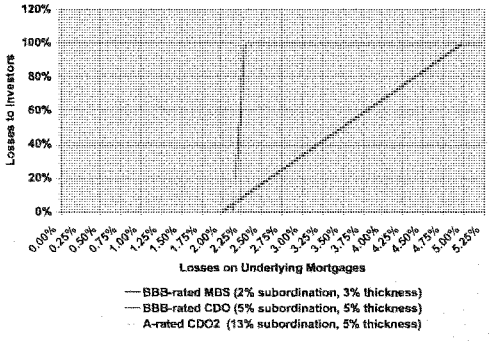
[177] *See generally* LEWIS, *SUPRA* note 90.

[178] Conceivably overcollateralization of the PLS could also be used to produce higher yields without increasing the yields on individual mortgages, but this would make securitization less profitable.

buyers of subordinated PLS often demanded a premium for investing in riskier deals.[179] Subordinated debt investors' risk tolerance should have thus provided a limit on the expansion of PLS; if the junior tranches of PLS became too risky, investors simply would not buy them.

The expansion of the collateralized debt obligation (CDO) market largely (or at least temporarily) bypassed the risk limitation on PLS provided by subordinated debt investors.[180] CDO is a generic term for securitizations, but deals referred to as CDOs typically involve a securitization of existing PLS—that is a resecuritization. Resecuritization (with further tranching) transformed some of the junior (frequently called mezzanine) tranches of PLS into senior, investment-grade CDO securities, albeit with a higher degree of implicit leverage. The junior tranches of the CDOs could then be resecuritized again as CDO^2s, and so on, again turning high-yield dross into investment-grade gold. By 2005, most subprime PLS were being resecuritized into CDOs.[181] Resecuritization enabled investors to take on additional leverage, which meant that investors in resecuritizations were much more exposed to mortgage defaults than investors in MBS.[182] (See Figure 22.)

Figure 22. Stylized Correlation Risk for Resecuritizations[183]



[179] Adelino, *supra* note 58, at 27.

[180] Mark H. Adelson & David P. Jacob, *The Subprime Problem: Causes and Lessons*, 14 J. OF STRUCTURED FIN., 12, 12 (2008).

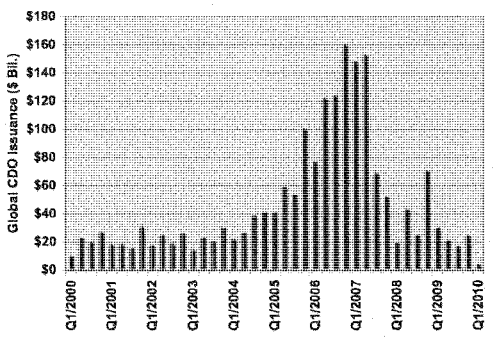
[181] Anna Katherina Barnett-Hart, *The Story of the CDO Market Meltdown: An Empirical Analysis* 10-11 (Mar. 19, 2009) (unpublished B.A. thesis, Harvard College), *available at* http://www.hks.harvard.edu/m-rcbg/students/dunlop/2009-CDOmeltdown.pdf.

[182] GRANT, *SUPRA* note 155, at 171, 182.

[183] Authors' calculations. Assumes CDO2 tranche of 5% thickness with 13% subordination support comprised of perfectly correlated CDO tranches of 5% thickness with 5% subordination support, themselves comprised of perfectly correlated MBS tranches of 3% thickness with 2% subordination support.

The rapid expansion of the CDO market occurred in 2006-2007, during the middle and end of the bubble, as the drop in underwriting standards became apparent. (See Figure 23.) The expansion of the CDO market occurred just when subordinated debt investors would have begun to demand larger risk premiums and market appetite for direct investment in junior PLS tranches would have reached its limit. But, as noted in Figures 12, 13 and 14, spreads were falling on PLS, and PLS issuance was expanding.[184] This was possible only because CDOs thus enabled the PLS market to bypass the constraint of subordinated debt investors' limited risk appetite.[185] CDOs likely lengthened the housing bubble by at least a third, making the decline all the more painful.

Figure 23. Growth of Collateralized Debt Obligations[186]



Many CDOs contained synthetic assets, particularly credit default swaps—credit insurance contracts, frequently written on PLS. CDOs were generally insurance *sellers*, not buyers, in CDS, meaning that they received regular premia until an insurable event occurred. For hybrid cash-synthetic CDOs, selling CDS protection provided a regular income stream that enabled the purchase of more PLS to supplement the CDS.[187] This business model only worked as long as the CDOs' outflows from having to pay on CDS on defaulted PLS did not outpace the inflows of premia on other CDS. Once mortgage defaults rose too

[184] Yongheng Deng *et al. CDO Market Implosion and the Pricing of CMBS and Sub-Prime ABS*, April, 2008, at 4, 28, *available at* http://www.reri.org/research/article_pdf/wp150.pdf.

[185] *See generally* LEWIS, *SUPRA* note 90, at 140 ("All by himself, [CDO manager Wing] Chau generated vast demand for the riskiest slices of subprime mortgages bonds, for which there had previously been essentially no demand.").

[186] Asset Backed Alert.

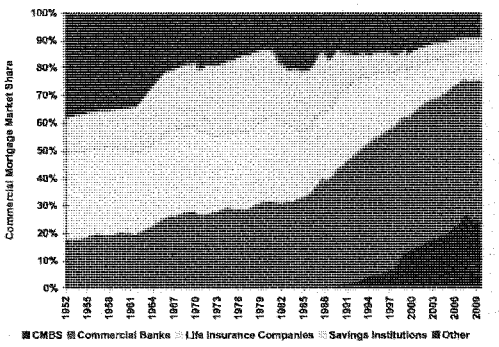
[187] *See* LEWIS, *SUPRA* note 90, at 143.

fast, however, CDOs were no longer capable of providing the funding for the subordinated PLS tranches, and the whole structure collapsed.

3. Subordinated Debt Investors and CDOs: Commercial Real Estate

The expansion of the CDO market also explains the commercial mortgage bubble that closely paralleled the residential mortgage bubble. (See Figure 19, above.) Commercial real estate (CRE) mortgages are securitized at a much lower rate than residential mortgages (see Figure 24, below), but commercial mortgage-backed securities (CMBS) are entirely a private-label market; there are no GSEs or government agencies involved in the CRE market. Why, then, didn't a CRE bubble develop with the advent of CMBS in the early 1990s?

Figure 24. Commercial Mortgage Market Share[188]



The answer relates to the unique structure of CMBS. Historically, CMBS were much more focused on credit risk than RMBS structures because CMBS are prone to idiosyncratic default risk—the risk of major loss because of a small number of loan defaults.[189] In contrast to RMBS, CMBS pools feature small numbers of loans with large balances. Whereas an RMBS issuance will be backed by a pool of thousands of properties, a CMBS pool will be backed by dozens or

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[188] Federal Reserve Statistical Release Z.1, Table L. 220.

[189] Trepp for CMBS, Pricing, *at http://www.trepp.com/templ_a.cgi?whichTrepp=m&cmbs_product=pricing* ("In the RMBS universe, credit concerns are dwarfed by interest rate risk considerations. In the CMBS universe, however, the opposite is true. Credit risk dominates the analytical process in CMBS as interest rate sensitivity, while still relevant, is of secondary concern."). RMBS investors have historically been more focused on interest rate risk, which is a much smaller concern for CMBS investors. CMBS have little prepayment risk because most CRE loans have prepayment penalties, yield maintenance, or defeasance provisions that make refinancing impractical. Instead, their prepayment characteristics are similar to corporate bonds. *See* FRANK J. FABOZZI, *FIXED INCOME ANALYSIS*, (2007).

hundreds or sometimes even a single property.[190] Therefore, in a CMBS pool, the relative importance of any particular property's performance is much greater than in an RMBS pool, where idiosyncratic default risk is largely eliminated through diversification.

CMBS's concern about credit risk has resulted in a very different deal structure than in RMBS. A CMBS deal is divided into two parts, an "A-piece" and a "B-piece." The A-piece consists of the investment-grade tranches, whereas the B-piece consists of the subordinated, non-investment-grade tranches. Because credit risk is concentrated on the B-piece, CMBS deals provide special rights and protections to B-piece investors, beginning in the origination process.[191]

After a pool of commercial real estate mortgages is created, the CMBS deal sponsor presents the pool to rating agencies in order to get a sense of what the rating will be given particular structures and credit enhancements.[192] Next the pool is presented for bidding to B-piece investors.[193] The winning bidder gets to perform additional diligence on the pool.[194] As the result of the diligence, the B-piece investor will sometime insist on "kickouts"—the removal of particular loans from the pool.[195] Once negotiations with the B-piece investor are finalized, the deal is presented to the rating agencies for rating, and once the bonds are rated, the prospectus for the investment grade (A-piece) is circulated to investors.[196]

Before 2004, there were only a small number of B-piece investors. This meant that they could exert significant market power and insist on kickouts for any properties with which they were uncomfortable. Kickouts are expensive for CMBS deal sponsors, which are typically investment banks that are borrowing money on warehouse lines from commercial banks to finance the purchase of CRE loans that they are pooling for securitization. If a property is kicked out of deal, the deal sponsor will have to continue to hold that property itself, which means the sponsor is left financing a lemon. The risk of kickouts, thus led CMBS deal sponsors to be careful in their selection of properties for

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[190] The median (mean) number of properties in a US-denominated CMBS deal with US collateral is 99 (130), and the median (mean) number of loans of is 53(119) with median (mean) loan size of $6.62 million ($6.19 million). Commercial Mortgage Alert CMBS database, authors' calculations. The typical US residential mortgage loan is for about $200,000.

[191] *See* Larry Cordell & Adam J. Levitin, *What RMBS Servicing Can Learn from CMBS Servicing*, working paper, July 2010, *at* http://ssrn.com/abstract=1640326.

[192] CW Capital Investments, The Evolution of the CMBS Market, Powerpoint Slides for a presentation at the CRE Annual Convention, Maui Hawaii, October 23-26, 2006, slide 11, *at* http://www.cre.org/images/events/hawaii_06/presentations/hawaii_06_silva.ppt.

[193] *Id.*

[194] *Id.*

[195] *Id.*

[196] *Id.*

pools, which meant that riskier CRE ventures did not get securitized. Because riskier ventures were consigned to balance sheet lending, underwriting standards retained discipline. The strength of subordinate lenders in the CMBS market served to keep underwriting standards in check.[197]

This market equilibrium changed in 2004, as the B-piece market dramatically expanded.[198] As a real estate investment trust (REIT) noted in a 2004 letter to investors:

> The flurry of new entrants and the emergence of improved CDO technology have dramatically changed the dynamics of B-Piece acquisition. The norm for a B-Piece investor has changed from a buy-and-hold mentality to a CDO warehouse mentality. Many B-Piece investors are aggressively pursuing product with the intent of aggregating it for resale in the form of a CDO. This factor has changed the focus on subordination levels, credit quality, and required yields from appropriate long-term risk-return balancing from a real estate perspective to that of short-term stability until CDO execution. Between the high CDO proceeds (and don't forget who is buying those bonds) and the fees from special servicing and asset management, the B-Piece investors have very low basis in their interests—no investment at risk.[199]

The result of the expansion of the B-piece market was tremendous liquidity in CRE lending. This led to a deterioration in underwriting standards, as CRE loan originators became agents for securitization conduits, eager to increase volume and without "skin-in-the-game." Thus, the same REIT letter to investors observed that by 2004:

> "Competition among lenders [in the commercial real estate market] is so fierce that borrowers can dictate terms that fly in the face of accepted credit standards. High loan proceeds, low debt service coverage requirements, aggressive property valuations, limited or

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[197] *See* Nomura Fixed Income Research, *The Evolution of Commercial Real Estate (CRE) CDOs*, Jan. 4, 2006, *at* http://www.securitization.net/pdf/Nomura/CRE-CDO_4Jan06.pdf ("Subordinate lenders often exercise great influence on the fortune of troubled CRE loans, and the involvement of commercial real estate experts also benefits other CDO investors.").

[198] *Id.*

[199] ARCap, REIT, Inc. *An Open Letter to Investment Grade Investors: Buyer Beware*, 2 The B-Piece 1 (Oct. 2004), *at* http://www.centerline.com/news/Newsletters/Vol2No3.pdf.

> no reserve requirements, substantial interest-only periods and other similarly aggressive loan terms are increasingly prevalent in conduit transactions. Combined with the non-recourse nature of conduit lending, these terms make it possible for a borrower to purchase and finance a property with little or no equity, strip cash flow for an extended period of time while the property performs, and then "put" the property back to the CMBS trust if the property fails to perform. Between the high loan proceeds and the immediate cash flow, borrowers often have absolute no equity in a property—no investment at risk.[200]

Structured finance attorneys Stuart Goldstein and Angus Duncan also observed the same phenomenon:

> As competition for commercial real estate product has grown, firms have found themselves chasing loans in the US that did not neatly fit into the CMBS 'box.' We have seen the emergence of mezzanine loans, B notes, B participations and preferred equity as means of offering mortgage loan borrowers increased leverage. Originators of this collateral and investors in the B pieces of conduit securitizations wanted to be able to securitise this product, but the rules relating to CMBS would not permit it.[201]

CDOs offered the solution for securitizing nontraditional CRE collateral. As Jonathan Shlis has noted:

> Prior to 2004/2005, CRE CDOs were terra incognita – and deservedly so – to most commercial real estate borrowers. Before those dates, CRE CDOs almost always were comprised solely of REIT debt, and, importantly, unrated and below-investment-grade rated CMBS tranches known as first loss pieces ("B-Piece"), providing long term financing to B-Piece buyers, thereby adding liquidity and providing a degree of risk sharing to the CMBS process. But in 2004, B-Notes [subordinated mortgage notes], mezzanine loans [loans made to LLC development companies that own the equity in real

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[200] *Id.*

[201] Stuart Goldstein & Angus Duncan, *The Developing Global Market for CRE CDOS*, ISR CDO SUPPLEMENT, March 2007, www.isr-e.com, *at* http://www.cadwalader.com/assets/article/030107DuncanGoldsteinISR.pdf.

> estate developments], credit tenant leases, loans and debt-like preferred equity were included with B-Pieces and REIT debt in CRE CDOs. And then in 2005, first mortgage commercial real estate loans – "whole loans" – started becoming collateral assets in CRE CDOs [meaning that whole loans were going directly into CDOs, rather than into CMBS.[202]

CRE CDOs had existed since 1999,[203] but they were originally created to provide "long-term, non-mark-to-market financing for CMBS B-piece buyers."[204] The first CRE CDOs were liquidity provision mechanisms for B-piece buyers, not a source of market demand for CRE assets in their own right.

By 2004, however, the CRE CDO market had begun to change and with it the leverage that traditional B-piece buyers had over quality of CMBS underwriting declined. As the CRE CDO market expanded, a new class of B-piece buyers emerged. These new buyers were primarily conduit buyers, looking to repackage the B-pieces they purchased into CRE CDOs. As intermediaries, rather than end-investors, these new B-piece buyers were not particularly concerned about credit risk and lacked the long-standing CRE experience of traditional B-piece buyers. Not surprisingly, underwriting standards deteriorated.

Because it was now much easier for CMBS sponsors to sell the B-piece of deals, CMBS volume boomed along with CRE CDO volume. (See Figure 25, below.) CRE CDOs nearly tripled in volume from 2004 to 2005 and CRE CDO volume was nearly a fifth of the total CMBS market. Moreover, existing CRE CDOs and CDO^2s were also resecuritized, creating an investment cocktail with unique "complexity and high leverage."[205]

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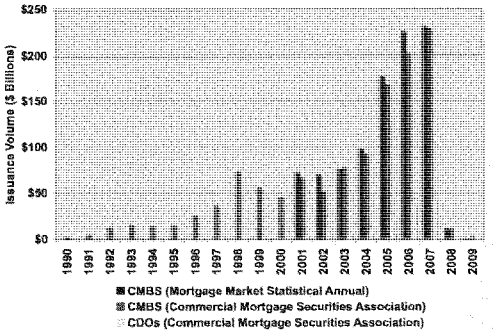
[202] Jonathan Shils, *Managed CRE CDO v. CMBS: Is One Better For A Borrower?*, *at* http://files.ali-aba.org/thumbs/datastorage/skoob/articles/TAB16-Shils_thumb.pdf.

[203] Nomura Fixed Income Research, *The Evolutino of Commercial Real Estate (CRE) CDOs*, Jan. 4, 2006, *at* http://www.securitization.net/pdf/Nomura/CRE-CDO_4Jan06.pdf.

[204] *Id.* ("Since the early days, the primary motivation of CRE CDOs has been the financing needs of B-piece buyers and special servicers, who have extensive experience in the commercial real estate market.").

[205] *Id.*

Figure 25. CMBS and CRE CDO Issuance Volume[206]



The development of the "new breed of CRE CDOs" created "added complexity in analyzing exposures to the commercial real estate sector that involve multiple layers of pooling and tranching.[207] Accordingly, Nomura Fixed Income Research observed in 2006, that "Unfortunately, it is not clear at present if the rating agencies and market participants fully appreciate the implications of structural characteristics in different CRE assets [CRE, CMBS, CRE CDOs, and CRE CDO^{2}s]."[208]

As with RMBS, CMBS underwriting standards declined noticeably from 2004-2007. While nominal LTV ratios were steady and debt service coverage ratios (DSCR) increased, these were reflecting a booming economy and rapidly appreciating real estate prices. Stressed LTV ratios (the anticipated LTV in a stressed market) actually increased and stressed debt service coverage ratios fell. (Figure 26.) Thus difference between the underwritten LTV and the LTV in a stressed real estate market (Moody's Stressed LTV) soared. (Figure 27.) Yet, even as risk for CMBS investors was noticeably increasing, the spreads between CMBS tranches and Treasuries narrowed. (Figure 28.)

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[206] Inside Mortgage Finance, 2010 Mortgage Market Statistical Annual; Commercial Mortgage Securities Association.

[207] Nomura Fixed Income Research, *supra* note 197.

[208] *Id.*.

Figure 26. Decline in CMBS Underwriting Standards[209]

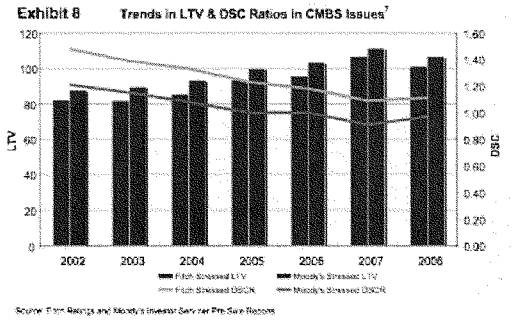
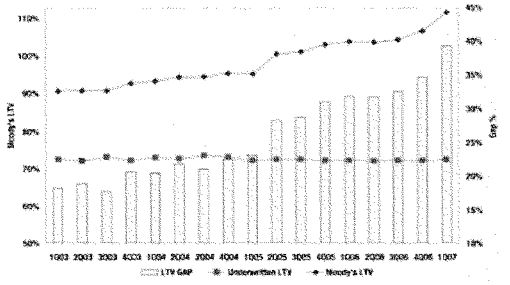


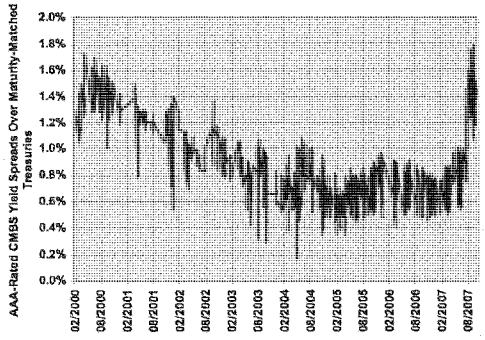
Figure 27. CMBS LTVs Compared with CMBS Stressed LTVs[210]



[209] Joseph N. Iadarola, Jr., *The Opportunity for Investing in Commercial Mortgage Debt, Babson Capital*, Nov. 2008, 4.

[210] Moody's Structured Finance, *US CMBS: Conduit Loan Underwriting Continues to Slide - Credit Enhancement Increase Likely*, Special Report, Apr. 10, 2007, at 2.

Figure 28. AAA-Rated CMBS Yield Spreads over Maturity-Matched Treasuries[211]



As with RMBS, risk premiums on CMBS declined, while risk rose, a story consistent only with a glut of supply in the commercial mortgage finance market. Historically, CMBS maintained discipline over underwriting standards in a manner parallel to RMBS. CMBS's reliance on subordinated debt investors to uphold underwriting standards is similar to reliance on Agencies for underwriting standards; in both cases, the underwriting standards are being upheld by a party in the first loss position on the MBS, as the Agencies hold the credit risk on their MBS. In both cases, this discipline was unraveled: for RMBS, it was the market's shift to PLS, while for CMBS, it was the dilution and bypassing of the small, skilled cadre of B-piece investors by resecuritization. In both cases, underwriting standards were arbitraged by a shifting of risk to a less disciplined market.

4. Short Investors and Credit Default Swaps

Subordinated debt investors were unable to exert market pressure on PLS, both residential and commercial, which would have controlled against the decline in underwriting standards. But why didn't short

[211] CMBS data comes from the Commercial Mortgage Alert database, an extensive private subscription data source covering all commercial mortgage securitizations. From the CMA Database, we removed all tranches with the following characteristics: (1) All deals with non-US collateral, (2) All deals or tranches not denominated in dollars, (3) All deals with Ginnie Mae or GSE issuers, (4) All deals with unidentified issuers, (5) All deals priced after 2007, (6) All deals priced before 2000, (7) All deals with adjustable rate notes or mixed fixed/adjustable notes, (8) all deals without ratings by at least one of Moody's, S&P, or Fitch's, (9) all deals other than conduit or fusion (conduit and large loan) deals. This left us with a sample of 1204 AAA tranches. We matched maturities with 1, 2, 3, 5, 7, 10, and 20-year Treasuries as closely as possible and then calculated the spread using the "corporate bond equivalent" coupon measure in the CMA database (converting coupons on CMBS into 360-day semi-annually paid corporate bond equivalents), which is depicted in the graph.

pressure—investment decisions made in anticipation of asset price declines—exert market discipline on mortgage and MBS underwriting? There were certainly short investors who understood that an enormous decline in underwriting standards for both mortgages and MBS was occurring,[212] and CDOs did not affect the ability of investors to take out short positions. As it turns out, PLS were uniquely immune to short pressure as well.

The real estate market in general presents particular problems for shorts. To short an asset involves selling the asset without owning it and then purchasing it in time to meet the delivery obligation. The short-seller's hope is that the asset price will decline between the time it enters into the sales contract and the time of the delivery obligation.

It is impossible to sell real estate itself short.[213] Every parcel of real estate is unique, so the short seller cannot meet its delivery obligation.[214] Thus, to short New York real estate, one would have to sell the Empire State Building, the Chrysler Building, and Rockerfeller Center, without actually owning them, and then manage to buy them at a lower price before the closing of the first sale! Indeed, the difficulty in shorting real estate is one reason that it has historically been so prone to price bubbles.

MBS can, in theory, be shorted directly,[215] but because they are relatively illiquid shorting is a risky endeavor; the short seller might not be able to find MBS to purchase that meet its delivery obligation. Markets with short sale constraints are particularly susceptible to asset bubbles.[216]

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[212] *See, generally*, LEWIS, *SUPRA* note 90.

[213] *See* Richard Herring & Susan Wachter, *Bubbles in Real Estate Markets*, University of Pennsylvania, Zell/Lurie Real Estate Center Working Paper #402, Mar. 2002, *at* http://realestate.wharton.upenn.edu/newsletter/bubbles.pdf. Shorting real estate should not be confused with a "short sale" in which a mortgage lender agrees to let the borrower sell the property for less than the full amount due on the mortgage, which due on sale, and forgives the deficiency.

[214] Similarly, the uniqueness of real estate is a reason that specific performance is generally available as a remedy for breach of real estate sales contracts. Restatement (Third) of Property (Servitudes) § 8.2 (1998) (noting that specific performance is usually available as a remedy for a breach of a land conveyance contract)

[215] It is also possible to short housing-related stocks, such as those of major home builders or banks with large real estate portfolios, but this applies only indirect market pressure and is an expensive and risky strategy because of the indirect connection with real estate prices.

[216] *See, e.g.*, José A. Scheinkman & Wei Xiong, *Overconfidence and Speculative Bubbles*, 111 J. POL. ECON. 1183 (2003) (arguing that if short sales are prohibited and some investors are over-confident regarding asset appreciation, then asset prices will rise above their fundamental values); Charles M. Jones & Owen A. Lamont, *Short-sale constraints and stock returns*, 66 J. FIN. ECON. 207 (2002) (finding that stocks that are more expensive to short have higher valuations and low subsequent returns); J. Michael Harrison & David M. Kreps, *Speculative investor behavior in a stock market with heterogeneous expectations*, 92 Q. J. ECON. 323 (1978) (arguing that differences in investor opinions combined with short sale constraints can create a "speculative premium"); Edward M. Miller, *Risk, Uncertainty, and Divergence of Opinion*, 32 J. FIN. 1151 (1977) (arguing that in a market with where short selling is limited and

It is possible, however, to short mortgages indirectly, through credit default swaps (CDS). A CDS is a form of credit insurance[217] in which one party (the protection buyer) agrees to pay regular premia to its counterparty (the protection seller) until and unless a defined credit event occurs on a reference asset.[218] Upon the occurrence of a credit event, the payment flow reverses, and the protection seller pays the protection buyer the agreed upon level of insurance coverage. Thus, the protection buyer is short and the protection seller is long on the reference asset, without either having to own the reference asset.

A CDS is generally written on a particular bond, meaning that a single CDS is written on a single MBS tranche, not on an entire MBS deal.[219] CDS, however, are not an effective means of shorting an individual MBS tranche because it is difficult to find a counterparty that will take the long position as CDS protection seller. If the counterparty merely wants to be long on the MBS tranche, it is possible to buy the MBS tranche directly.[220] Moreover, the counterparty will likely be suspicious that an informational asymmetry exists between it and the short CDS protection buyer: what does the protection buyer know that makes it want to be short on this particular bond?

Because of the difficulty in using CDS to short individual MBS, short investors like John Paulson (the famed short investor in the Goldman Sachs Abacus CDO scandal)[221] and Magnetar (a hedge fund that executed a major shorting strategy on the housing market)[222] utilized CDOs as their counterparties, rather than direct investors. CDO managers, who choose (at least nominally) the assets of CDOs received

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investors hold a divergence of opinions, asset prices may rise above fundamental levels because the price only reflects the view of optimistic investors).

[217] Insurance would have conceivably been another avenue of market discipline. If private mortgage insurance were required on all high LTV loans, as is the case in Canada, *see* Levitin *et al.*, *supra* note 146, then insurance premiums could have maintained discipline on underwriting standards. *See* Susan M. Wachter, *Procyclicality and Lending Standards Through-the-Cycle*, working paper, Aug., 2010. The collapse of the GSEs itself was arguably an insurance failure, as the GSEs failed to reserve countercyclically for losses on their guarantee business and found themselves in a rate war (for risk-adjusted rates) with PLS credit enhancements, including monoline bond insurers.

[218] *See, e.g.*, VINOD KOTHARI, *SECURITIZATION: THE FINANCIAL INSTRUMENT OF THE FUTURE* ___ (2006); Richard Stanton & Nancy Wallace, *ABX.HE Indexed Credit Default Swaps and the Valuation of Subprime MBS*, Feb. 15, 2008; David Mengle, *Credit Derivatives: An Overview*, FED. RESERVE BANK OF ATLANTA, ECON. REV. 1 (QIV, 2007).

[219] CDS can in theory be written on a collection or "bucket" of assets, but more often this takes the form of a CDS on a CDO, rather than a CDS on a bucket of individually selected assets.

[220] There are reasons for a protection seller to choose to enter into a CDS rather than buy the reference asset. The counterparty might want to receive the protection premium cash flow without having to invest in an asset.

[221] *See* Joe Nocera, *A Wall Street Invention Let the Crisis Mutate*, N.Y. TIMES, Apr. 17, 2010, at B1.

[222] Jesse Eisinger & Jake Bernstein, *The Magnetar Trade: How One Hedge Fund Helped Keep the Bubble Going*, PROPUBLICA, Apr. 9, 2010.

fee-based compensation based on assets under management.[223] While CDO managers generally held the first loss piece of the CDO, the managers' fees were paid periodically, off the top and the bottom, so that even if the CDO performed poorly in the end, the managers could still make substantial income initially, and the more assets under management, the larger the fees.[224] CDO managers were eager for the revenue streams and to increase assets under management. In some cases, their asset selection were also effectively controlled by the short investors. Thus, John Paulson had significant influence over the choice of the assets of the Abacus CDO with which he entered a set of CDS,[225] while Magnetar was able to choose the assets of its CDOs by virtue of holding the junior "equity" position, even though it simultaneously took out larger CDS on the intermediate "mezzanine" positions in those CDOs.[226] While there is no data on the percentage of CDS protection sold by CDOs, it appears to have been a significant portion, if only because of the tremendous growth of synthetic and hybrid CDOs during 2006-2007.

5. The ABX Index

The widespread use of CDS to short MBS led in to the development in 2006 of the ABX, a series of indices that track CDS pricing on MBS.[227] (A similar set of indices, the CMBX, exist for CMBS.[228])

Each ABX index track the prices of CDS on twenty initially equally-weighted subprime PLS issued in the prior six months.[229] The deals referenced by the CDS in the index must have a minimum deal size of $500 million, consist of at least 90% first lien mortgages with a

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[223] *See* LEWIS, *SUPRA* note 90, at 142.

[224] CDO manager fees are divided into a senior and junior component. The senior is at the top of the cashflow waterfall. KOTHARI, *SUPRA* note 218, at 433; Aaron Johnson & Olivia Thetgyi, *Half Of ABS CDO Managers Could Go*, Dec. 7, 2007 (10 bps for high-grad, 25 bps for mezzanine); CDO Managers get 10 bps + 2bps admin fee.); David DeBiase, *A CDO Primer*, Standish Mellon, Jan. 2005; Caroline Salas & Darrell Hassler, *CDOs May Bring Subprime-Like Bust for LBOs, Junk Debt (Update3)*, BLOOMBERG, Mar. 13, 2007 (CDO manager fees of 45-75bps).

[225] *See supra* note 221.

[226] *See supra* note 222.

[227] Ingo Fender & Martin Scheicher, *The ABX: how do the markets price subprime mortgage risk?*, BIS Q. REV. 67, 68 (Sept. 2008). The ABX was launched on January 19, 2006. Press release, *CDS IndexCo and Markit Announce Roll of the ABX.HE Indices*, BUSINESS WIRE, Jan. 19, 2007.

[228] Alan Tood & Yurkol Iwai, *An Introduction to the CMBX.NA Index and Single-Name CMBS CDS*, Commercial Mortgage Securities Association, 2006, at 29; Nomura Fixed Income Research, *The CMBX: the Future is Here*, Mar. 4, 2006, *at* http://www.securitization.net/pdf/Nomura/CMBX_23Mar06.pdf. *See also CMBX Index Draws Fire for Lack of Transparency*, COMM. MRG. ALERT, Mar. 14, 2008 (lack of trading volume information on CMBX contributes to concerns that prices are manipulated by short traders driving up spreads); *Trade Group Urges More CMBX Disclosure*, COMM. MRG. ALERT, Mar. 28, 2008.

[229] MarkIt, Index Methodology for the ABX.HE Index for the Sub-Prime Home Equity Sector ("ABX.HE Index Rules") (Sept. 5, 2008) at 1, 3.

weighted average borrower FICO score of no more than 660 and have at least four tranches registered with the SEC under the Securities Act of 1933.[230] The deals must also have tranches of at least $15 million that are rated AAA, AA, A, BBB, and BBB-.[231] The major CDS dealers that collaborate on the ABX[232] select the referenced deals by ranking their preference for the two largest PLS deals for each of the twenty-five largest RMBS issuers.[233] The twenty most-preferred deals are the ones referenced by the index, with the stipulation that the index cannot reference more than five deals with the same majority originator for the underlying mortgages.[234]

Each ABX index also contains six sub-indices, each of which tracks a particular ratings level: the penultimate AAA sub-index, which tracks the AAA tranches in the deals with the second-longest expected weighted average life, the AAA sub-index, which tracks the AAA tranches with the longest expected weighted average life, and then separate sub-indices for AA, A, BBB, and BBB- rated tranches.[235] A new set of ABX indices commences every six months; there are two ABX series every year.[236]

Economist John Geanakoplos has argued that widening spreads on the ABX during 2006-2007 resulted in investors cooling on MBS and real estate assets in general, and when this occurred, the bubble was no longer sustainable.[237] Geanakoplos's argument implies that the ABX accurately reflects risk on the underlying referenced RMBS (and hence

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[230] *Id.* at 2-4.

[231] *Id.*

[232] Originally sixteen financial institutions participated in the ABX: ABN AMRO; Bank of America; Barclays Capital; Bear Stearns; BNP Paribas; Citigroup; Credit Suisse; Deutsche Bank; Goldman Sachs; JPMorgan; Lehman Brothers; Merrill Lynch; Morgan Stanley; RBS Greenwich; UBS; and Wachovia. Press release, *CDS IndexCo and Markit Announce Roll of the ABX.HE Indices*, BUSINESS WIRE, Jan. 19, 2007. Several of these firms no longer exist as independent entities.

[233] *Id.* at 4-5.

[234] *Id.* at 5.

[235] *Id.* at 7.

[236] Pricing of the ABX is somewhat complex. The ABX references a few price components of CDS. It presents a coupon, a price index, and a factor. The coupon, in basis points, reflects the base protection premium that must be paid on the reference asset. The factor weights the reference asset based on its amortization; the factor starts at 1 at the beginning of a series and declines thereafter. The price index is actually an additional price component on top of the coupon. The price index is 100 percent at the start of a series' roll. Counterintuitively, when the price index *declines*, the cost of CDS insurance *increases* and vice-versa. Thus, to calculate the cost of CDS insurance from the ABX, one takes the reference asset amount, multiplies it by the coupon and the factor and then adds that to the reference asset amount multiplied by the factor and by (100% minus the price index percentage). Accordingly, on what was initially a $20 million reference asset with a coupon of 50, a factor of .75 (meaning that $15M is still owed on the reference asset), and a price index of 80, the average cost of a year's worth of CDS insurance, as reflected by the ABX, would be ($20M * .005 *.75 = $75,000) + ($20M * .75 * (100%-80%) = $3M) = $3,075,000.

[237] John, Geanakoplos, *Solving the Present Crisis and Managing the Leverage Cycle*, Cowles Foundation Discussion Paper No. 1751, Jan. 2010, *available at* http://dido.econ.yale.edu/P/cd/d17b/d1751.pdf.

on the underlying mortgages), and that it thus serves as a useful market discipline tool.

It seems unlikely, however, that the ABX could effectively play such a role. The ABX has a number of serious limitations as a market discipline tool for mortgage finance. First, the ABX is an index. Indices are only useful in tracking overall market movements, but cannot impose meaningful market discipline on individual assets. Thus, the performance of the S&P 500 index does not indicate anything about the performance of any one of the five hundred individual underlying stocks it tracks.

Second, the ABX suffers from being a very narrowly based index, with only twenty reference assets in each series.[238] Thus, even assuming that CDS are priced accurately (and given that they are relatively illiquid and traded OTC, this is doubtful[239]), the ABX does not reflect the risk in most deals, or even in all tranches of the deals in tracks. This means riskier tranches and riskier deals can free-ride off of less risky ones included in the ABX. Given the heterogeneity of MBS deals, the pricing of CDS on one deal does not necessarily reflect on other deals.

Indeed, because of the ABX's particular methodology, it could be vulnerable to gaming by market participants. The eligibility thresholds of 90% first lien mortgages, 660 average FICO score, $15 million tranche size, $500 million deal size, SEC registration, and being one of the two largest deals by a top 25 originator all present possible avenues for channeling the best quality mortgages into deals that are eligible to be in an ABX series and moving the lemons into deals that the ABX will not track. Savvy originators will structure deals with 89% first lien mortgages or 661 average FICO scores, smaller tranches and deals, or Rule 144 offerings. Or, the most problematic originations could simply be ceded to smaller originators. To be sure, there might be costs to such deal structuring and coordination problems, but the bright-line eligibility cut-offs present a potential gaming risk.

Third, the ABX is an inherently delayed and reactive measure of risk. ABX series start as much as six months after the RMBS deals it references are issued, and the RMBS deals themselves lag the origination of the mortgages they contain by several months. Thus, the first ABX series, ABX.HE Series 06-1, was referencing PLS assembled in the

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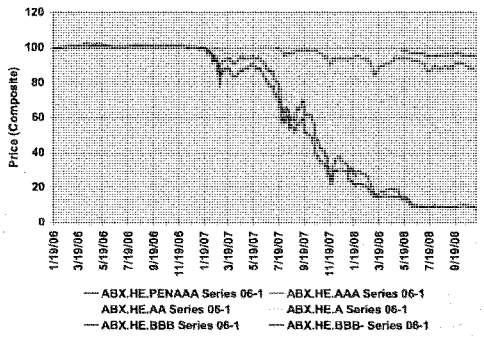
[238] Gary Gorton, *Information, Liquidity, and the (Ongoing) Panic of 2007*, 99 AM. ECON. REV. 567 (2009).

[239] *See* LEWIS, *SUPRA* note 90, at ___ (discussing CDS dealer handing up phone when confronted with difference between quoted prices and what deals were being done).

second half of 2005, which contained mortgages likely made in the first half of 2005 or second half of 2004. By the time the ABX shows the cost of CDS protection on the PLS rising (indicated, counterintuitively, by falling ABX prices), at least a year's worth of dodgy mortgage underwriting would have occurred.

Consider the performance of the ABX.HE Series 06-1, illustrated in Figure 29. It did not start to show increased risk until January 2007. To the extent that the ABX is supposed to be a canary in the coalmine, it simply sang too late to prevent the housing bubble. The presence of continually rolling indices may not alleviate this lag problem, as any particular ABX series will only reflect the risk in a limited origination vintage. Rising housing markets can reduce default levels because of the ability to refinance or sell properties. If in a rising housing market it takes over two years for the ABX to reflect risky underwriting, then it might, as Geanakoplos argues, deflate housing bubbles, but it suffers from too much of a lag to prevent them.

Figure 29. ABX.HE Series 06-1 Performance[240]



Lastly, and most importantly, the ABX might be driven by factors other than default risk on the mortgages underlying the RBMS referenced by the CDS tracked by the index. As former Moody's managing director Jerome Fons has observed, the ABX diverges significantly from the values of the actual RMBS its CDS reference.[241] Instead, the ABX could be reflecting arbitrage and hedging strategies or counterparty risk. If so, the ABX would be inherently of limited use as a market discipline mechanism on mortgage and RMBS underwriting.

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[240] MarkIt, ABX.HE Series 06-1.

[241] Jerome S. Fons, *Shedding Light on Subprime RMBS*, Feb. 23, 2009.

Prices in indexed derivatives markets that reference an illiquid underlying asset markets can be driven by arbitrage imbalances. This is because when the index strays from the fundamental value of the underlying assets, it is difficult for investors to take advantage of arbitrage opportunities in the underlying asset market.[242] Economists Richard Stanton and Nancy Wallace note that arbitrage imbalances may be a particular problem for the ABX "because it was specifically designed to allow for large positions that would otherwise be impossible due to the relative scarcity of trading sub-prime mortgage backed securities."[243] Thus, Stanton and Wallace have found that the credit performance of the ABX's referenced subprime RMBS is uncorrelated with fluctuations in the ABX.[244] Instead, they find that the ABX correlates with short-sale demand imbalances in the option and equity markets of publicly traded builders, commercial banks, investment banks, and GSEs.[245]

The ABX might also reflect excessive demand for hedging due to the illiquid nature of RMBS, rather than credit risk on the RMBS. Financial economist Gary Gorton has argued that in 2007, the ABX might not have reflected actual risk because it is heavily used by banks to hedge their illiquid positions, which led to demand for CDS protection overwhelming the market and causing index prices to stray from the risk implied by real estate fundamentals.[246]

The ABX also reflects counterparty risk on the CDS it tracks. CDS protection substitutes the credit risk on the protection seller for the protection risk on the reference asset. Even if the CDS is collateralized and underwritten by a sound counterparty, credit risk still exists. Thus, all ABX sub-indices register a noticeable drop and then a rebound February-March of 2008, before and after Bear Stearns' collapse. The credit risk on the RMBS did not suddenly change; Bear Stearns' collapse had no effect on the soundness of the mortgages backing the RMBS. Likewise, the spreads for the ABX—the difference in cost between purchasing CDS protection and purchasing a risk-free investment like a Treasury—spiked during the height of the financial crisis in September-October 2008, and then fell dramatically on October 28, when Treasury's

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[242] Karl Case *et al., Indexed-based futures and options markets in real estate*, J. PORTFOLIO MGMT. (1993); Mark J. Powers, *Does Futures Trading Reduce Price Fluctuations in the Cash Market?*, AM. ECON. REV. 460 (1976); Michael C. Lovell & Robert C. Vogel, *A CPI-Futures Market*, 81 J. POL. ECON. 1009 (1973).

[243] Richard Stanton & Nancy Wallace, *ABX.HE Indexed Credit Default Swaps and the Valuation of Subprime MBS*, Feb. 15, 2008 at 5.

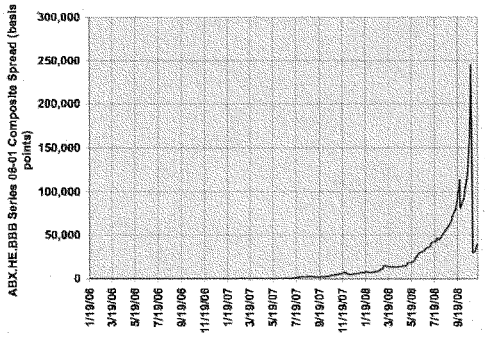
[244] *Id* at 24.

[245] *Id.*

[246] Gorton, *supra* note 238.

capital injection into the nation's largest financial institutions was announced. Figure 30 illustrates the spike and 73% decline in the spreads[247] for the ABX.HE.BBB Series 06-1.[248]

Figure 30. ABX.HE.BBB Series 06-1 Spreads



Likewise, Gary Gorton argues that there is a high correlation between the ABX and the sale and repurchase (repo) market used for short-term secured funding by many financing institutions, so the ABX might have been reflecting counterparty risk, rather than RMBS risk.[249] In a repo transaction, one financial institution sells another a security and simultaneously agrees to repurchase it in a short time at a higher price.[250] Economically, this is equivalent to a secured loan with the security as the collateral, and the difference in sale and repurchase price as the interest. If the repo obligor defaults, its counterparty keeps the collateral security. RMBS were frequently used as repo collateral, and repo collateral was frequently rehypothecated, meaning that the repo seller would use the collateral that was posted to it as collateral for its own repo borrowing.[251]

Accordingly, the increase in ABX prices might have reflected increased counterparty risk, particularly in the repo market, where defaults would lead to financial institutions being stuck with illiquid RMBS. And because of rehypothecation, the number of financial institutions seeking CDS protection would exceed the actual exposure to RMBS that existed in the system, thereby further spurring demand for

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[247] ABX composite spreads are a different pricing measure; they are not actually spreads over a risk-free baseline, but a composite of the coupon and price components of the ABX.

[248] This series is shown by itself because the scaling obscures the parallel effect on other series they are presented together.

[249] *Id.*

[250] *See* Gary Gorton & Andrew Merton, *The Run on Repo and the Panic of 2007-2008*, working paper at 8, *available at* http://econ-www.mit.edu/files/3918.

[251] *Id.*

CDS protection and pushing up CDS prices.[252] The inability to sort out MBS credit risk and CDS counterparty risk limits the usefulness of the ABX as a market discipline device.

PLS proved impervious to normal market discipline methods. Credit ratings were compromised in terms of incentives as well as in terms of analysis capability in rating heterogeneous, complex MBS products that lacked a performance history. The expansion of resecuritization via CDOs removed the natural risk appetite limitation on mortgages. Smart money short investors understood the decline in mortgage underwriting standards, but their investment instrument of choice was incapable of imposing much market discipline on housing finance markets. Regulation was non-existent in the PLS market, and largely absent in the mortgage origination market.[253] The result was that other informationally limited investors failed to accurately price for risk and overinvested in MBS.

V. STANDARDIZATION AS AN INFORMATIONAL PROXY

In any market, as long as there is a return on heterogeneity and complexity, one can, in the absence of effective regulatory oversight, expect heterogeneity and complexity to prevail. If market participants can benefit from shrouded information, they will attempt to shroud the information. This holds true for securitization markets, as well as for any other market, and suggests a critical role for regulation as the housing finance system is redesigned and rebuilt. Regulation must concentrate on correcting the informational failures in the housing finance market, and the starting point for this is standardization of MBS.

Historically, in the United States and Europe, securitization as a vehicle for housing finance has succeeded when credit risk has been borne, implicitly or explicitly, by the government and regulated accordingly.[254] Government assumption of credit risk is a form of product standardization that alleviates the need for investors to analyze credit risk. GSE securitization standardized credit risk by having the GSEs guaranty all of their MBS, and having the implicit backing of the United States government behind the GSEs' guaranty.

A government-backed mortgage finance market poses its own problems, however, such as the socialization of risk and the potential politicization of underwriting standards. Lesser forms of

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[252] *See* Gary B. Gorton & Andrew Metrick, *Securitized Banking and the Run on Repo*, Yale ICF Working Paper No. 09-14, July 14, 2010, at 11, n.13, *available at* http://ssrn.com/abstract=1440752 (discussing rehypothecation as a multiplier).

[253] *See supra* note 51.

[254] Snowden, *supra* note 41, at 270.

standardization—of mortgage and MBS credit risk structures, rather than of credit risk—may themselves be sufficient to facilitate adequate risk pricing without forcing a trade off between market stability and risk socialization.[255]

Irrespective, whatever the outcome of housing finance reform, market discipline—be it by regulators or by investors—requires easily analyzable information that is available in real time, and this will require standardization. As Lewis Ranieri, the "godfather" of mortgage securitization (and reputed creator of the term "securitization")[256] has noted, unless PLS investors rely on ratings, they need to reverse engineer deals as part of their investment analysis.[257] Reverse engineering a PLS is an incredibly expensive process. Because deals are not standardized, each deal must be reverse engineered on its own in order to identify the best investment, adding to the expense of the analysis. As a result, most investors resort to relying on ratings.

Standardization allows for more investors to be able to reverse engineer deals in a cost-effective manner and thereby have more effective market discipline. Moreover, standardization adds to market stability. Standardization helps confine the parameters of market experience, and as economists Reshmaan Hussam, David Porter, and Vernon Smith have shown, bubbles are less likely to occur in "experienced" markets with bounded parameters.[258]

Standardization also enables more effective discipline by regulators and the market. The housing bubble evaded regulatory and market discipline in part because only one of the two components in the cost of housing—interest rates—were observable in real time. The other component—the credit risk premium—was not observable in real time. It was only observable after the fact, and even then perhaps not fully. (Low/no-doc loans frustrate analysis of underwriting). The inability to observe in real time the change in underwriting standards underwriting

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[255] In this Article we take no position as to the form of the future secondary housing finance market—whether it is completely privatized, run through cooperatives, run as a public utility, run through GSEs, or even completely nationalized. *But see* Levitin & Wachter, *supra* note 34 for our views on potential forms for the U.S. housing finance market.

[256] Mike McNamee, *Lewis S. Ranieri: Your Mortgage Was His Bond*, NEWSWEEK, Nov. 29, 2004.

[257] Lewis Ranieri, Comments at Dept. of Treasury & Dept. of Housing and Urban Development, Conference on the Future of Housing Finance, Aug, 17, 2010, Washington, D.C. (on file with the authors).

[258] Reshmaan N. Hussam *et al.*, *Thar She Blows: Can Bubbles Be Rekindled with Experienced Subjects?*, 98 AM. ECON. REV. 924 (2008) ("[I]n order for price bubbles to be extinguished, the environment in which the participants engage in exchange must be stationary and bounded by a range of parameters. Experience, including possible "error" elimination, is not robust to major new environment changes in determining the characteristics of a price bubble.").

standards prevented the systemic scope of the housing bubble from being manifest until it was too late. Only if regulators or the market have information about lending practices and their pervasiveness can they make a judgment about their sustainability and thereby determine if there is a bubble forming.

To monitor against housing bubbles, then, it is necessary to have data not just on interest rates, but also on the character of credit. It is insufficient, however, to simply require greater data disclosure about the collateral and borrowers supporting MBS, as the SEC's proposed amendments to Regulation AB would do.[259] Instead, investors need to have access to meaningful data that can be analyzed effectively in real time; disclosure alone does not make data meaningful.

Disclosure of hundreds of loan-level data elements is useless, unless the relationships among those elements are known. While it may be possible to design effective multivariate risk models, excess information and variables reduce the predictability of such models, especially when new terms, for which there is no track record, are introduced.[260] It is possible, however, to facilitate mortgage risk-modeling and real time analysis of changes in underwriting standards by reducing the number of potential variables affecting a loan's risk profile through product standardization. Product standardization facilitates underwriting discipline by both regulators and the market.

To standardize MBS, it is necessary not only to standardize deal structure features, such as tranching structures and other credit enhancements, but also to standardize the underlying mortgages and origination procedures, including documentation requirements. Borrower risk is stochastic, but the risk from particular mortgage products is not.

The GSEs have already brought significant standardization to the mortgage market, in terms of standard notes and security instruments, automated underwriting, MBS forms, and servicing procedures. While

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[259] Asset-Backed Securities, 75 Fed. Reg. 23328-23476 (proposed May 3, 2010) (to be codified at 17 C.F.R. pt. 200, 229, 230, 232, 239, 240, 243, 249). In recognition of informational failures in structured finance, the SEC has proposed a major revision to Regulation AB, which governs asset-backed securities. The SEC proposal is entirely disclosure focused. It would require loan-level data disclosures to be made in XML (eXtensible Markup Language) format as part of the issuance process as well as on-going reporting. For residential mortgages, 137 data points would be collected for each mortgage on origination (although many would be non-applicable for many mortgages) and 151 data points for on-going reporting. 75 Fed. Reg. 23361, 23368.

[260] The Reg AB revisions could also have the unintended consequence of making housing finance markets locally, rather than nationally, based, as detailed geographic data on borrowers will be available. While this could impose some discipline of localities' policy choices, it could also increase the price volatility of local housing markets, undermining the stability necessary for social gains.

there are differences in practice between the GSEs, they have moved the market from multiple standards to their two standards. The emergence of the PLS market resulted in a destandardization. But the principle of standardization in the mortgage market is not itself a novel or radical one, and has worked well in the past, creating a deep, liquid market and enabling mortgages to be sold on the To Be Announced (TBA) market, meaning that they are sold to the GSEs before they are actually closed. The existence of the TBA market allows borrowers to lock in their mortgage rates months before their closing.

Standardizing MBS does not mean eliminating consumer choice for mortgages. There have always been niche mortgages products, and there will always be borrowers for whom these products are appropriate. But niche products should not be securitized. They involve distinct risks and require more careful underwriting and should remain on banks' balance sheets. If a bank wants to incur the risk of underwriting an exotic mortgage product it should, but it should put its own risk capital at stake.

We, therefore, propose restricting securitization to proven, sustainable mortgage products for which there is well-established consumer demand and performance history[261]. If securitization were restricted to a limited menu of mortgage forms—the "plain vanilla" 30-year fixed, the "plain chocolate" 15-year fixed, and the "strawberry" 5/1 or 7/1 adjustable-rate mortgages—investors would not be taking on mortgage product risk. We term this menu of mortgage products the "Neapolitan" mortgages, a term we find especially fitting given the etymology of term, Neapolitan: of the new city.

"Neapolitan" mortgages products have long satisfied the vast majority of the consumer borrowers, and there is no reason to think they will not in the future. Combined with the availability of niche products

[261] We note that the Dodd-Frank Wall Street Reform and Consumer Protection Act, P.L. 111-203, opens the door to moving the mortgage securitization market substantially in this direction. Dodd-Frank imposes risk retention requirements for securitizations other than of "qualifying residential mortgage." H.R. 4173 § 941(a), *codified at* 15 U.S.C. §78o-9. (Section 15G(c) of the '34 Act). "Qualified residential mortgage" is to be defined jointly by various financial regulators "taking into consideration underwriting and product features that historical loan performance data indicate result in a lower risk of default,," including loan documentation, underwriting (front-end and back-end debt ratios), "the potential for payment shock on adjustable rate mortgages through product features and underwriting standards," the existence of private mortgage insurance, and "prohibiting or restricting the use of balloon payments, negative amortization, prepayment penalties, interest-only payments, and other features that have been demonstrated to exhibit a higher risk of borrower default." H.R. 4173 § 941(a), *codified at* 15 U.S.C. §78o-9. (Section 15G(e)(3)(B) of the '34 Act). The result of Dodd-Frank is that it will be more expensive to securitize non-qualified residential mortgages. This might result in these products being retained on balance sheet or simply not being originated in the first place. The definition of "qualified residential mortgage" will result in some measure of standardization, but at this point, however, it is not clear what products will be treated as "qualified residential mortgages."

from balance sheet lenders, consumers should still be able to choose from a wide array of mortgage products and find the product that best fits their needs and financial ability.

By limiting securitization to "Neapolitan" mortgages, certain underwriting standards would be hard-wired into securitization. There is a limit to how weak borrower credit can be with a fully-amortized product because the highest payment burden is at the beginning of them mortgage's term. Speculative future income and expenses are less of a concern. Interest-only, pay-option, hybrid-ARM, and 30/40 balloon mortgages and other such short-term affordability products present markets with a "Rocky Road," because they enable weaker or aspirational borrowers to get financing that has a high likelihood of failure. Enabling aspirational borrowing encourages cyclical expansions of credit and housing price volatility, which are destabilizing for communities and the economy.

Standardization would also restrict investor choices, but we do not believe this to be a critical cost. Investors have far more investment options than homeowners have mortgage product options, and the marginal loss in choice for investors is minimal. While structured finance has long prided itself on offering securities bespoke to particular investors' needs, most PLS deals (unlike CDOs), were not designed for individual investors, and we do not see standardization as precluding collateralized mortgage obligation (CMO) structures that allow for individualized tailoring of maturities in order to match investors' interest rate risk preferences. Thus, standardization of PLS offerings is unlikely to restrict choice for investors in a detrimental way. Indeed, it is hard to believe that investors want prime jumbos to be largely standardized, but do not want standardization for not nonprime PLS. Ultimately standardization benefits investors by increasing liquidity, which increases the value of securities.

Securitization is necessary to guarantee the widespread availability of the long-term fixed-rate mortgage, which has been the cornerstone of American homeownership since the Depression. The long-term fixed-rate mortgage is not only a uniquely consumer-friendly product, but also promotes housing market stability. Requiring standardization of securitization around well-tested, seasoned products is the only sure method of addressing the investor-securitizer principal-agent problem endemic to securitization and ensuring that securitization is a means of enhancing consumer and investor welfare and systemic stability rather than a source of systemic risk and instability.

Government Housing Policies in the Lead-up to the Financial Crisis: A Forensic Study

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DISCUSSION DRAFT DATED 10/21/2010

Abstract: The major cause of the financial crisis in the U.S. was the collapse of housing and mortgage markets resulting from an accumulation of an unprecedented number of weak and risky Non-Traditional Mortgages (NTMs). These NTMs began to default en mass beginning in 2006, triggering the collapse of the worldwide market for mortgage backed securities (MBS) and in turn triggering the instability and insolvency of financial institutions that we call the financial crisis. Government policies forced a systematic industry-wide loosening of underwriting standards in an effort to promote affordable housing. This paper documents how policies over a period of decades were responsible for causing a material increase in homeowner leverage through the use of low or no down payments, increased debt ratios, no loan amortization, low credit scores and other weakened underwriting standards associated with NTMs. These policies were legislated by Congress, promoted by HUD and other regulators responsible for their enforcement, and broadly adopted by Fannie Mae and Freddie Mac (the GSEs) and the much of the rest mortgage finance industry by the early 2000s. Federal policies also promoted the growth of over-leveraged loan funding institutions, led by the GSEs, along with highly leveraged private mortgage backed securities and structured finance transactions. HUD's policy of continually and disproportionately increasing the GSEs' goals for low- and very-low income borrowers led to further loosening of lending standards causing most industry participants to reach further down the demand curve and originate even more NTMs. As prices rose at a faster pace, an affordability gap developed, leading to further increases in leverage and home prices. Once the price boom slowed, loan defaults on NTMs quickly increased leading to a freeze-up of the private MBS market. A broad collapse of home prices followed.

I wish to thank all those who reviewed various drafts and provided so many excellent comments. Opinions and any errors contained herein are mine.

Annotations:

State clearly that we went from 1 in 200 <=3% to 1 in 2.5, most with zero and 16% to 25% FICO<660 (<620 also) and growth from 7% to 27% low- and very-low F/F.

Preface:

Events of the late 1980s and early 1990s[1] joined three disparate groups in a common cause: low- and moderate-income housing:

1. Fannie Mae decided in 1986 to give up its government charter and become a private company.[2] This decision was quickly reversed in 1987 when it was decided that its funding advantages and implicit government guarantee under its charter were too valuable to surrender. Instead it would turn its focus to protecting its charter franchise privileges. Over the next 5 years Fannie would develop and begin implementing a strategy to use its low- and moderate-income housing mission as the means to "protect the franchise". Fannie would use copious amounts of low- and moderate-income housing lending to capture its regulator, Congress,[3] in an effort to assure that Congress would not change its charter privileges to its detriment. Lehman Brothers' consultant Jim Johnson was hired in 1988 to more fully develop this strategy. By 1991 Johnson was Fannie's chairman and CEO. In 1991 Johnson announced Fannie's opening bid, a commitment[4] to acquire $10 billion in affordable housing loans under a program called "Opening Doors".[5] Johnson's strategy was successful in that Fannie was able to prevent any charter changes from being enacted after 1992 (the year "The Federal Housing Enterprises Financial Safety and Soundness Act of 1992" (the "GSE Act of 1992" or "GSE Act) passed with Fannie's support) until 2008; three months before Fannie and Freddie were placed in conservatorship.[6]

2. National People's Action (NPA) and ACORN, along with other community and consumer advocacy groups concluded that Fannie and Freddie's underwriting requirements were to blame for the failure of the Community Reinvestment Act of 1977 (CRA) to gain traction. In about 1986, NPA began to meet separately with Fannie and Freddie in an effort to get them to adopt more flexible underwriting standards in an effort to expand CRA lending. While agreeing to a number of pilot programs, Fannie and

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[1] From 1985-1987 the author was Fannie's Senior Vice President for Marketing and Product Management, with responsibility for single- and multi-family lending and affordable housing and from 1987-1989 was Executive Vice President and Chief Credit Officer.

[2] This decision was not made public

[3] Congress had issued Fannie's charter and was the only entity that could change it.

[4] A commitment is a pledge to acquire (in Fannie's case or originate in the case of a lender) a quantity of loans usually over an announced time period. Virtually all the commitments mentioned in this paper were fulfilled,

[5] "Fannie Mae's Johnson Says Corporation Ready to Meet Housing Goals in Legislation", PR Newswire, March 31, 1993,
http://www.thefreelibrary.com/FANNIE+MAE%27S+JOHNSON+SAYS+CORPORATION+READY+TO+MEET+HOUSING+GOALS+IN...-a013133485

[6] Fannie's (and Freddie's) charter was established by congressional act. As such, only Congress could amend it. The GSE Act of 1992 was a wholesale revision of Fannie's (and Freddie's) charter; however Fannie supported the changes, including the addition of the affordable housing goals. Freddie had only emerged from being a subsidiary of the Federal Home Loan Bank Board in 1989 and more or less acquiesced with Fannie's position.

Freddie were initially dubious about many of the requested flexibilities. By the early 1990s NPA, ACORN and other groups were dissatisfied with the perceived pace of change and were concerned that Fannie, Freddie, and lenders "still viewed them as 'special programs' and have not incorporated them into standard underwriting practices."[7] Having gotten CRA passed in 1977, NPA, ACORN, and other community groups appealed to Congress in 1991 to force change at the GSEs.

3. Congress had long used HUD and its loan guarantee arm, FHA (created in 1934), as its main tools to provide low- and moderate-income housing. However, in 1990 two budgetary changes made it more difficult for Congress to expand low- and moderate-income housing through HUD and FHA. First, HUD and FHA were agencies of the federal government and included in the discretionary portion of the budget. In 1990 Congress had reached a limit in what it could do on budget:

> "In 1990, as part of a new, multiyear budget agreement, the Congress and the President adopted new procedures for deficit control. Those procedures, embodied in the Budget Enforcement Act of 1990, established statutory limits on discretionary spending and a deficit-neutral pay-as-you-go (PAYGO) requirement for new mandatory spending and tax legislation."[8]

A second change came about with the passage of the Federal Credit Reform Act of 1990. To the extent FHA's expected premiums were insufficient to cover expected losses, these amounts would need to be incorporated as a budget item. Third, at the same time, the Omnibus Budget Reconciliation Act of 1990 required FHA to establish a reserve fund and set its premiums so as to ensure actuarial soundness.[9]

As a result of these provisions, Congress had to find another means if it wanted to significantly expand financing for low- and moderate-income housing. Fannie and Freddie filled the bill perfectly. Both were off budget, could raise virtually unlimited sums in the capital markets, and could use their substantial volumes of traditional low risk lending to subsidize low- and moderate-income housing. As an added bonus, Congress was also able to meet the demands of an important constituency group - community advocacy organizations.

In 1992 the interests of Fannie, community groups, and Congress converged resulting in the passage of GSE Act. Fannie got its wish as the GSE Act formalized its strategy of using affordable housing to protect its key charter privileges – protection that would last until 2008,

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[7] "Not in My Back Yard: Removing Barriers to Affordable Housing", Chapter 3, page 13 http://www.huduser.org/Publications/pdf/NotInMyBackyard.pdf

[8] Congressional Budget Office testimony on Budgeting for Emergency Spending, June 23, 1998 http://www.cbo.gov/doc.cfm?index=591&type=0

[9] GAO, "Credit Reform", September 1994, http://www.legistorm.com/ls_score/gao/pdf/1994/9/ful24685.pdf

two months before it and Freddie would be forced into conservatorship. The community groups got their wish now that Fannie and Freddie were required to loosen underwriting standards in support of CRA. Congress got its wish by moving the affordable housing mission largely off-budget and at the same time, placing itself in a position to take credit for the affordable housing activities of Fannie and Freddie.

Fannie's 1991 opening bid of $10 billion was called and raised by Congress' in the GSE Act of 1992. In 1994 Fannie raised its bid with a $1 trillion commitment. Over the next dozen years, additional commitments totaling $6 trillion by Fannie and Freddie, $1 trillion by Countrywide, and $4-plus trillion by big banks would follow.[10]

I have called this a forensic study because my goal was to investigate and document the motives, opportunities, and means by which the main participants (Congress, joined by the executive branch, Fannie and Freddie, and community groups) accomplished the desired loosening of loan underwriting standards. These actions would ultimately derail the world's largest economy and cost the American people untold trillions of dollars.

[10] There is some overlap among these $11 trillion in commitments. Without overlap the commitments are estimated to have totaled about $8 trillion.

I. Background:

> "'Lenders will respond to the most conservative standards unless [Fannie Mae and Freddie Mac] are aggressive and convincing in their efforts to expand historically narrow underwriting.' This point was reinforced over and over again by other [community advocacy] witnesses." U.S. Senate Committee on Banking, Housing, and Urban Affairs in 1991[11]

The very next year Congress turned this wish of these witnesses into the law of the land when it passed "The Federal Housing Enterprises Financial Safety and Soundness Act of 1992" (the "GSE Act of 1992" or "GSE Act").[12]

The major cause of the financial crisis was the accumulation of an unprecedented number of weak or Non-Traditional Mortgages (NTM) in the U.S. financial system. NTMs were characterized by low or no downpayments, increased debt ratios, impaired credit, reduced loan amortization, and other changes in underwriting standards. These NTMs were no accident. During the 15 year period after the passage of the GSE Act of 1992, trillions of dollars in ever more weakly underwritten loans would first buoy and then capsize the housing market.

This accumulation of NTMs overwhelmed a thinly capitalized and highly leveraged housing finance sector, whose high level of leverage was also the result of government policies. For example, Fannie and Freddie's minimal capital requirements were set by Congress in the GSE Act of 1992. The GSEs only needed $900 in capital behind a $200,000 mortgage they guaranteed[13] – many of which by 2004-2007 had no borrower downpayment. In order for private sector to compete with Fannie and Freddie, it needed to find ways to increase leverage.

Lack of skin in the game promoted systemic risk on both Main Street and Wall Street.

When these NTMs began to default, they triggered the collapse of the worldwide market for mortgage backed securities (MBS), which in turn triggered the instability and insolvency of financial institutions that we call the financial crisis.

Nouriel Roubini and Elisa Parisi-Capone documented a progression of loss estimates:

> "[b]y April 2008 the IMF estimated them to be $945 billion; then Goldman Sachs came with an estimate of $1.1 trillion; the hedge fund manager John Paulson estimated them at $1.3 trillion; then in the fall of 2008 the IMF increased its estimate to $1.4 trillion; Bridgewater Associates came with an estimate of $1.6 trillion; and most recently, in

[11] Allen Fishbein, "Filling the Half-empty Glass: The Role of Community Advocacy in Redefining the Public Responsibilities of Government-Sponsored Housing Enterprises", Chapter 7 of Organizing Access to Capital: Advocacy and the Democratization of Financial Institutions, 2003, Gregory Squires, editor

[12] "The Federal Housing Enterprises Financial Safety and Soundness Act of 1992" http://www.law.cornell.edu/uscode/html/uscode12/usc_sup_01_12_10_46.html

[13] GSE minimum capital levels, "The Federal Housing Enterprises Financial Safety and Soundness Act of 1992" http://www.law.cornell.edu/uscode/html/uscode12/usc_sec_12_00004612----000-.html

> December 2008, Goldman Sachs cites some estimates close to $2 trillion (and argues that loan losses alone may be as high as $1.6 trillion and expects a further $1.1 trillion of loan losses ahead)."[14]

By January 2009 Roubini and Capone advised that:

> "We have now revised our estimates and we now expect that total loan losses for loans originated by U.S. financial institutions [alone] will peak at up to $1.6 trillion out of $12.37 trillion loans.... If we include then around $2 trillion mark-to-market losses of securitized assets based on market prices as of December 2008 (out of $10.84 trillion in securities), total losses on the loans and securities originated by the U.S. financial system amount to a figure close to $3.6 trillion."[15]

The impact on the capital positions of U.S. banks and broker dealers (not to mention Fannie and Freddie) was dire:

> "U.S. banks and broker dealers are estimated to incur about half of these losses, or $1.8 trillion ($1 -1.1 trillion loan losses and $600-700bn in securities writedowns) as 40% of securitizations are assumed to be held abroad. The $1.8 trillion figure compares to banks and broker dealers capital of $1.4 trillion as of Q3 of 2008, leaving the banking system borderline insolvent even if writedowns on securitizations are excluded."[16]

In this context, the causes were those policies and actions that led to the accumulation of so many NTMs in our financial system. It also demonstrates how federal policies, undertaken by Republican and Democratic administrations and Congresses alike, were directly responsible for mandating a vast increase in homeowner leverage (ex. low or no downpayments, increased debt ratios, impaired credit, reduced loan amortization, and other changes in underwriting standards), setting extremely high leverage levels for Fannie and Freddie, and requiring flexible (i.e. loose) underwriting standards throughout virtually the entire mortgage finance industry.

As house prices continued their unprecedented climb and delinquency rates stayed in relative check, both Presidents Clinton and George W. Bush relied on weakened underwriting standards to expand homeownership. Federal policy makers and market participants ignored the potential impact of increased leverage resulting from these standards on the housing market and on a mortgage finance system that itself was over leveraged. The focus of this paper is to describe and understand the cause and effect of federal policies on the collapse of the mortgage finance system.

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[14] Nouriel Roubini and Elisa Parisi-Capone, RGE Monitor, "Total $3.6 Trillion Projected Loan and Securities Losses in the U.S.,$1.8 Trillion of Which Borne by U.S. Banks/Brokers: Specter of Technical Insolvency for the Banking System Calls for Comprehensive Solution", January 2009, http://media.rgemonitor.com/papers/0/RGECreditLossesEPCNRJan09.pdf

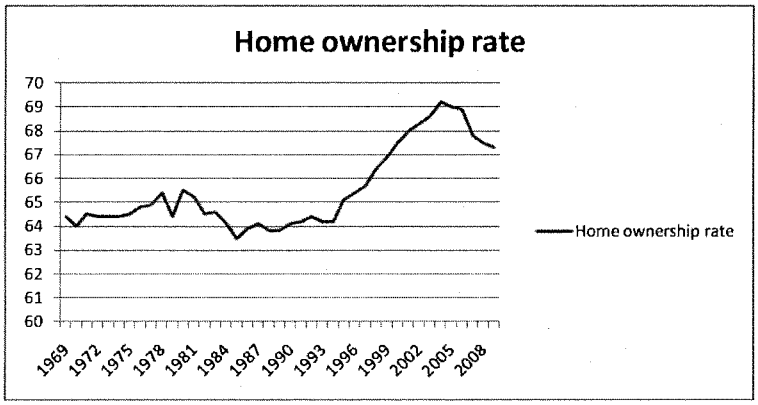
[15] Id.

[16] Id.

A. Twelve significant and unprecedented trends:

1. **Homeownership rate:** after staying within a narrow band of 64% to 65.5% over 1969 - 1994, it increased substantially (from 64.2% to 69.2%) over the period **1994**-2004.

Chart 1:



Source: U.S. Census Bureau and compiled by Edward Pinto

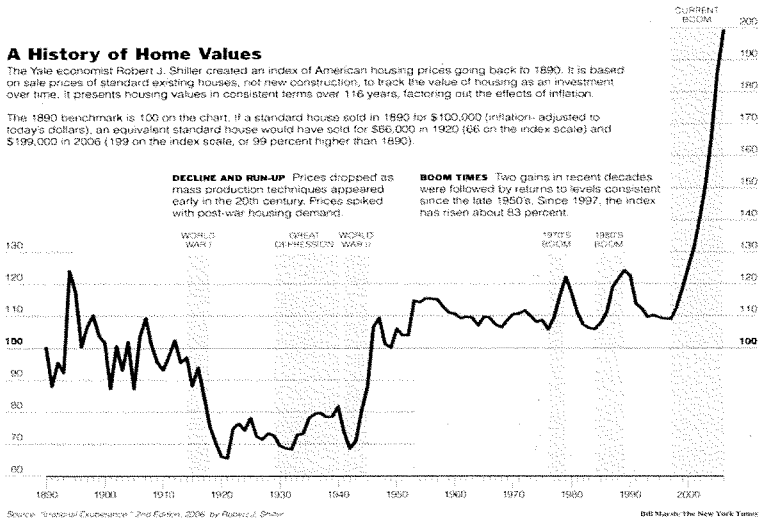
Other Group of 7 (G-7) countries have similar home ownership rates without much of the pro-housing and housing finance stimulus provided in the U.S.:[17]

G-7 country	2009 homeownership rate
Italy	81.7%
United Kingdom	73.4%
Canada	68.7%
United States	67.3%
France	65.5%
Japan	61.2%
Germany	55.6%

[17] "Homeownership Rate Declines", Wall Street Journal, February 3, 2010, p. A2

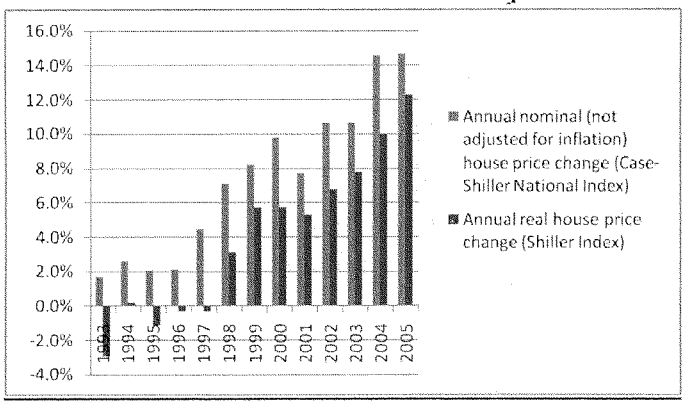
2. **Real home prices:** an unprecedented and ultimately unsustainable boom in real home prices started in **1998** and lasted 9 years, about twice as long as the booms in the late-1970s and late-1980s and 4-5 times as large in terms of cumulative percentage increase relative to each of the two earlier booms:

Chart 2: The following chart covers the period 1890-2006:



3. **Nominal home prices:** an unprecedented (in length and size) boom in nominal home prices started in **1993** and lasted 12 years, with a cumulative increase in prices of 150%.

Chart 3: Shows U.S. annual nominal and real house price increases



Source: Real house price increases - Robert Shiller, http://www.econ.yale.edu/~shiller/data.htm Compiled by Edward Pinto

Many countries experienced similar or even higher house price inflation over roughly the same period as in the United States.[18] The United States is in the middle of the selected OECD countries shown in Chart 4.

Chart 4:[19]

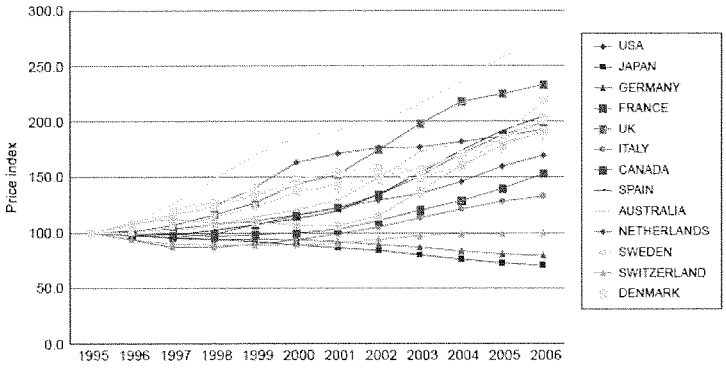


Figure 1. Real house price increases in selected OECD countries: 1995–2006

Chart 4 displays significant synchronization of house prices in industrial countries. This has been attributed to:

> "...synchronization of monetary policy and financial liberalization, integration of international financial markets as well as general business cycle linkages. In fact most industrial countries implemented financial deregulation and this led to an increased access to mortgage financing to a larger share of the population. Tsatsaronis & Zhu found that house price increases have been more marked in countries with more market-sensitive valuation methods."[20] [21]

Notwithstanding the increased coincidence of real house price increases internationally, the reaction of various markets to the stress of price declines has varied substantially. In

[18] Kim,Kyung-Hwan and Renaud, Bertrand, "The Global House Price Boom and Its Unwinding", p. 8, 2009 http://www.informaworld.com/smpp/content~content=a908065595~db=all~order=page

[19] Id.

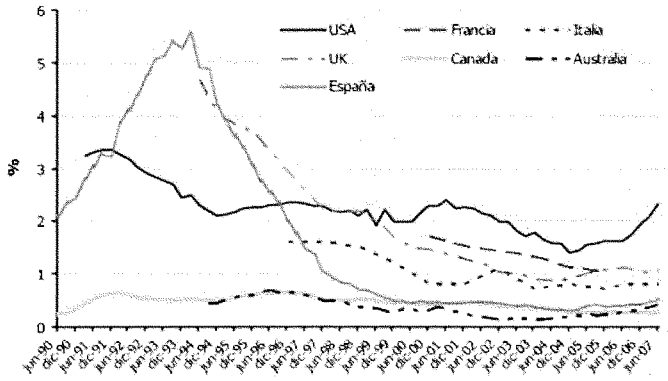
[20] Id.

[21] The United States' valuation methodology relies solely on the sales prices of comparable properties and as such is a "market-sensitive valuation method". Less market sensitive valuation methods use multiple valuation principles along with stabilized or trended sales prices. See Appendix D: The role of appraisals in the financial crisis.

particular, the U.S. is the only major country expected to experience default levels of 15% - 20% of outstanding loans (8-10 million foreclosures and other property dispositions).[22] [23] As noted earlier, the dollar cost of the losses on these loans could total $1.6 trillion.

Chart 5 shows delinquency trends over 17-plus years, 1990-2007, for 7 major countries. From the late 1990s onward the U.S. has had a seriously delinquent rate substantially higher than the other 6 countries listed. Note that the chart ends in 2007 and that serious delinquency rates in the U.S. was increasing rapidly. The serious delinquency rate for the U.S. at 12.31.09 was 9.67%.[24] This rate far eclipses the rate of 3.25% reached in the U.S. in the early 1990s, in the aftermath of the late 1980s boom.

Chart 5:[25]



The differences in loan performance in Canada compared to the U.S were attributed to the following:

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[22] RealtyTrac's Housing Predictor, "10 Million Foreclosures Through 2012", Late 2009, http://www.realtytrac.com/contentmanagement/realtytraclibrary.aspx?channelid=8&itemid=6675

[23] Canada: data from the Canadian Bankers Association shows that the delinquency rate in Canada is much lower than the U.S. rate. 0.29% Canadian delinquency rate at 10.08 versus 7.88% in U.S. at 12.31.08. http://seekingalpha.com/article/127234-mortgage-delinquencies-in-canada-nowhere-near-as-low-as-u-s
United Kingdom: Council of Mortgage Lenders: Repossessions as a proportion of all mortgages remained steady at 0.09% in the first quarter [2010], the same proportion as in the previous quarter and down from 0.12% in the first quarter of 2009. The number of repossessions was 9,800, down from 10,600 in the previous quarter and 13,200 in the first quarter of 2009. http://www.cml.org.uk/cml/media/press/2612 The U.S. had 237,052 repossessions in Q.3:09. http://money.cnn.com/2009/10/15 /real_estate/foreclosure_crisis_deepens/?postversion=2009101507 This represents 0.43% of the 55 million mortgages outstanding in the U.S.

[24] Source: Mortgage Bankers Association National Delinquency Survey

[25] http://www.eleconomista.es/economia/noticias/367237/02/08/La-morosidad-sigue-creciendo-los-bancos-cortan-el-grifo-a-las-familias.html

> "Housing markets in the United States and Canada are similar in many respects, but each has fared quite differently since the onset of the financial crisis. A comparison of the two markets suggests that relaxed lending standards likely played a critical role in the U.S. housing bust."[26]

The varied experiences in sixteen western European countries are detailed in "House Price Comparisons in Europe", an IMF Working Paper.[27] Relevant to this paper's discussion about the causes of the financial crisis in the U.S are the following observations:

> "The degree of sophistication of a country's mortgage market will affect the demand for housing. The greater the range of flexibility of the financial instruments offered, the more affordable housing can become for a given level of income. Ceteris paribus, this will increase demand for housing. The ability of financial institutions to offer more flexibility in housing finance is determined, inter alia, by collateral legislation and the extent to which mortgage loans can be securitized in order to pool and diversify risk from individual borrowers."

> "Mortgage markets in the [countries with the greatest price increases] appear to be most 'complete' in terms of range of products offered....In most continental European markets mortgage equity withdrawal is less common, and bank lending practices (e.g. relatively low LTV ratios and the use of historical rather than current property valuation) are more conservative....Overall, the less complete and therefore more conservative nature of many European mortgage markets, including the relatively strong reliance on retail (deposit) funding and the virtual absence of a market for subprime loans—apart from a relatively modest share of this market in the U.K.—has so far protected these markets from some of the problems that have occurred, e.g. in the U.S.."

Hilbers et.al. describe the differences present in the sixteen countries studied. While there are similarities, the differences are quite substantial, not unexpected given that each country has a national system of housing finance. While the population of these sixteen is about 400 million,[28] these countries do not, as a group, constitute a standardized mortgage finance system.

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[26] James MacGee, "Why Didn't Canada's Housing Market Go Bust?" http://www.clevelandfed.org/research/commentary/2009/0909.cfm

[27] Hilbers, Hoffmeister, Banerji, and Shi, IMF Working Paper, "House Price Developments in Europe: A Comparison", October 2008, p. 34, http://www.imf.org/external/pubs/ft/wp/2008/wp08211.pdf

[28] http://en.wikipedia.org/wiki/List_of_European_countries_by_population

Contrast this with the United States with a population of 300 million.[29] Rather than a diversified system of housing finance, the U.S. had evolved into one that was largely unified and standardized around Fannie, Freddie, and HUD. The GSEs were the largest mortgage investors/guarantors, exerted great influence in setting mortgage underwriting standards, provided the automated underwriting systems used by almost all market participants, developed market-sensitive appraisal and valuation methodologies that became uniform throughout the industry, had an implicit government guarantee, were highly leveraged, offered continuous access to liquidity across all 50 states, relied on the originate to distribute model, promoted securitization, competed with virtually all other market participants (except jumbo and second mortgage products), and set interest margins on the most popular mortgage types, the 30 and 15 year mortgage. Add the central regulatory role played by HUD in orchestrating a multi-faceted weakening of underwriting standards over many years. **It does not appear that any other country had ceded the role of underwriting standard setter to a non-prudential regulator.**[30]

Compared to the United States, Western Europe's housing finance systems were neither uniform nor standardized. The absence of the equivalent of a Fannie, Freddie, or HUD throughout Western Europe goes a long way towards explaining how it avoided the worst effects of the housing decline while the U.S. did not. It is relevant that the U.S. ended up with almost half of all outstanding loans being NTMs, loans with weak loan characteristics.

In addition to the United States housing finance system's reliance not only on a) excessive leverage by both borrowers and loan funding institutions (led by Fannie Mae and Freddie Mac), b) a highly developed and increasingly more highly leveraged mortgage backed securities and structured finance transactions market, and c) implicit and explicit government guarantees, excessive leverage and a greater reliance on debt was promoted by income tax policy, the ease with which home equity could be withdrawn, and d) an ability to refinance virtually without penalty.

4. **Community Investment Act (CRA) announced commitments:** Over the 16 year period **1992**-2007, announced CRA commitments totaled $4.5 trillion. The $4.5 trillion total for the period 1992-2007 represents a 511 times increase in CRA commitment volume over the $8.8 billion total for 1977-1991. **See Chart 6 below.**

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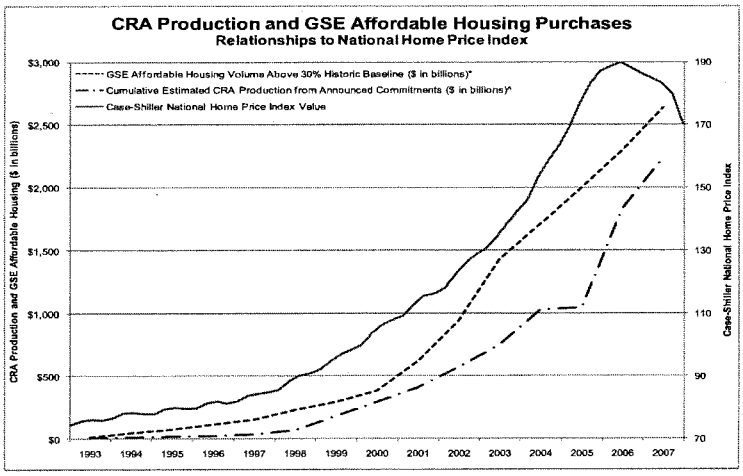
[29] http://www.google.com/search?q=population+of+united+states+2007&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a

[30] "Prudential regulation is meant to protect the banking system from [banking crises]. Traditionally, it consisted of a mixture of monitoring individual transactions (ensuring, for instance, that adequate collateral was put up), regulations concerning self-dealing, capital requirements, and cntry restrictions." Thomas F. Hellmann, Kevin C. Murdock and Joseph E. Stiglitz, "Liberalization, Moral Hazard in Banking, and Prudential Regulation: Are Capital Requirements Enough?, forthcoming American Economic Review, p. 2, http://strategy.sauder.ubc.ca/hellmann/pdfs/aerpaper.pdf

5. **Fannie and Freddie (GSEs) affordable housing acquisitions mandated by the GSE Act:** From **1993** to 2008 the GSEs acquired $2.78 trillion more in low- and moderate-income loans than they would have acquired under their pre-1992 baseline where 30% of their acquisitions consisted of low- and moderate-income loans.[31] Pre-1992 the GSEs' low- and moderate-income loan acquisitions were underwritten to the GSEs' traditional standards. Under the pre-1992 baseline of 30%, the GSEs would have purchased only $3.5 trillion in low- and m oderate-income loans, not the $6.3 trillion they ultimately acquired over 1993-2008.

Chart 6:



Sources: HUD, FHFA, Case-Shiller Index, and compiled by Edward Pinto

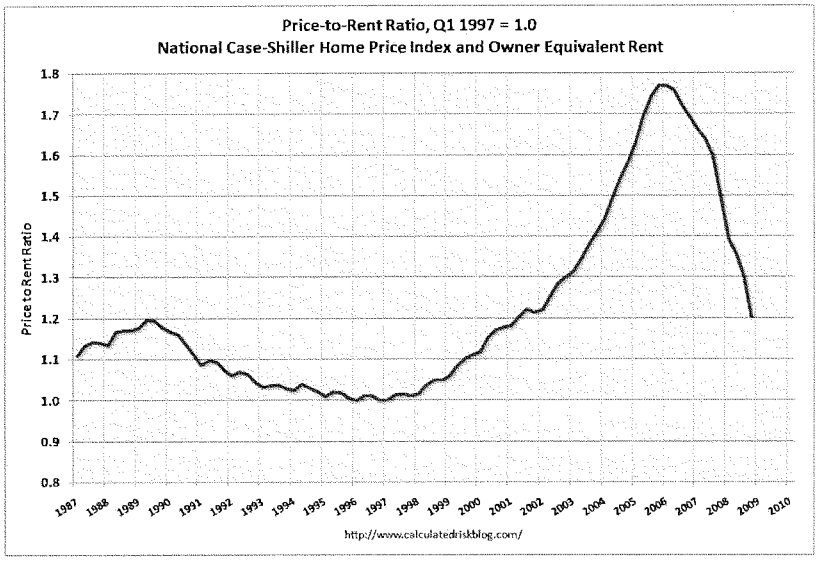
[31] While the GSEs (particularly Fannie) had single-family affordable housing programs prior to 1993, they were small. For example, Freddie's acquisitions of low- and moderate-income loans in 1993 (this is before Freddie started any significant targeted efforts in the single-family affordable housing area) amounted to about 30% as this is its level of attainment for that year as reported by HUD (see **1997-A**). This level of attainment was reached in the normal course of business.

Private mortgage insurance on loans with an LTV above 80% was one of the primary means of serving the low- and moderate-income market. While mortgage insurance brought the severity of loss on a default down to the level experienced on an 80% LTV loan, the incidence on high LTV loans was 2-4 times higher than on an 80% LTV loan. Since the GSEs in the early 1990s did not price for risk at a loan level, the higher incidence on 90% and 95% LTV loans was an implicit subsidy provided by the GSEs on these loans.

Over the period 1988 – 1990 about 50% of Fannie's home purchase loans to first time homebuyers had an LTV or combined LTV >80% (from a random sample review of Fannie Mae's single-family acquisitions for the period October 1988-January 1992, dated 3.10.1992. Document contained in the author's files).

6. **Price-to-rent ratio:**[32] The high shown for mid-1989 occurred just as a major housing price correction was beginning in the northeast and California. The high reached in mid-1989 was largely driven by extensive low doc/no doc lending along with negatively amortizing ARMs. Starting in **1998** the price-to-rent ratio begins to rise rapidly reaching an all-time high in late 2005/early 2006.[33]

Chart 7:

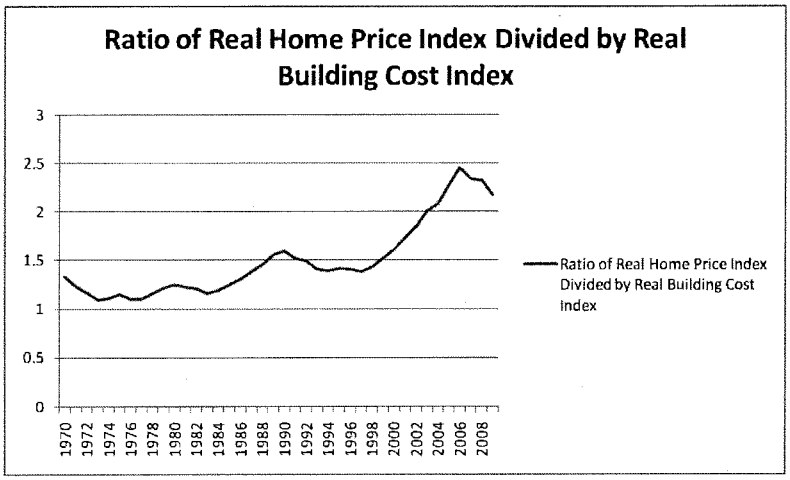


[32] The ratio between the price of a house and the annual rent the house commands as a rental property. A house selling for $200,000 and renting for $1000/month or $12,000 annually has a price-to-rent ratio of 16.67:1; The chart above sets the ratio at 1 in Q.1:1997 in order to show the prior and subsequent growth better.
[33] http://www.calculatedriskblog.com/2009/02/house-prices-real-prices-price-to-rent.html

7. **Ratio of Real Home Price Index Divided by Real Building Cost Index**

Total home market value to total replacement cost ratio: from 1970-1998 this ratio generally stayed within a band of 1.0-1.5. In **1999** to 2006 it increased from 1.51 to 2.45. By 2009 it was down to 2.17.[34] Smaller run ups in this ratio occurred during the 1970's and 1980's real estate booms (see **Chart 2** above).

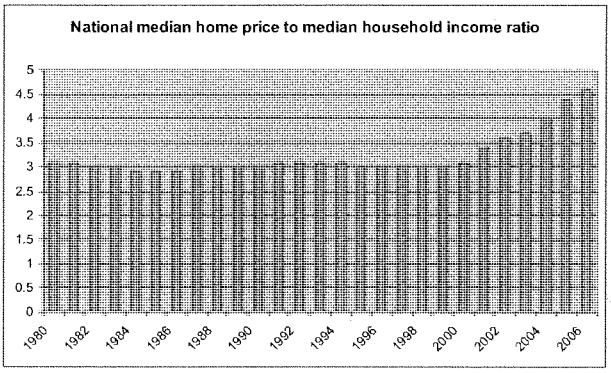
Chart 8:[35]



[34] Robert Shiller, http://www.econ.yale.edu/~shiller/data.htm
[35] Id. Compiled by Edward Pinto

8. **National median home price to median income ratio:** from 1988 to 2000, it remained in a range of 2.9 to 3.1. In **2001** it increased to 3.4, eventually increasing to 4.6 in 2006.[36]

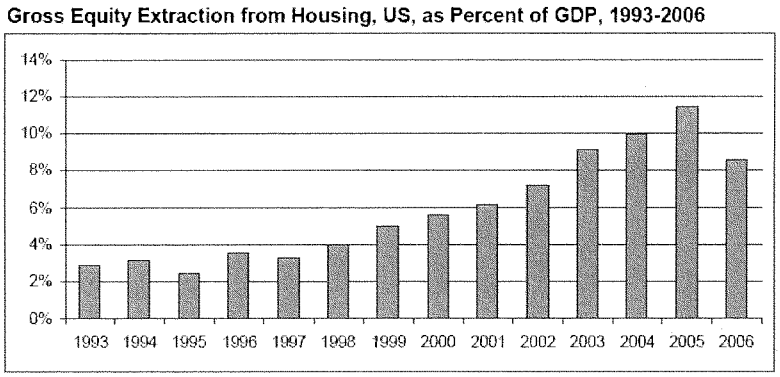
Chart 9:



9. **Gross equity extraction from housing, as a percent of GDP:** from 1993 – 1997 it ranged from 2.5% to 3.8%. In **1998** it increased to 4% of GDP and eventually reached 11.5% in 2005. Totals include both cash out refinances and home equity loans and lines.

[36] Harvard Joint Center for Housing Studies

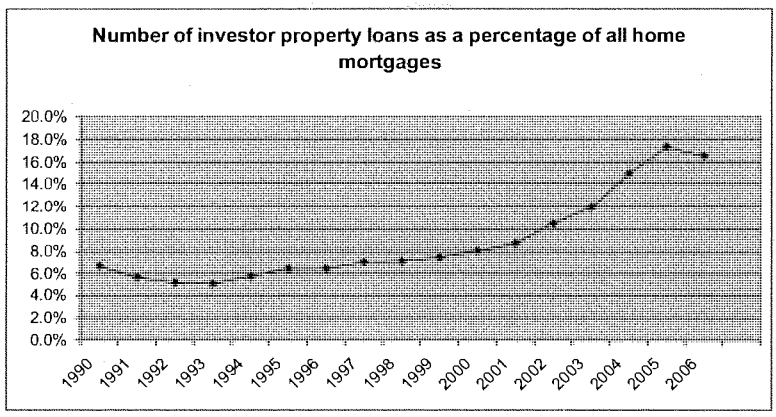
Chart 10:



Source: Greenspan and Kennedy (2007)

10. **Number of investor property loans as a percentage of all home mortgages:** from 1991-1996 it ranged from 5.1-6.6%. Starting in **1997** it increased steadily from 7% to 17.3% in 2005.

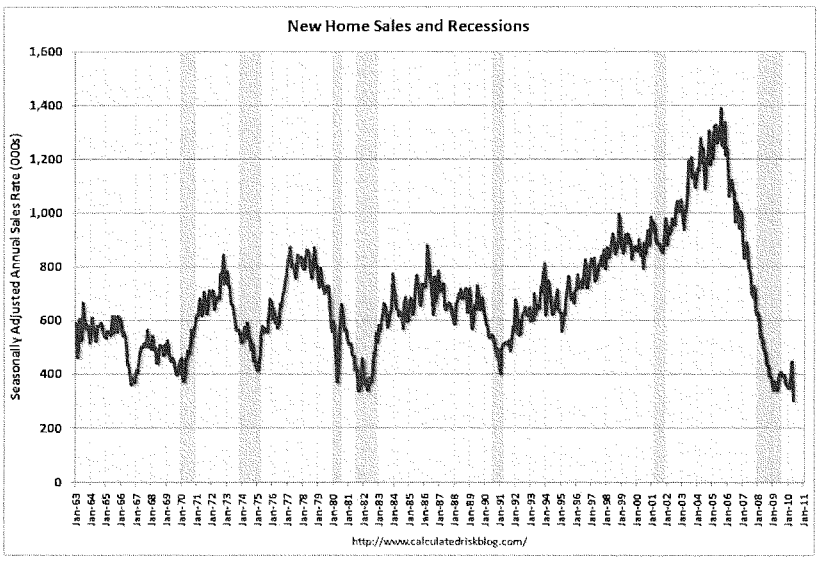
Chart 11:



Source: Fed Reserve, p. 65, http://www.federalreserve.gov/pubs/bulletin/2007/pdf/hmda06draft.pdf
Compiled by Edward Pinto

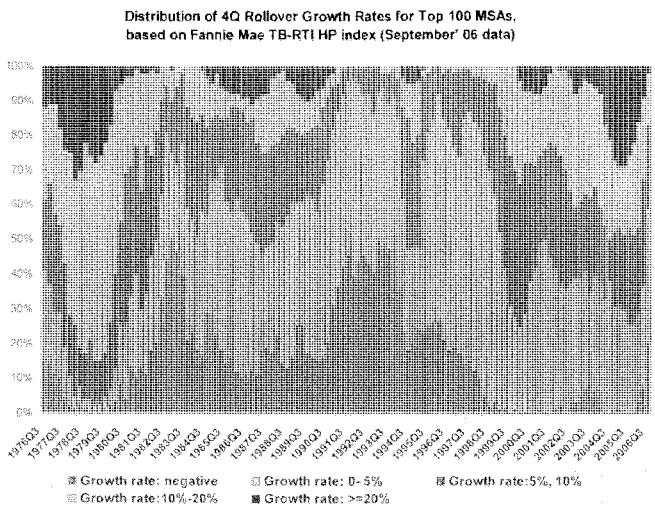
11. **New Home Sales:** Based on past experience, a correction would have been expected in about **1995**, instead the sales boom continued for 11 more years.

Chart 12:



12. **Constant market stimulation mutes price corrections:** As shown by Chart 13, the house price boom resulted in almost an eight year period (**1998**—early 2006) with an extremely low incidence of price corrections calculated with respect to the 100 largest MSAs (incidences ranged from 0 – 7, with most at 0 – 2). This 8 year period of low incidence was more than double the period experienced in 1978—early 1981 (the real estate correction that followed resulted in the Texas Depression Scenario and by late 1982 50% of the MSAs had negative growth rates). The lack of regional corrections during the 1998-early 2006 period allowed lending excesses to grow without apparent consequences as outsized home price increases served to keep delinquency rates artificially low. As a result the ensuing housing bust was more severe.

Chart 13:



These trends are noted because each is significant and unprecedented in its own right and on a combined basis are exceptional. Each started well before 2004, the year in which many analysts and commentators start their analysis of the causation of the financial crisis. Each trend continued for an unusually lengthy period of time.

While there is almost universal agreement that the financial crisis was caused by excesses in housing finance, opinions diverge as to the causes that led to these excesses. Any explanation as to what led to the accumulation of an unprecedented number of Non-Traditional Mortgages (NTMs) in the U.S. financial system, the mortgage meltdown, and the resulting financial crisis must look to events before 2004.

While low interest rates and strong demographic trends have been noted by many people as fundamentals that helped push up house prices and sustain the boom, these cannot explain the boom completely or why the U. S. was so susceptible to a collapse of the mortgage market.[37] In this paper I argue that the excesses in housing finance were the direct result of housing policy decisions made by the federal government over a 15 year period. These policies led to the accumulation of an unprecedented number of NTMs in the U.S. financial system. These NTMs

[37] House price declines do not have to cause a finance sector crisis. The combination of overleveraged borrowers and an overleveraged housing finance system is what turns a housing downturn into a finance sector crisis.

were the result of underwriting changes that were reliant on increased borrower leverage. The broad extant of this credit loosening helps explain the length and level reached by the above noted trends.

The explicit goal of these policies was to increase the homeownership rate by making more loans to moderate-, low- and very-low income borrowers. The explicit means was the promotion of lower downpayments and other loosened underwriting standards. The explicit tactic was to force the GSEs to loosen their underwriting standards so that primary lenders would in turn loosen theirs. This increased demand led to inflated house prices, and ultimately created an affordability gap, which gap required even lower downpayments and a further loosening of underwriting standards. The unprecedented increase in home prices made it appear that loan risk was decreasing, providing a rationale for additional loosening as future price increases would alleviate any underwriting weaknesses. Unprecedented price increases also created trillions in paper profits which were tapped by way of massive equity withdrawals. These withdrawals added additional fuel to the continuing price boom and widening affordability gap, creating a non-virtuous cycle. Responding to these government initiatives and mandates, the real estate finance industry, already prone to boom and bust cycles without any encouragement, went on to finance an unprecedented number of high risk loans.

B. Fannie Mae provides a significant clue:

In a March 18, 2003 press release,[38] Fannie Mae was candid about the role of federal affordable housing mandates, its own $2 trillion affordable housing commitment, and its lender partners in bringing about and extending the nation's housing boom:

> "Joining with representatives from 11 leading mortgage lenders and Fannie Mae partners, Raines applauded the mortgage finance industry for its extraordinary efforts to reach and serve 'emerging markets' of historically underserved families and communities, deliver Fannie Mae's $2 trillion in targeted capital, and extend the benefits of the nation's housing boom."
>
> "Lender partners participating in today's announcement include: Bank of America; Banc One Corporation; Charter One Bank; Countrywide Financial Corporation; Doral Financial Corporation; First Horizon Home Loan Corporation; Fleet Boston Bank; Huntington Mortgage Company; Irwin Mortgage; J.P. Morgan Chase & Co.; and Standard Mortgage Corporation."
>
> "Together, America's top lenders and Fannie Mae have made terrific progress in bringing the nation's housing boom to overlooked Americans and addressing the gaps in housing

[38] "Fannie Mae Passes Halfway Point in $2 Trillion American Dream Commitment; Leads Market in Bringing Housing Boom to Underserved Families, Communities"
http://findarticles.com/p/articles/mi_m0EIN/is_2003_March_18/ai_98885990/pg_3/?tag=content;col1

> opportunity,' Raines said. 'Fannie Mae applauds our lender partners for helping us surpass the halfway mark in our $2 trillion commitment to underserved families so quickly. Together, we lead the market in serving Americans of color and modest means.'"

This press release is significant for reasons beyond Fannie taking responsibility for creating and extending the housing boom in early 2003. First, Fannie states that it is halfway to fulfilling its $2 trillion commitment "in targeted capital". In actuality, this $2 trillion was backed by about $30 billion of real capital – as Fannie's was leveraged at about 70:1. Excessive leverage combined with the risky nature of the loans themselves was instrumental to the on-going boom and its subsequent bust. Second, the release documents the participation of many of the nation's largest lenders (Freddie accounted for most of the rest).

C. Generating loan demand by increased leverage – the role of weakened lending standards:

When the financial crisis hit in full force in 2008, approximately 26.7 million or 49% of the nation's 55 million outstanding single-family first mortgage loans had high risk characteristics, making them far more likely to default. Each of these high risk characteristics represented a weakening of one or more of the traditional "Three Cs of Mortgage Credit".[39] Weak or non-traditional lending has four effects. First, it helps increase demand, causing prices to rise. Second, broadly rising prices inflate the equity of all homeowners, which fuels equity withdrawals which lead to economic growth thereby generating additional demand thereby causing home prices to rise further. Third, if home price increases outstrip income growth, an affordability gap is created which can only be met by either a further weakening of credit standards or a price correction. Fourth, the higher the quantity and the poorer the quality of weak loans, the more severe the subsequent price correction.[40]

Weak lending is created by increasing leverage. As downpayments decrease, the debt-to-equity leverage ratio increases. Increasing debt-to-income ratios allows a borrower to service (leverage) a higher level of debt. Lowering monthly payments with interest only amortization, negative amortization, no doc lending, or a low start rate also allow a given amount of income to leverage a higher level of debt.

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[39] Collateral, character, and capacity are the Three Cs of Mortgage Credit. The key attributes for collateral are downpayment or loan-to-value (LTV) and property use (primary residence, second home, or rental), for character are credit history and property use), and for capacity are mortgage debt ratio, total debt ratio, and sources and stability of income.

[40] The fact that loan underwriting got even weaker near the end of the cycle is entirely to be expected as it is a normal reaction by lenders to a growing affordability gap and the diminished supply of even marginally qualified borrowers. It happened at the end of both the Oil Patch (Colorado, Oklahoma, Louisiana, Texas, and Alaska) boom of the early-1980s and the boom that ended in late-1980s/early-1990s (primarily effecting the Northeast and Southern California).

The role played by weakened lending standards and increased leverage in increasing demand is straightforward. A maximum LTV of 90% and maximum housing debt-to-income ratio of 28% will create or allow for a certain amount of demand. Raise the maximum LTV to 97% and the housing debt ratio to 40% and additional demand will be created.[41] The weakened standards create demand by moving down the demand curve by making more households eligible. The additional demand causes prices to rise.

By moving down the demand curve it was possible for more people to buy homes, resulting in a larger percentage of the US population owning a home. The home ownership rate in the United State had been unchanged for 25 years and then from 1994-2004 the rate increased from 64.2% to 69.2%. The leverage boosting features of lower downpayments or higher debt ratios also meant that households could buy larger homes with little or no downpayment or qualify for a larger loan with the same income. This increased move-up and new home demand and drove further price increases. Finally, with underwriting standards loosening, prices rising, and more advantageous capital gains rules, many individuals took the opportunity to buy one or more additional homes as an investment.

This increase in homeownership rate coincides with increased homebuyer leverage that resulted from a reduction in downpayments – a trend that picked up speed in the early-1990s for FHA and in the mid-1990s for Fannie and Freddie and in the early-2000s for self-denominated subprime.

Government policies promoted the lower and lower downpayment requirements. In 1980, approximately 1 in 400 home purchase loans had a downpayment of <=3%, all provided under government lending programs.[42] By 1990 this had expanded slightly to 1 in 200, again all under government lending programs. With the passage of the GSE Act of 1992, the prevalence of home

[41] In this paper the following conventions will be used, conventional loans with an LTV >90% will be referred to as either a loan with an LTV>=95% or a downpayment of 5% or less, an LTV >95% will be referred to as loan with an LTV>=97% or a downpayment of 3% or less and an LTV >97% will be referred to as loan with an LTV>=100% or a zero or no downpayment. These conventions are appropriate because of the mortgage insurance premium structure applicable to loans with private mortgage insurance. Loans with an LTV of >80% and <=85% had one premium rate structure. Loans with an LTV of >85% and <=90% had a second higher premium rate structure. Successively higher premium rate structures applied to loans with an LTV >90% and <=95%, to an LTV of >95% and <=97%, and to an LTV of >97%. Given the higher premium rates that applied as LTV increased, one would generally take out a 90% LTV or a 95% LTV loan, not one with an LTV of 91% -94%. This practice is demonstrated by the GSEs' experience with loans with an LTV>90%. These would be expected to have an LTV of 95%, 97% or 100%. Fannie reports that the average LTV on its loans with an LTV>90% was 98.1% (see p. 30 of Fannie's Q.2:2008 Investor Summary, http://www.fanniemae.com/media/pdf/newsreleases/2008_Q2_10Q_Investor_Summary.pdf;jsessionid=VCHEXVQOBQRYTJ2FQSISFGQ. In the case of combined LTV, there is no mortgage insurance premium so a 97% combined LTV loan had a downpayment of 3%. FHA does not vary its insurance premium by LTV so a 97% LTV loan is just that.

[42] In the housing finance industry loans were traditionally described as "government" consisting of FHA, VA, and Department of Agriculture rural housing loans, non-investment grade or subprime loans and conventional or investment grade loans consisting of everything else.

purchase loans with a downpayment of <=3% would expand rapidly. By 2003 and 2007 1 in 7 and 1 in 3 home purchase loans respectively had a downpayment of <=3%.

The utilization of low downpayments had spread to all segments of the housing finance market. By 2006 the National Association of Realtors reported that 46% of first-time homebuyers and 19% of repeat buyers nationwide put down no money. The median first-time buyer put down 2% of the purchase price, while repeat buyers put down 16%.[43] In 2006 first-time buyers constituted 39% of all home purchases.[44] Based on these findings:

1. 18% of home buyers (46% x 39%) were first-time buyers that put no money down.
2. 11.6% of home buyers (19% x 61%) were repeat buyers that put no money down.
3. **As a result, an estimated 30% of home buyers put no money down.** Many more put as little as 1-3% down.

The leverage factor for the median first time home buyer was 49:1 ($2 of equity for every $49 of debt) while the half making no downpayment had infinite leverage.

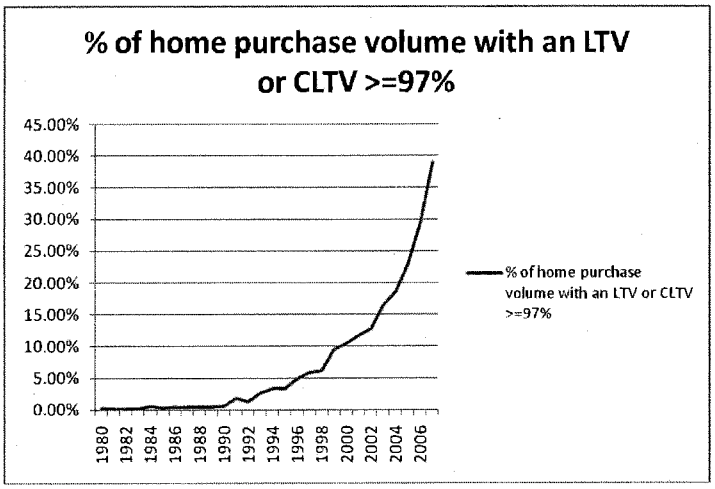
[43] USA Today, "First rung on property ladder gets harder to reach", July 17, 2007 http://www.usatoday.com/money/economy/housing/2007-07-16-first-time-buyers_N.htm. The NAR report may accessed at http://www.realtor.org/prodser.nsf/products/186-45-06?OpenDocument.

[44] http://rismedia.com/2008-06-01/first-time-home-buyers-nar-survey-of-home-buyers-home-sellers-2007/

These trends are displayed in Charts 14 and 15:

Chart 14:

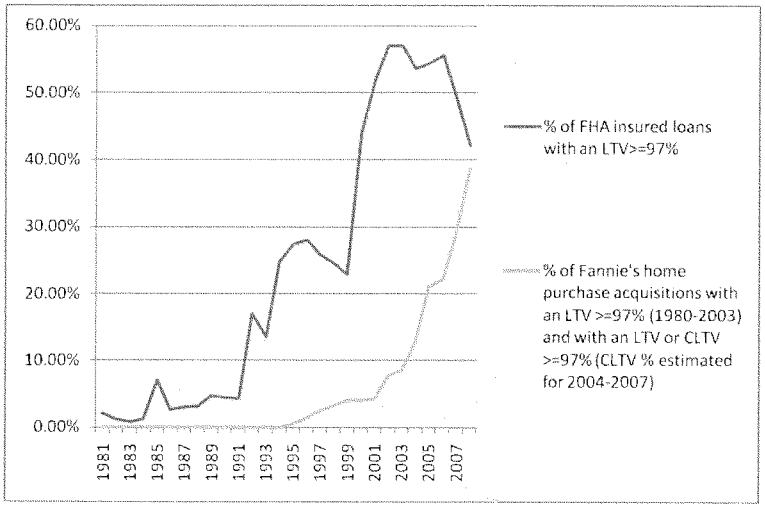
Chart 14: Estimated Percentage of Home Purchase Volume with an LTV or CLTV >=97% (Includes FHA and Conventional Loans*) and Combined Foreclosure Start Rate for Conventional and Government Loans:



Sources: FHA 2009 Actuarial Study, and HUD"s Office of Policy Development and Research - Profiles of GSE Mortgage Purchases in 1999 and 2000, in 2001-2004, and in 2005-2007, and Fannie's 2007 10-K. Compiled by Edward Pinto

*Fannie's percentage of home purchase loans with an LTV or CLTV >-97% used as the proxy for conventional loans.

Chart 15:



Sources: FHA 2009 Actuarial Report and HUD. Fannie percentages for 1994-1996 are estimated based on the fact that it first started acquiring 97% LTV loans in 1994 and the percentage of such acquisitions in 1997 was 3.3%. Combined LTV percentages for 2004-2007 are based on Fannie's disclosure in its 2007 10-K that 9.9% of its credit book (home purchase and refinance loans) had an LTV>90% (the average LTV of these loans was 97.2%), 15% of its credit portfolio had an LTV or combined LTV >90%. This increased Fannie's exposure in loans with downpayments of 5% or less by 50%. A common combination loan was an 80% first and a 20% second, yielding a combined LTV (CLTV) of 100%. Fannie purchased the first. Compiled by Edward Pinto

House prices are subject to the laws of supply and demand and are not immune from the bullish effects of leverage. As the downpayment percentage decreases, a borrower's leverage increases. Apply high leverage lending to a massive market such as housing and the effect can be quite dramatic and is almost always bullish (at least for a time). Leverage magnifies the opportunity for both gains and losses. Take a borrower making a downpayment of 10% on a $100,000 home. His home is valued at ten times the amount of the downpayment, resulting in a 9:1 leverage ratio. If the home now appreciates by 10% or $10,000 in the next year, his investment is now valued at $20,000 or double his initial downpayment.[45] Conversely a decline of $10,000 over the same time period wipes out his entire investment. If the same borrower makes a downpayment of 3% on a $100,000 home, he is now able to buy a home valued at about thirty-three times the amount of his downpayment, resulting in a 32:1 leverage ratio. If the home now appreciates by 10% or $10,000, his investment is now valued at $13,000 or more than quadruple his downpayment.

[45] For purposes of these examples the costs of sale and other transaction costs are ignored.

However, a price decline of $10,000 would not only wipe out his entire investment, it would leave the lender under-collateralized with a current LTV of 108%.

However the story does not end here. Increased leverage attracts additional buyers, thereby increasing demand and generally resulting in an upward push on house prices.[46] Consider a first time homebuyer who is attracted by a 3% downpayment loan and wants to buy before home prices go even higher. He makes a downpayment of 3% on a home now selling for $110,000 – the increase in leverage spurred additional demand which increased the home's price. Since the downpayment is only 3% or $3300, it has only gone up by $300. If the home now appreciates by 10% or $11,000, leverage still allows him to more than quadruple his investment of $3,300. However, instead of a price decline of 10%, the high level of leverage leads to a price correction of 20%. This wipes out his investment and leaves the lender under-collateralized with a current LTV of 121%. The borrower may simply walk away.

Low and no downpayment lending and other leverage enhancing underwriting changes armed a significant portion of borrowers with the ability to bid on houses using borrowed money. This removed a constraint on house prices since the great majority of home buyers no longer needed to put a substantial amount of their own money at risk in the form of a sizable downpayment. Rising prices spurred a refinance boom. Booming house prices spurred increased lending for home purchases and the extraction of burgeoning home equity through cash out refinances and home equity loans. Loan origination volumes expanded such an extent that as of 12.31.03 58% of all outstanding single family mortgages were less than a year old and all were underwritten based on the latest leverage driven market value.[47] The impact of low downpayments and other leverage enhancing underwriting changes was compounded by increasing levels of leverage of mortgage investors (like Fannie and Freddie) and structured transactions (like private MBS). This double dose of increasing leverage caused this boom to differ from earlier booms. Ultimately home values reached $23 trillion in 2006 and then rapidly declined to $16.6 trillion by 2009, a reduction of $6.4 trillion.[48] [49]

The recognition that loosened underwriting standards caused increased demand which drove up house prices was recognized in a 2005 study commissioned by HUD:

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[46] Initially this upward push occurs because it either takes time for the housing supply to increase or supply is constrained. Over time, greater levels of leverage will promote speculation which tends to absorb added supply. For example, the investor loans as a percentage of all loans transaction steadily increased from 5% in 1993 to nearly 18% by 2006. At the same time, the upward push on house prices gets reflected both with respect to the subject house being sold, but also becomes a comparable for existing homes and creates a wealth effect across the market.

[47] 2003 total originations from Inside Mortgage Finance. Total outstanding first mortgage single-family debt as of 12.31.03 is from Fed Flow of Funds report covering the period 1995-2004. Data found at L.218. p. 87, http://www.federalreserve.gov/releases/z1/Current/annuals/a1995-2004.pdf, Compiled by Edward Pinto

[48] Data found at B.100. p. 95, line 4, http://www.federalreserve.gov/releases/z1/Current/annuals/a2005-2009.pdf

[49] The new, higher price created by leverage was not only used to support the sale of the subject property, but also new homes and the resale of existing homes (normally about 6%-7%of homes sell in a given year). It was also used to support equity withdrawals by way of cash out refinances and home equity loans.

> "The main point is that aggressive mortgage financing can boost demand for housing, and that demand can drive up house prices. As interest rates fall and loan terms relax, borrowers have more buying power to raise the offer price on home purchases. In the late 1990s, with a hot labor market and stock market, housing demand was fueled by a combination of population growth, income, wealth, supportive government policy, and easy credit."[50]

Loosened standards designed to promote affordable housing lending became counter-productive. As noted by HUD, one reason many homeowners could not afford to buy a home is that aggressive mortgage financing drives up house prices. Second, many overleveraged homebuyers do not have the ability to handle normal maintenance such as painting, replacing furnaces, or replacing roofs. Third, as the resulting boom drives prices up, property taxes and insurance go up in lock step, creating more stress on weak homeowners. . Weakened lending standards distorted everything.

D. The power of rising prices:

A powerful psychology can take hold of borrowers and lenders alike during a period of booming prices:

> "During a housing price bubble, buyers think that a home that they would normally consider too expensive for them is now an acceptable purchase because they will now be compensated by significant further price increases. They will not need to save as much as they otherwise might, because they expect the increased value of their home to do the saving for them. First-time buyers may also worry during a housing bubble that if they do not buy now, they will not be able to afford a home later. Further, the expectation of large price increases may have a strong impact on demand if people think that home prices are very unlikely to fall, and certainly not likely to fall for long, so that there is little perceived risk with an investment in a home."[51]

In testimony before the Financial Crisis Inquiry Commission, Mr. Warren Buffett made similar observations about the power of rising prices to mesmerize virtually all concerned:[52]

> "Rising prices and discredited Cassandras from the past blunt the sensitivities and judgment of even people who are very smart. A home is a sound investment...and if you believe house prices are going to go up next year you are going to stretch to buy one this year and the world enabled people to stretch. After awhile rising prices became their own rationale. People decided if buying one house is a good idea, then buying three houses is a good idea. Buying a house you can afford is a good idea, than buying a house you can't

[50] HUD PDR, May 2005, HUD Contract C-OPC-21895, Task Order CHI-T0007, "Recent House Price Trends and Homeownership Affordability", p. 46

[51] Karl Case and Robert Shiller. "Is there a Bubble in the Housing Market:", 2004 http://www.econ.yale.edu/~shiller/pubs/p1089.pdf

[52] http://www.c-span.org/Watch/Media/2010/06/02/HP/R/33689/Financial+Crisis+Inquiry+Commission.aspx

afford is a good idea because it is going to go up in price. And people who lent money said it really didn't make any difference if the guy's lying about his income. If the house goes up in price, we'll get our money back anyhow. So rising prices are a narcotic and affect the reasoning power up and down the line."

E. Another clue - where the loans with weak or non-traditional lending characteristics ended up:

As of June 30, 2008 over 70% of the 26.7 million NTMs with weak or high risk characteristics[53]—19.25 million loans--were owned or guaranteed by (a) Fannie Mae and Freddie Mac (11.9 million), (b) the Federal Housing Administration and other federal agencies (4.8 million); (c) Federal Home Loan Bank (FHLB) investments in Alt-A and Subprime Private MBS (0.3 million) or (d) banks and other lenders originating loans pursuant to CRA requirements and HUD's Best Practices program (2.2 million, net of CRA loans already accounted for in (a) and (b)[54]. These numbers suggest that government policies and requirements were the source of the loans with weak or high risk characteristics, and thus the cause of the financial crisis.

Most of the rest of the NTMs are found in private mortgage backed securities.

In a span of 15 years, the underwriting standards of virtually the entire mortgage industry changed and came to embrace the origination or acquisition of unprecedented numbers of NTMs. It was the concerted push by regulators that created a dangerously synchronized mortgage market where virtually all participants were reliant on NTMs. The only lending group that escaped the forces of regulatory lending standard liberalization was the community banks.[55] This is demonstrated by comparing the non-performing loan rate by bank asset size which shows that the top 4 institutions are at 17.36% while the thousands of community banks with less than $500 million in assets average about 2.3%. This demonstrates two influences that exacerbated the accumulation of NTMs. Too big to fail (TBTF) banks (such as Citibank, Bank of America, and J.P. Morgan Chase) along with other TBTF institutions (such as Fannie, Freddie, Merrill

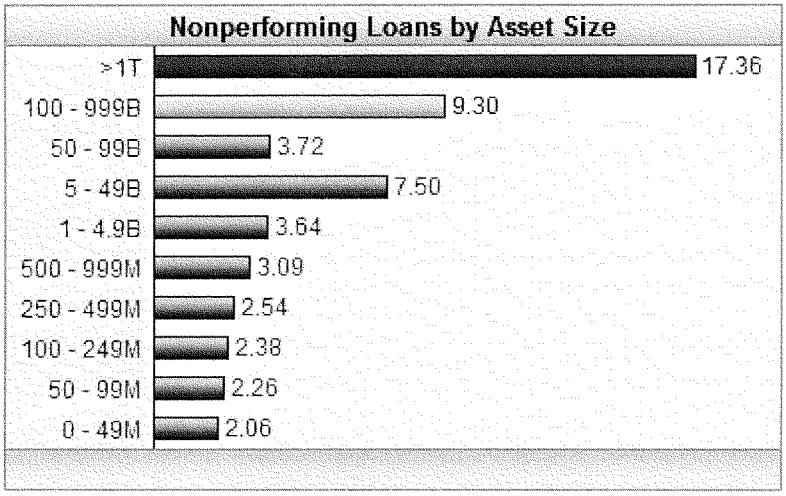
[53] Loans with weak or high risk characteristics are defined as either subprime (loans to borrowers with weakened credit histories) or Alt-A loans (loans with low or no documentation requirements or some other feature that was "alternative to agency" (hence, the term "Alt-A")—i.e., did not meet the traditional underwriting guidelines of the GSEs in such characteristics as Original LTV, Combined LTV, debt ratio, rules for loans on investment properties, rules on cash-out refinances, condominium guidelines, special income definitions, low start rates, or negative amortization ARMs). Most of these loans had non-traditional risk characteristics as compared to prime, subprime, and government loans standards prevalent in 1991. See **1991-A** below.

[54] See Appendix I for the link to "Sizing Total Federal Government and Federal Agency Contributions to Subprime and Alt-A Loans in U.S. First Mortgage Market as of 6.30.08"

[55] This group qualified under the less onerous CRA regulations applicable to small banks and was less oriented towards merger activity. Also given the large number of community banks (over 7000), changing the credit culture at such a large number of banks by regulatory action was difficult. Community banks have about 23% of all banking assets (source: http://www.icba.org/files/ICBASites/PDFs/cbfacts.pdf) and a smaller percentage of single-family mortgage assets.

Lynch, and AIG) accumulated a disproportionate share of NTMs. Non-TBTF institutions like thousands of community banks did not.

Chart 16:[56]



Overtime the ability to identify subprime and Alt-A loans became much more difficult as the GSEs increased their purchases but did not disclose all of their acquisitions of loans with subprime or Alt-A characteristics. Fannie on November 10, 2008 for the first time admitted:

> "We apply these classification criteria [for subprime and Alt-A] loans in order to determine our Alt-A and subprime loan exposures; however, we have other loans with some features that are similar to Alt-A and subprime loans that we have not classified as Alt-A or subprime because they do not meet our classification criteria."[57]

The original meaning of Alt-A was: "Alternative to Agency" or to GSE underwriting standards. Fannie and Freddie ultimately purchased nearly 60% of all known Alt-A production (see **Chart 38**).

[56] Source: Bill Moreland at bankregdata.com
[57] Fannie Q.3:2008 10-Q. p. 115, http://www.fanniemae.com/ir/pdf/earnings/2008/q32008.pdf

II. A Slow Fuse to the Big Bang: A Chronology of Events Leading to the Mortgage Meltdown:

Stage 1: Congress turns initially to FHA and then to the Community Reinvestment Act and bankers to increase low- and moderate-income housing lending

1962:

Since it was established in 1934, FHA has been reliant on low downpayments and long-term fixed rate mortgages.[58] It initially insured fixed rate loans with a maximum LTV of 80% (up from 50%-60% by non-government lenders) and a loan term of 20 years (up from a maximum of 12 years by non-government). By 1962 it would be insuring LTVs up to 95% and loan terms of 30 years.

Along with LTVs and loan terms, FHA's foreclosure rate has also been increasing, a trend that would continue for the next 58 years. In 1956 FHA's annual foreclosure start rate was up to 0.37%/year. By 1961 FHA was experiencing a tripling of its foreclosure start rate to 1.00%/year. Time magazine observed in 1962[59]:

> "Homeowners of a new and unattractive breed are plaguing the Federal Housing Administration these days. Known as "the walkaways," they are people who find themselves unable to meet their mortgage payments—and to solve the problem simply move out their belongings at night, drop their house key in the mailbox and disappear."

1977:

Community advocacy groups were the driving force behind the passage of CRA. First and foremost among them was National People's Action and its founder and leader Gale Cincotta.

> "Ms. Cincotta was known as the 'Mother of the Community Reinvestment Act....'"[60]

However, the language as passed was viewed as too weak:

> "The CRA passed without a clear statement of the reinvestment obligations and standards for which community groups had lobbied. The wording of the Act was short and in many respects vague.... Regulators were simply required in their examination to 'encourage'

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[58] Thomas Herzog, "The History of Mortgage Finance with an Emphasis on Mortgage Insurance", P. 21, http://www.soa.org/library/monographs/finance/housing-wealth/2009/september/mono-2009-mfi09-herzog-history.pdf

[59] http://www.time.com/time/magazine/article/0,9171,827500,00.html

[60] The Washington Post, August 17, 2001, http://www.highbeam.com/doc/1P2-471572.html

> lending institutions to serve the needs of the local communities in which they are chartered."[61]

CRA became the common thread in the government's unprecedented and broad efforts to weaken underwriting standards. Any effort to substantially increase CRA lending required a broad based loosening of the lending industry's loan standards, including those of Fannie and Freddie. It would be years before Congress would pass additional legislation that would mandate this loosening. Defenders of CRA ask how a statute passed in 1977 could play such a central role in the financial crisis. The answer is community groups supportive of CRA successfully lobbied for a series of government policy initiatives undertaken in 1992-1995 that invigorated CRA and placed it at the center of the effort to force the housing finance industry to institute flexible and innovative underwriting standards. As a result CRA commitment volume exploded in the 1990s.

1977-1990

In the early 1970s community groups became concerned because "[T]he FHA was known in the loan business as a 'lender of last resort' Implicit in receiving government insurance on a loan is the idea that conventional private lenders choose not to offer the borrower favorable terms."[62] The solution was CRA and its requirement that in "reviewing applications for charters, acquisitions, mergers, relocations, and branches, the regulatory agencies [be] required to 'access the institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods."[63] The goal was to force conventional (non-government) lenders to adopt more flexible underwriting standards in order to make more loans to low- and moderate-income borrowers. By 1995 CRA regulations would explicitly provide that banks be evaluated on their "use of innovative or flexible lending practices in a safe and sound manner to address the credit needs of low- or moderate-income individuals or geographies."[64]

Chart 15 demonstrates the growing foreclosure problems facing FHA, problems driven by high LTV lending. The peaks in the mid-60s and mid-70s were caused by missteps taken by FHA in urban areas.

> "One of [FHA's] key functions was to guarantee mortgages for people who might not qualify under private banking guidelines. Mismanagement and fraud plagued the agency in the 1970s, creating a legacy it was never able to shake, as shown by a reform campaign that began in 1997."[65]

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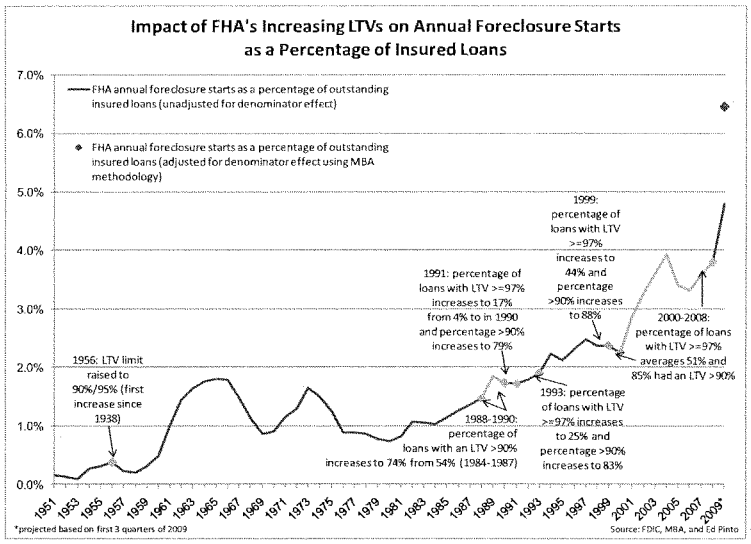
[61] Joe Mariano, "Where Did Billions of Dollars for Reinvestment Come From?", Chapter 2, p. 34 of Organizing Access to Capital: Advocacy and the Democratization of Financial Institutions, 2003, Gregory Squires, editor
[62] Id. pp. 30-31
[63] Id. p.34
[64] FDIC regulations, Part 345, Community Investment, Section 345.22, http://www.fdic.gov/regulations/laws/rules/2000-6500.html
[65] Supra. Mariano, pp. 35-36

The campaign had little effect as FHA's foreclosure start rate continued its climb after 1997.

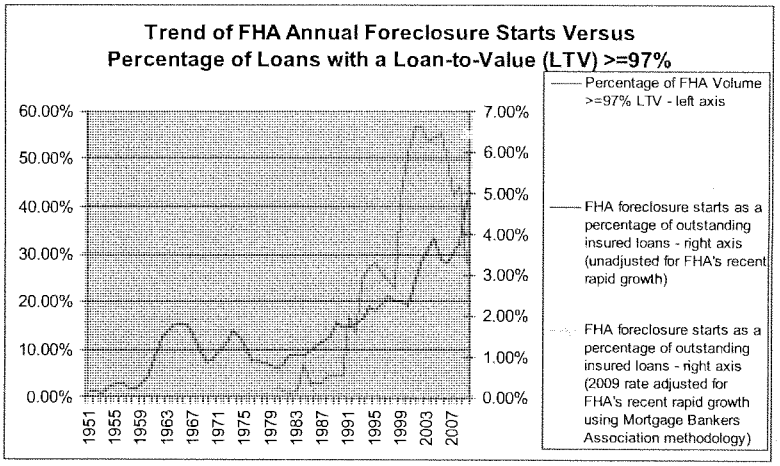
Chart 17:



Compiled by Edward Pinto

Ignored was the impact of downpayments of <=3% on FHA's foreclosure rates. The correlation between FHA's increasing reliance of loans with downpayments of <=3% which started in the early 1980s and its increasing foreclosure start rate is set out in Chart 18 below:

Chart 18:



Sources: FDIC, MBA, FHA, and compiled by Edward Pinto

Most agree that CRA had very little impact in its early years. Announced CRA commitments over CRA's first 15 years from 1977 to 1991 totaled less than $9 billion, with almost half of this total announced in 1990 and 1991.[66] This was likely due to the fact that many industry participants were reluctant to weaken underwriting standards. Also until 1995 CRA was based on the effort put forth by a bank, not results as measured by actual loan volume. Finally, regulators had minimal ability to penalize a bank for any perceived CRA shortcomings. While announced CRA commitments did not represent all CRA activity and CRA activity did not represent all low- and moderate-income lending, community groups viewed these CRA volume levels as small compared to overall origination volume (total originations were running about $500 billion/year in 1990 and 1991).

By the mid-1980s, these groups concluded that Fannie and Freddie's underwriting requirements were to blame for the perceived low level of CRA volume. In about 1986, National People's Action (NPA), a consumer advocacy group, began to meet separately with Fannie and Freddie in an effort to get them to adopt more flexible underwriting standards in an effort to expand CRA

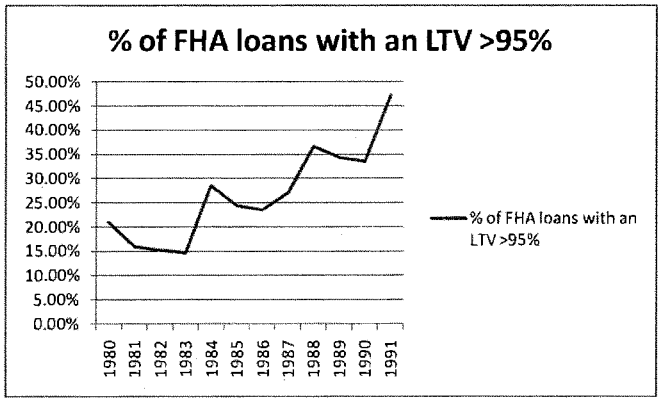
[66] Source: National Community Reinvestment Coalition's 2007 CRA Commitments report found at http://www.community-wealth.org/_pdfs/articles-publications/cdfis/report-silver-brown.pdf

lending. While agreeing to a number of pilot programs, Fannie and Freddie were dubious about many of the requested flexibilities.[67] NPA, ACORN and other groups were dissatisfied with the perceived pace of change and were concerned that Fannie, Freddie, and lenders "still viewed them as 'special programs' and have not incorporated them into standard underwriting practices."[68]

1980-1991:

Oblivious to rising default rates (see **Chart 19**), FHA steadily increases the percentage of its business represented by loans with an LTV >95%.

Chart 19:[69]



With the exception of loans made by the much smaller Veterans Administration, FHA was the only source of loans with downpayments of less than 5%, as conventional loan LTVs required at least 5% down. In 1991 FHA did over $7 billion of home purchase loans with down payments of 3% or less to the GSEs' volume of $0. These loans represented about 47% of FHA's insured loans, with another 30% having an LTV >90% and <=95%.[70] FHA's ability to fuel ever greater volumes of low downpayment lending was limited by its market share, which was 8% in 1991. Increasing its share was politically difficult as FHA was on budget and its annual volume was set by Congress.

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[67] The author was Fannie's senior vice president of marketing and product management during the first two years of Fannie's interaction with NPA. I advised NPA that Fannie would be as ill-equipped as FHA to implement a large-scale national affordable housing program. I cited HUD and FHA's failures in this regard and noted that any such effort was fraught with problems and risks.

[68] "Not in My Back Yard: Removing Barriers to Affordable Housing", Chapter 3, page 13 http://www.huduser.org/Publications/pdf/NotInMyBackyard.pdf

[69] FHA 2009 Actuarial Study found at: http://www.hud.gov/offices/hsg/comp/rpts/actr/2009actr_exhecm.pdf,

[70] Id.

Early 1980s:

The most severe housing downturn since the Depression occurs in the aftermath of the collapse of oil prices. The hardest hit area is known as COLTA – Colorado, Oklahoma, Louisiana, Texas, and Alaska. The COLTA states had first experienced an oil-fueled boom in the late 1970s and early 1980s and then a bust as the price of oil quickly collapsed. Texas and Alaska were the hardest hit. Both had unique circumstances.[71]

Texas had a strict homestead property law that banned the withdrawal of any home equity after the initial home financing (even extending to a borrower's original down payment). For this reason real estate agents encouraged home buyers to put down as small a downpayment as possible. A 5% down payment on a conventional loan and even lower on an FHA loan became prevalent. Texas was also one of the fastest growing states in the country in terms of population and jobs in the late 1970s and early 1980s.[72] Traditionally, first time homebuyers make greater use of low downpayment lending. The combination of these two factors resulted in Texas having the highest LTVs in the nation. When the downturn hit, mass foreclosures resulted. The downturn in Texas became known as the Texas Depression default scenario.[73]

In Alaska the story had a different twist. In the early 1980s interest rates had risen to record levels. Alaska used tens of millions of dollars of its royalties from the oil pipeline to fund low interest rate mortgages through the Alaska Housing Finance Agency (AHFA). The program financed homes with very low downpayments (once again 5% on a conventional loan and less on an FHA loan). The program had mortgage and income limits. The mortgage limit was $80,000 on a two bedroom home (including condominiums). Once the economic downturn hit Alaska, prices collapsed from $80,000 to $20,000 on many of the properties financed by AHFA.

As a result of the foreclosure losses incurred in the COLTA states, 6 of the 12 mortgage insurance companies either went into liquidation or run-off.

1985-A:

Fannie undertakes a top-to-bottom review of its underwriting standards in the spring and summer of 1985. This review was prompted by Fannie's adverse experience with loosened underwriting practices in the early 1980s and resulted in the announcement of new standards in August of 1985. While covering numerous topics, a significant focus was on standards relating to loans with a downpayment of 5%. Tightened restrictions on loans with a downpayment of 5% included: reduction in maximum debt ratios and seller contributions, an increase in cash reserve requirements and limitations on property usage (ex. investor loans and 2, 3 and 4 unit properties

[71] The author was Fannie's Senior Vice President for Marketing and Product Management from 1984-1987 and worked on the aftermath of the housing downturn, particularly with respect to Texas and Alaska.
[72] "The Texas Economy", pp. 6 and 9, http://www.dallasfed.org/sanantonio/news/events/2007/0709sigalla.pdf
[73] The high default rates experienced in Texas are described in Fitch Research, "Fitch Mortgage Default Model", June 28, 1993, pp. 6-8. Document contained in the author's files.

were not eligible for a downpayment of only 5%) and standards for riskier loan product types were tightened (ex. ARMs).[74] The changes made by Fannie largely bring them into sync with Freddie's guidelines.

> "[t]he conclusion is inescapable that the most central element in weighing the soundness of a mortgage loan is the amount of the homeowner's equity." David O. Maxwell, Chairman of the Federal National Mortgage Association [Fannie Mae], Address before the National Press Club, August 5, 1985[75]

1985-B:

While Fannie and Freddie both have conservative underwriting guidelines, FHA has loosened its guidelines:

> "On average, downpayments on FHA insured homes declined from 10% in 1982 to 7.8% in 1985. In 1985, 40 percent of the agency's insured mortgages had loan-to-value ratios of 96 percent or greater. There is near unanimous agreement among housing experts that the less equity homebuyers have tied up in their homes, the greater is their likelihood of default."[76]

FHA also had much higher debt ratios than the private sector. In 1982 it raised Total Debt to Income and Total Expense to Income ratios to 38% and 53% from 35% and 50% respectively, with about 30% of FHA's loans exceeding these levels. Private mortgage insurers applied 28% and 36% ratios in 1985.[77] Chart 17 above shows FHA's foreclosure start rate increasing by a factor of 5 from 1982 to 2009.

In 2005, twenty years later, as federal housing policies succeed in pushing the GSEs and the private sector to a point where they largely replace FHA, housing and total debt ratios of 38% and 53% will become the norm.

1986:

The income tax law is changed to effectively limit interest deductions to interest incurred on loans relating to primary and secondary residences. This helped encourage the use of debt over equity, larger loans, larger homes, and the extraction of home equity. While tax deductibility was not the sole cause, home mortgage debt as a percentage of GDP increases from 39% in 1986 to 50% in 1999 to 75% in 2007 (see **Chart 20** below).

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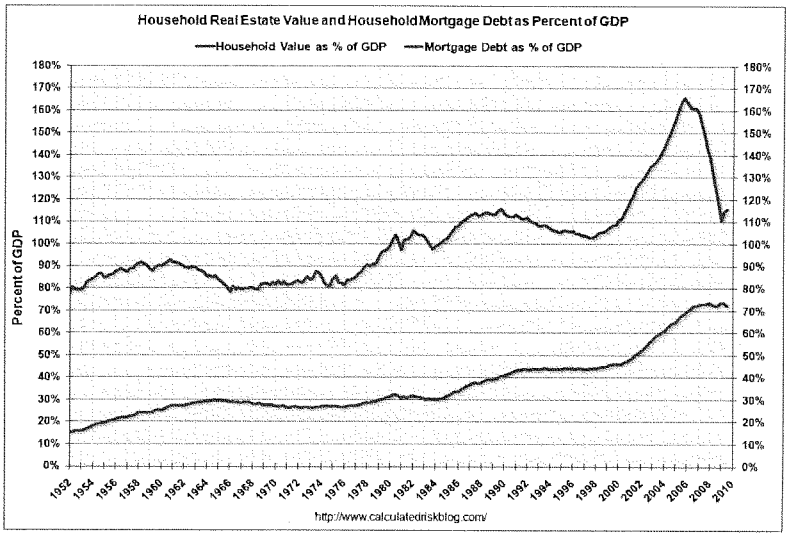
[74] The author was Fannie's senior vice president of marketing and product management both during the time this review was undertaken.
[75] Stephen Moore, Heritage Foundation, "How Congress Can Diffuse the Federal Housing Time Bomb", July 29, 1986, p. 7, http://www.policyarchive.org/handle/10207/bitstreams/9281.pdf
[76] Id.
[77] Id.

Chart 20:



1988-A:

> "In 1988 the holding company for Union National Bank, a large bank headquartered in Pittsburgh, requested approval from the Federal Reserve for its merger with Pennbancorp....Through flexible loan underwriting, [Union National's CRA lending] agreement created an affordable conventional home-purchase product for homeownership in [Pittsburgh Community Reinvestment Group] neighborhoods. Union National Bank reduced the interest rate on these loans by at least one half of one percent below their rates, waived points, mortgage insurance, and minimum loan amounts, and increased the loan-to-value and qualifying debt-to-income ratios. To avoid the conservative underwriting preferred by secondary market investors, Union National agreed to keep these mortgages in portfolio."[78]

The above program is representative. It demonstrated that community groups were not really looking for equal treatment by banks; they wanted the private sector to provide subsidized

[78] Stanley A. Lowe and John T. Metzger, "A Citywide Strategy: The Pittsburgh Community Reinvestment Group", Chapter 6, page 89 of Organizing Access to Capital: Advocacy and the Democratization of Financial Institutions, 2003, Gregory Squires, editor

loans[79] with highly leveraged loan terms. If the private sector would only provide enough interest rate subsidies and additional leverage, low and very low income borrowers could avoid FHA and still become homeowners.

1986-1992:

Union National Bank's inability to sell loans with weakened credit standards to the GSEs remained a point of contention with community groups. As noted earlier, NPA, ACORN and other groups were dissatisfied with the perceived pace of change and concerned that Fannie, Freddie, and lenders "still viewed them as 'special programs' and have not incorporated them into standard underwriting practices."[80]

> "As early as 1987[81], ACORN began pressuring Fannie and Freddie to review their standards, with modest results. By 1989, ACORN had lured Fannie Mae into the first of many "pilot projects" designed to help local banks lower credit standards. But it was all small potatoes until the serious pressure began in early 1991. At that point, Democratic Senator Allan Dixon convened a Senate subcommittee hearing at which an ACORN representative gave key testimony."
>
> "ACORN's spokesman strenuously complained that his organization's efforts to relax local credit standards were being blocked by requirements set by the secondary market. Dixon responded by pressing Fannie and Freddie to do more to relax those standards — and by promising to introduce legislation that would ensure it. At this early stage, Fannie and Freddie walked a fine line between promising to do more, while protesting any wholesale reduction of credit requirements."

By mid-1991 ACORN and other groups goal of forcing the GSEs to loosen their lending standards was getting close to reality:

> "By July of 1991, ACORN's legislative campaign began to bear fruit. As the *Chicago Tribune* put it, 'Housing activists have been pushing hard to improve housing for the poor by extracting greater financial support from the country's two highly profitable secondary

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[79] Since FHA's loan limits targeted its activity to low- and moderate-income homeowners and its loans had low downpayments, it had little ability to cross-subsidize or transfer profits from lower risk borrowers to higher risk borrowers. Conventional lenders (whether a bank, Fannie, or Freddie) had a much broader range of lower risk customers which could be used to generate profits that could be used to subsidize higher risk loans by way of lower rates, reduced profit margins, and other methods..

[80] "Not in My Back Yard: Removing Barriers to Affordable Housing", Chapter 3, page 13 http://www.huduser.org/Publications/pdf/NotInMyBackyard.pdf

[81] The author represented Fannie Mae at the first and many subsequent meetings with NPA and believed that the first meeting may have occurred as early as 1986.

mortgage-market companies. Thanks to the help of sympathetic lawmakers, it appeared...that they may succeed.'"[82]

1988-B:

Risk based bank capital standards (known as the Basel Accords) were initially implemented in 1988.[83] A risk based capital weight of 20% was set for bank holders of Fannie and Freddie MBS. Private "AAA" and "AA" MBS were set at 100%[84] and remained at this level until changed to 20% in 2001.[85] Residential mortgages were set at a 50% level. These percentages were then applied to the base capital level of 8%. This yields the following risk based capital levels:

- Fannie and Freddie MBS – 1.6% capital (8% base capital requirement x 20% risk weight)
- Residential mortgages – 4% capital (8% base capital requirement x 50% risk weight)
- Private "AAA" and "AA" MBS – 8% base capital requirement

A Fannie MBS required Fannie to hold capital of 0.45% and the bank buying the Fannie MBS to hold 1.6%, for total capital of 2.05% and a leverage ratio of 49:1.[86]

1988-C

During the presidential campaign of 1988, candidate Michael Dukakis offered a homeownership plan:

> "aimed at about five million households that now live in rental housing and have incomes ranging from $20,000 to $40,000. The program is designed to help them enter the housing market through a variety of measures, including relaxed criteria for mortgages insured by the Federal Housing Administration....The F.H.A. now insures mortgages and requires a down payment of only 3 percent of the first $25,000 of the price of the house, and 5 percent for the remainder of the price, the Dukakis campaign said. The Democratic nominee would require a flat 3 percent down payment for the entire price.... He would let the F.H.A. insure most forms of adjustable rate mortgages and eliminate the ceiling on the number of such loans that the agency can insure annually. Currently, the agency will only guarantee adjustable rate mortgages with an annual cap of 1 percent, the campaign said. The Dukakis plan would

[82] Stanley Kurtz, Planting Seeds of Disaster , p. 2, http://article.nationalreview.com/374045/planting-seeds-of-disaster/stanley-kurtz?page=1
[83] See Arnold Kling, "Not What They Had in Mind" for an excellent discussion on the impact of the Basel Accords on the financial crisis. http://mercatus.org/sites/default/files/publication/NotWhatTheyHadInMind%281%29.pdf
[84] http://www.fdic.gov/bank/analytical/fyi/2003/042103fyi.html
[85] http://www.dallasfed.org/banking/notices/2005/not0566.pdf
[86] GSE Act

> broaden that to a 2 percent cap on annual increases in interest rates and a 5 percent lifetime cap, [and] proposed revisions to F.H.A. standards on mortgage underwriting so that mortgage eligibility could take into account savings and one's history of paying rent 'in excess of otherwise rigid underwriting limits.' Currently, underwriting standards for conventional mortgages require that monthly mortgage, interest and tax payments not exceed 28 percent of one's income, the campaign said"[87]

Fresh from the lessons learned during the housing crash that had occurred just a few years before in Texas, Professor Anthony Sanders pointed out the dangers of such policy changes:

> "Ask investors in Houston how they would have liked it if they'd been stimulated to buy housing."[88]

1990-A:

As a result of the passage of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989, federal regulators and Fannie and Freddie adopt a new definition of "market value" (emphasis added):[89]

> *"Market value* means the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming **the price is not affected by undue stimulus.** Implicit in this definition are the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:
>
> (1) Buyer and seller are typically motivated;
>
> (2) Both parties are well informed or well advised, and acting in what they consider their own best interests;
>
> (3) A reasonable time is allowed for exposure in the open market;
>
> (4) **Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto**; and
>
> (5) The price represents the normal consideration for the property sold **unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.**"

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[87] NYT "Dukakis, in Levittown, Offers a Plan To Help Young Families Buy Homes", October 11, 1988, http://www.nytimes.com/1988/10/11/us/dukakis-in-levittown-offers-a-plan-to-help-young-families-buy-homes.html

[88] Id.

[89] http://www.fdic.gov/regulations/laws/rules/6000-1700.html

While explicit in this definition is that the financing terms not affect the price, the bullish impact on demand and home prices of loosened underwriting standards was ignored by regulators and the GSEs. The underwriting changes that would shortly spread throughout much of the housing finance industry would create additional demand and act as a stimulus to prices. Loosened loan terms would constitute "financial arrangements" that were not comparable to cash. The potential for this type of price distortion was noted in a standard appraisal handbook over a half century ago.[90]

1991-A:

In the late 1980s-early 1990s, the first mortgage industry has 3 non-overlapping and well defined components:

1. The investment quality mortgage loan market alternately known as the prime, "A" or conventional lending market. Fannie and Freddie set strict lending standards as they were expected to acquire mortgages meeting the investment standards imposed by private institutional mortgage investors;[91]

2. Government loans consisting of loans that would be non-investment or non-prime quality but for their government guarantee; and

3. Non-investment quality or subprime mortgage loans were loans that did not "meet the underwriting criteria set forth by [Fannie and Freddie][92].

The investment quality, "A" or prime loan segment constitutes 79% of the market in 1991.[93] Fannie and Freddie are the biggest players in and largely set loan standards for this segment. "A" quality loans are conservatively underwritten in terms of LTV, credit history, debt ratios,

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[90] This is not a new concept as this excerpt from a 1951 appraisal handbook demonstrates: "Assume that we are dealing with two residential properties in two different cities, which we shall call City *A* and City *B*. Both of these cities, we shall assume, have the same population history and trend, the same social and economic background, and the same supply and demand ratio. In each city, we have a residential property to appraise. Each of these properties is similarly environed, of the same size, quality, utilitarian capacity, and cost. The only factor of difference in the problem is the local custom concerning terms of sale, which we may assume are 25 per cent down and 5 years to pay the balance in the case of City *A*, and 10 per cent down and 15 years to pay the balance in City *B*. Does it now follow that, because of this difference in the terms of sale, the property located in City *A* may conceivably be valued at $10,000, and the property in City *B* at $12,500?, The answer is no; the value is the same in each case, but the price differs because the price as finally fixed in each case stems from the terms agreed upon." Pp. 18-19, May's "The Valuation of Residential Real Estate" copyright 1942, 1951. If you have any doubt as to the correctness of May's result, consider the last time you purchased a car. Perhaps you were offered a car with a price of $23,000 and the option of either a 60 month loan at 0% or $3000 cash back. We all know that the price of the car is $20,000 and that the $3000 is the cost of bringing the interest rate to zero.

[91] Under Fannie Mae's charter, it was restricted to purchasing loans "of such quality, type, and class as to meet, generally, the purchase standards imposed by private institutional mortgage investors." p. 14, http://www.fanniemae.com/aboutfm/pdf/charter.pdf

[92] Thomas LaMalfa, "The Market for Non-Investment Quality Loans", Wholesale Access, Vol. 1, No. 7, p..3, December 1989. Document contained in the author's files.

[93] Inside Mortgage Finance

and other risk characteristics.[94] These characteristics are quite different from both FHA and Subprime loans. The following are selected characteristics of "A" loans as represented by a sample of Fannie Mae's loans from 1988-1991:

1. Low loan-to-values predominate (78.5% have LTVs <=80% and 5.5% have LTVs >90% and <=95%). Zero percent have an LTV >95%:[95] Loans with an LTV of 95% are subject to stricter standards than those with larger downpayments.
2. Cash-out refinances have conservative LTV limits with 1% of cash out refinances having an LTV >80% and 9% having an LTV >75%;
3. Seven percent of rate and term (no cash out) refinances have an LTV >80% and 25% have an LTV >75%;
4. Forty-two percent of first time homebuyers have an LTV >=90% and <=95% compared to 24% of repeat home buyers (excludes home refinance borrowers);
5. Only 4% of loans are combination loans (a first mortgage acquired by Fannie with a second mortgage held by a third party) and only one in four of these combination loans have a first mortgage LTV >75%. The maximum combined LTV (CLTV) is 90%;
6. Past mortgage credit is near perfect (98% have no mortgage late payments and 99.5% have no or at most 1 late mortgage payment. Ninety-nine percent of borrowers with a downpayment of 5% had a perfect mortgage payment history;
7. Past revolving credit was very good (69% have no late payments, 79% have one or none, 85% had two or fewer, and 89% have 3 or fewer);
8. Ninety-one percent of borrowers have at least 2 months in cash reserves;
9. Eighty percent of borrowers have a housing debt ratio <=28% and 94%<=33%;
10. Seventy-six percent of borrowers have a total debt ratio <=36% and 86%<=38%; and
11. Few loans finance investor properties (2% of all loans) or 2-4 unit properties (3% of all loans).

The FHA loan segment constitutes 12% of the market in 1991.[96] FHA loans have much higher risk characteristics than Prime loans as evidenced by the following selected characteristics:[97]

1. Seventy-nine percent of loans have an LTV >90% and 17% have an LTV >=97%;
2. In 1997 (earliest data available) 30% of FHA borrowers had a FICO below 620 as compared to 7% for Prime loans (also in 1997).[98] Loans with a FICO below 620

[94] Fannie Mae Random Sample Review, prime loan characteristics are from a random sample review of Fannie Mae's single-family acquisitions for the period October 1988-January 1992, dated 3.10.1992. Document contained in the author's files.
[95] At the end of 2007 Fannie reported that 15% of its entire credit book had an LTV or combined LTV >95% (about half of which had no down payment). Given that combination loans are poorly reported, 15% is a conservative figure. This compares to 0% of Fannie's credit book in 1992. Source: Fannie's 2007 10-K, p. 128.
[96] Inside Mortgage Finance
[97] FHA 2009 Actuarial Report
[98] Mortgage Banking, October 1997, "The Stampede to Subprime"

corresponded to the "B"–"D" subprime grades in terms of credit.[99] No data was provided for the "A-" or 620-659 FICO category; and

3. As noted previously at **1985,** in 1982 30% of FHA's loans had debt ratios that exceeded its limits of 38% for housing debt and 53% for total debt. It is highly unlikely that this percentage had declined since 1982. Ten percent of Fannie's loans exceeded a combined 28% housing and 36% total debt ratio.

The self-denominated subprime segment constitutes 10% of the market.[100] [101]Subprime loans have much higher risk characteristics than Prime loans. They were generally graded as "A-"[102] (43% of subprime), "B" (25%). "C" (20%) or "D" (4%):

1. Twelve percent are for home purchases and 68% are for refinance (the balance had an unknown purpose);[103]
2. In 1989 cash equity of 20% or more was common on "A-" loans, with several investors setting a maximum of 75%.[104] Maximum LTVs of 70-75% and 60-70% respectively were required on "B" and "C" loans. In 1991Fannie's and FHA's medians LTVs were about 73%[105] and 95% respectively.
3. While 99.5% of Fannie's borrowers had 1 or zero mortgage late payments), the best subprime grade ("A-") allowed for two 30 day mortgage late payments in the past 12 months. "B" and "C" grade loans could have increasing amounts of delinquencies of varying types and other evidence of impaired credit.[106] As noted above the trade-off for a greater level of impaired credit was more substantial borrower equity.
4. Maximum total debt ratios were 45%, 50%, and >50%, for "A-", "B", and "C" grades respectively.[107]

Based on these underwriting characteristics, the three market segments were quite distinct. The prime market generally served borrowers with low to medium LTVs (however first time home buyers have a substantially higher usage of high LTV financing), excellent credit, and moderate debt ratios. The FHA market served borrowers (particularly home purchase and first time homebuyers) with high LTVs, approximately half with impaired credit (a FICO below 660), and high debt ratios (similar to subprime). The subprime market primarily served borrowers getting

[99] Fitch IBCA, "A New Look at Subprime Mortgages", December 16, 1996. Document contained in the author's files.
[100] Inside Mortgage Finance
[101] In those instances where data from 1995, 1996, or 1997 is used, it is believed to be generally representative of the 1991 time period.
[102] In 1989 "A" was the best grade of subprime loan, with "B" being the second best. By the mid-1990s as competition increased between the GSEs and subprime lenders, the best grade became known as "A-" to distinguish it from GSE mortgages which were called "A". In this paper, the best grade of subprime will be referred to as "A-".
[103] Supra. "The Stampede to Subprime"
[104] Supra. Thomas LaMalfa, "The Market for Non-Investment Quality Loans", p. 6
[105] Supra. Fannie Mae Random Sample Review
[106] Supra. Thomas LaMalfa, "The Market for Non-Investment Quality Loans", p. 6
[107] Id. pp. 4-5

cash out refinances with medium to low LTVs, most with impaired credit, and with high debt ratios. Not only were these markets quite separate and distinct, prime originators did not originate subprime loans and vice versa and a loan qualifying for FHA rarely met prime loan standards.[108] All of this would change in 1992 with the passage of the GSE Act. Post 1992 the GSEs would be required to substantially increase their acquisitions of low- and moderate-income borrowers – the same customer bases relied on by FHA and subprime. To accomplish this they would need to depart from the investment quality credit standards that distinguished "A" lending from FHA and subprime.

1991-B:

Karl Case and Robert Shiller had been studying housing booms for a number of years. In a 1991 interview, Case commented on the doubling of house prices in Boston over 1984-1987:[109]

> "[t]he Massachusetts economy was pushed into its current recession by the real estate boom that lasted from 1984-1987. Over that time, some $100 billion in real estate equity was 'created' in Boston by the rising prices of single-family residences. In response to the demand for housing, construction went ahead at a feverish pace. When the boom ended, tens of thousands lost their jobs. In February [1991] unemployment in Massachusetts stood at 9.3%. Case believes that in the absence of the boom, the economy would have slowed but not reached the "potentially catastrophic recession" it is now experiencing."

[108] Id.
[109] "The Analytical Economist: Bursting Bubbles", Scientific American, May 1991, Document contained in the author's files.

Stage 2: Congress turns to Fannie and Freddie in a further effort to increase low- and moderate-income housing and invigorate CRA

1991-C:

Community groups once again turn their attention to Fannie and Freddie. Unlike FHA, Fannie and Freddie were off-budget (as were banks). A key community organizer tells the U.S. Senate Committee on Banking, Housing, and Urban Affairs:

> "[i]t became increasingly clear that [Fannie and Freddie had] been a hidden loan officer at the loan origination table."[110]

1991-D:

In a similar vein, HUD's Advisory Commission on Regulatory Barriers to Affordable Housing stated in its 1991 report:

> "The market influence of Fannie Mae and Freddie Mac extends well beyond the number of loans they buy or securitize; their underwriting standards for primary loans are widely adopted and amount to national underwriting standards for a substantial fraction of all mortgage loans."[111]

The Commission also found that:

> "Fannie Mae and Freddie Mac's underwriting standards are oriented towards 'plain vanilla' mortgages."[112]

1991-E:

Congress was becoming interested in addressing what it perceived as overly conservative underwriting standards.

> "'Lenders will respond to the most conservative standards unless [Fannie Mae and Freddie Mac] are aggressive and convincing in their efforts to expand historically narrow underwriting.' This point was reinforced over and over again by other [community

[110] Allen Fishbein, "Filling the Half-empty Glass: The Role of Community Advocacy in Redefining the Public Responsibilities of Government-Sponsored Housing Enterprises", Chapter 7 of Organizing Access to Capital: Advocacy and the Democratization of Financial Institutions, 2003, Gregory Squires, editor

[111] "Not in My Back Yard: Removing Barriers to Affordable Housing", Chapter 5, page 3 http://www.huduser.org/Publications/pdf/NotInMyBackyard.pdf

[112] Id. Chapter 3, page 13

> advocacy] witnesses." (U.S. Senate Committee on Banking, Housing, and Urban Affairs 1991)[113]

This statement provides a clear indication as to Congress' intent when it passed the GSE Act of 1992 the following year. Rather than being viewed as prudent, the GSEs' standards were attacked for being inflexible and too conservative. Ignored was the fact that these standards were designed to originate sustainable loans in a safe and sound manner. They were based on the "Three Cs of Mortgage Credit". As noted previously, Fannie's underwriting standards had undergone a thorough risk based review in 1985 to address the substantial losses it had incurred on high LTV and highly leveraged loans in the early 1980s.

Community groups were determined to replace the Three Cs of Mortgage Credit with flexible and loosened lending standards as the means to invigorate the largely dormant CRA. As the above quotes demonstrate, NPA and other community groups viewed Fannie and Freddie as the central roadblock to expanded CRA lending. These groups wanted Fannie and Freddie to agree to lower downpayment requirements and other flexibilities. To accomplish this, Fannie and Freddie would either need to be convinced to support CRA voluntarily or forced to by Congress.

While the following quote is from 1994, it illustrates how the GSEs' traditional underwriting standards had been perceived:

> "Those guidelines must have been written sometime in the 1800s," says Beverly Hightower, chief lending officer and senior vice president at Family Savings Bank in Los Angeles. "In essence, the guidelines say that if a loan applicant's income-to-housing debt ratio exceeds 28%, they could be perceived as a credit risk." Hightower says the new program will allow a "qualifying flexibility" that will address the fact that black families traditionally spend a higher percentage of their incomes on living expenses."[114]

1991-F

The Federal Reserve Bank releases Home Mortgage Disclosure Act data related to approval and denial rates based on race. Notwithstanding the fact that this study did not take into account loan-to-value, credit history, property type, employment or debt-to-income data, the typical headline announced that discrimination was rampant. For example the New York Times' headline read: "Racial Gap Detailed on Mortgages":[115]

> "The most comprehensive report on mortgage lending nationwide ever issued by the Government shows that even within the same income group whites are nearly twice as

[113] Allen Fishbein, "Filling the Half-empty Glass: The Role of Community Advocacy in Redefining the Public Responsibilities of Government-Sponsored Housing Enterprises", Chapter 7, p. 113 of Organizing Access to Capital: Advocacy and the Democratization of Financial Institutions, 2003, Gregory Squires, editor

[114] "Fannie Mae's trillion dollar giveaway; the government agency pledges money to low- and moderate-income home buyers", Black Enterprise, Nov, 1994, http://findarticles.com/p/articles/mi_m1365/is_n4_v25/ai_15891530/

[115] Michael Quint, New York Times: "Racial Gap Detailed on Mortgages", October 21, 1991, http://www.nytimes.com/1991/10/22/business/racial-gap-detailed-on-mortgages.html?scp=2&sq=&st=nyt

likely as blacks to get loans.... John P. LaWare, a governor of the Federal Reserve Board, said the higher rejection rate for minority applicants disclosed in today's report was 'very worrisome.' The data will be 'red flags for examiners' who will be 'stepping up the intensity and depth' of their reviews, he said. But Mr. LaWare added that the records compiled by the Fed were not enough to prove discrimination, even if they showed much higher approval ratings for whites. Proof of discrimination would require more detailed study of each application, including information on the house to be mortgaged, data on creditworthiness like employment history, and the size of the monthly loan payments relative to the applicant's income....Representative Henry B. Gonzalez, the Texas Democrat who is chairman of the House Banking Committee, said the report showed discrimination in lending to be so pervasive that it was inflicting great pain across the country, whether or not the discrimination was intentional....Maude Hurd, president of the Association of Community Organizations for Reform Now[ACORN], a group frequently critical of bank lending practices, said the study showed that 'if you're a minority, our nation's banks want only your deposits, not your loan application.'...The study showed that in every income category, and for every kind of mortgage loan, black and Hispanic applicants were far more likely to be rejected than whites. In the case of low-income applicants for Government-backed mortgages, which are popular because they require relatively low down payments, 29.4 percent of black and 22.4 percent of Hispanic applicants were rejected, compared with only 14.7 percent of whites. Among high-income applicants, 20.8 percent of black and 14.2 percent of Hispanic applicants were rejected, compared with 8.6 percent for whites."

1991-G:

Having gotten CRA passed in 1977, many of the same groups now appealed to Congress to force change at the GSEs. They find a sympathetic ear, particularly from Henry Gonzales, chairman of the House Banking Committee. Chairman Gonzales "informally deputized [ACORN, Consumers Union, Enterprise Foundation, and Local Issues Support Corporation] to develop workable provisions that would be broadly acceptable to Fannie Mae and Freddie Mac."[116]

In 1986 at most about 7% of all home purchase loans (conventional, FHA, and VA[117]) had a down payment of less than 3%. All of these loans were insured by FHA or VA as the maximum conventional or non-government market did not insure loans with an LTV >95%.

By 1991 the market hadn't changed much with at most 10% of all home purchase loans (conventional, FHA, and VA) having a down payment of 3% or less. FHA was the market leader in providing loans with downpayments of 3% or less with about 47% of its insured loans having such a downpayment. Once again the maximum LTV on conventional loans was 95%. While FHA was steadily moving its core business to ever smaller downpayments, the private sector had

[116] Allen Fishbein, "Filling the Half-empty Glass: The Role of Community Advocacy in Redefining the Public Responsibilities of Government-Sponsored Housing Enterprises", Chapter 7, p. 114 of Organizing Access to Capital: Advocacy and the Democratization of Financial Institutions, 2003, Gregory Squires, editor

[117] There is no year by year LTV data for VA lending. For purposes of these calculations, 100% of VA guaranteed loans are assumed to have a down payment of 3% or less.

not followed suit as a result of its bad experience in the early 1980s. Given that the private sector financed 83% of all home purchase loans in 1991,[118] in order to make further "gains" in the expansion of the <5% downpayment market, the private sector would need to be drafted to the effort.

1991-H:

While Congress and federal agencies had no way of anticipating this, the beginning of the surge in leverage and flexible underwriting standards with respect to affordable housing lending happened to coincide with the resumption of a decline in mortgage rates that had started in the mid-1980s, as shown on Chart 21. While this interest rate decline would not have been sufficient to create the mortgage crisis[119] [120], its erratic nature drove a series of refinance booms with fixed rate mortgage as the product of choice. This played to the GSEs' strong suit – fixed rate loans, thereby helping to drive their market share growth. As Chart 21 shows, during the period 1991-2007 there were 3 periods of rate decline where rates fell below previous highs; early 1991 to early 1994, 1997-1998, and early 2001to early 2004. These periods were marked by sustained refinance booms. The GSEs' share of total outstanding residential mortgage debt increased by 6% over 1991-1993, 2.2% over 1997-1998, and 5.7% over 2001-2003. The gains averaged 1.7% per year during these 9 years compared to 0.9% for the 5 remaining years from 1991-2003. Whereas the GSEs started 1991 with 28.2% share of all outstanding mortgages, they ended 2003 with a 46.8%.[121] Once rates increased in early 2004, the loan market shifted towards adjustable rate mortgages (ARMs). This shift along with more highly leveraged securitization techniques allowed the private sector to better compete with and take share from the GSEs.

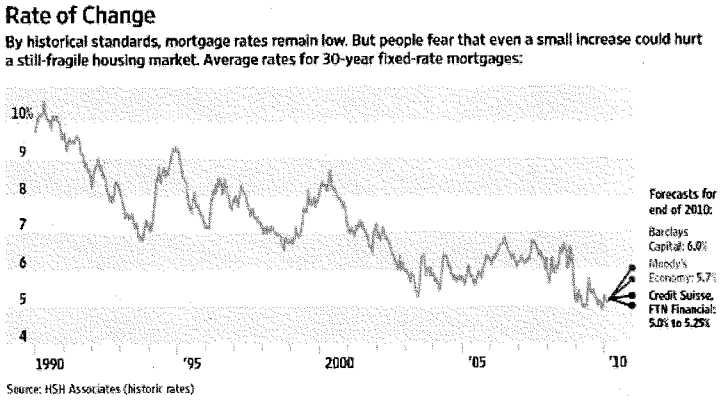
[118] FHFA

[119] Cleveland Federal Reserve Bank, "Why Didn't Canada's Housing Market Go Bust?" http://www.clevelandfed.org/research/commentary/2009/0909.pdf

[120] Long-term rates had been in a secular decline since the early-1980s. There was a much smaller housing boom that occurred in the late 1980s. It was also associated with a bout of weak lending (low doc/no doc and ARMs with potential negative amortization (see also http://www.econ.yale.edu/~shiller/pubs/p1089.pdf). The boom that started in the 1990s was much longer and fueled by much higher levels of leverage increases.

[121] The GSEs' share of total outstanding residential mortgage debt would ultimately decline to 41% by 2007. Source FHFA, http://www.fhfa.gov/webfiles/14597/SFMOutstanding1990to2009Q1.xls

Chart 21 – Interest Rate Trends:



Source: Wall Street Journal

1986-1992:

Events of the late 1980s and early 1990s[122] would join three disparate groups in a common cause: low- and moderate-income housing:

1. Fannie Mae decided in 1986 to give up its government charter and become a private company.[123] This decision was quickly reversed in 1987, when it decided that its funding advantages and implicit government guarantee under its charter were too valuable to surrender.[124] Instead it would turn its focus to protecting its charter privileges. Over the next 5 years (1987-1991) Fannie would develop and begin implementing a strategy to use its low- and moderate-income housing mission as the means to protect its charter franchise. Fannie set out to acquire copious amounts of low- and moderate-income lending in order to capture its regulator, Congress[125], with the goal of assuring that Congress would not change its charter privileges to Fannie's detriment. Lehman Brothers' consultant Jim Johnson was hired in 1988 to more fully develop this strategy.

[122] From 1985-1987 the author was Fannie's Senior Vice President for Marketing and Product Management, with responsibility for single- and multi-family lending and affordable housing and from 1987-1989 was Executive Vice President and Chief Credit Officer.
[123] This decision was not made public
[124] Author's personal knowledge.
[125] Congress had issued Fannie's charter and was the only entity that could change it.

By 1991 Johnson was Fannie's chairman and CEO. In 1991 Johnson announced Fannie's opening bid, a $10 billion affordable housing program called "Opening Doors".[126]

2. As has already been noted, National People's Action (NPA) and ACORN, along with other community groups concluded that Fannie and Freddie's underwriting requirements were to blame for the failure of the Community Reinvestment Act of 1977 (CRA) to gain traction. Having gotten CRA passed in 1977, NPA, ACORN, and other community groups appealed to Congress in 1991 to force change at the GSEs.

3. Congress had long used FHA (created in 1934) as its main tool to provide low- and moderate-income housing. However, FHA was an agency of the federal government and was included in the discretionary portion of the budget. In 1990 Congress had reached a limit in what it could do on budget:

> "In 1990, as part of a new, multiyear budget agreement, the Congress and the President adopted new procedures for deficit control. Those procedures, embodied in the Budget Enforcement Act of 1990, established statutory limits on discretionary spending and a deficit-neutral pay-as-you-go (PAYGO) requirement for new mandatory spending and tax legislation."[127]

Congress had to find another means to fund low- and moderate-income housing. Fannie and Freddie filled the bill perfectly. Both were off budget and both could raise virtually unlimited sums in the capital markets. As an added bonus, this also would meet the demands of community groups.

In 1992 the interests of Fannie, community groups, and Congress converged resulting in passage of the "The Federal Housing Enterprises Financial Safety and Soundness Act of 1992" (GSE Act). Fannie got its wish as the GSE Act formalized its strategy of using affordable housing to protect its key charter privileges – protection that would last until 2008, two months before it and Freddie would be forced into conservatorship. The community groups got their wish now that Fannie and Freddie were now required to loosen underwriting standards in support of CRA. Congress got its wish by moving the affordable housing mission largely off-budget and at the same time, placing itself in a position to take credit for the affordable housing activities of Fannie and Freddie.

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[126] "Fannie Mae's Johnson Says Corporation Ready to Meet Housing Goals in Legislation", PR Newswire, March 31, 1993,
http://www.thefreelibrary.com/FANNIE+MAE%27S+JOHNSON+SAYS+CORPORATION+READY+TO+MEET+HOUSING+GOALS+IN...-a013133485

[127] Congressional Budget Office testimony on Budgeting for Emergency Spending, June 23, 1998
http://www.cbo.gov/doc.cfm?index=591&type=0

1992-A

The Federal Reserve Bank of Boston released a statistical analysis of the 1990 and 1991 HMDA data that attempted to control for all objective indicators of applicant risk. The conclusion was that minorities were 56% more likely to be rejected than whites, down from the Federal Reserve's 1991 report of a rejection rate that was roughly double for minorities[128] (See **1991-F** above). This 1992 report was criticized for serious deficiencies and errors such as miscoded data and omitted variables. This prompted the Boston Fed to publish much of its underlying data to allow others to critique its work (see **1993-D**).[129] [130]

Notwithstanding its potential deficiencies:

> "This study appears to have been regarded by both the press and by policymakers as being decisive. Articles in the *New York Times* and *Wall Street Journal* had a spokeswoman for the Office of the Comptroller of the Currency saying "this study is definitive," the president of the Boston Fed saying "the study found discrimination in mortgage lending based on race" and "I don't think you need a lot more studies," and a reporter claiming that the study's results were "all but absolute." The study has had a tremendous impact upon public policy, with severe penalties for mortgage lenders that failed to alter their evaluation policies for minority applicants. For example, banks have been prevented from merging and have faced large civil fines in discrimination suits.[131]

1992-B:

In an unprecedented action the GSE Act of 1992 makes the community groups' desire for loosened underwriting the law of the land. It embodied a desire by Congress to break lenders of their conservative lending standards by requiring the GSEs do the same. Congress' decision to impose significant affordable housing goals on Fannie and Freddie (and expecting the GSEs' demand for CRA loans to jump start CRA) looks to be the ultimate free lunch. Unlike FHA, which was on budget, low- and moderate- income loan investments by Fannie, Freddie, and

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[128] Alicia Munnell, et. al., Mortgage Lending in Boston: Interpreting HMDA Data, #92-7, October 1992 http://www.bos.frb.org/economic/wp/wp1992/wp92_7.pdf

[129] James H. Carr and Isaac F. Megbolugbe, Journal of Housing Research, Vol. 4, issue 2, 1993, p. 277, "The Federal Reserve Bank of Boston Study on Mortgage Lending Revisited", http://www.knowledgeplex.org/kp/text_document_summary/scholarly_article/relfiles/jhr_0402_carr.pdf

[130] "Minority applicants with the same financial, credit history, employment, and neighborhood characteristics as the white applicants in Boston would have experienced a denial rate of 17 percent rather than the actual white denial of 11 percent." Statement by Richard F. Syron, President, Federal Reserve Bank of Boston, before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, February 24, 1993, http://findarticles.com/p/articles/mi_m4126/is_n4_v79/ai_13815155/?tag=content;col1

[131] William S. Neilson, Symposium the Mortgage Discrimination Controversy, Economic Inquiry, Vol. 36, 1998, http://www.questia.com/googleScholar.qst;jsessionid=LpkV6FhZfBJbysk53IncFwhdQ12MV12vdqvVnC0DrrYVNpj6lc1v!1094675332?docId=96521811

banks under CRA were off budget with no apparent budget impact.[132] The GSE Act effectively requires the "A" paper or Prime market (largely consisting of the GSEs and banks) to compete with the two high risk areas of market – FHA and subprime. In a study by the Fannie Mae Foundation in 2000, it was observed:

> "FHA loans constituted the largest share of Countrywide's activity, until Fannie Mae and Freddie Mac began accepting loans with higher LTVs and greater underwriting flexibilities."[133]

The mandates of the GSE Act quickly unleash actions and reactions as market competitors react to the changed landscape. Once the Prime market is forced to loosen underwriting standards in an effort to promote affordable housing, most of these same standards are made available to all borrowers regardless of income. The community groups had three goals, all of which were embodied in the GSE Act of 1992:

1. The GSE Act of 1992, for the first time, set formal affordable housing goals for Fannie and Freddie. The GSEs were expected to "lead the market" (a market which included FHA) and HUD was authorized to set annual low- and moderate-income goals which over time grow from 30% (1993) to 56% (2008). The GSE Act set a conservative interim low- and moderate-income goal of 30%, basically the level that the GSEs had already been attaining. While no interim Special Affordable goal[134] is set, the statutory minimum for this goal is 1%.[135]

2. Congress made clear that it wanted Fannie and Freddie to get much more active in high LTV lending (>=95% LTV) and other loosened underwriting. It mandated a study on "the extent to which their underwriting guidelines prevent or inhibit the purchase or securitization of mortgages for housing located in mixed-use, urban center, and predominantly minority neighborhoods and for housing for low- and moderate-income families." It was in this context that Fannie and Freddie were asked to examine the implications of implementing underwriting standards that:

   > "(A) establish a downpayment requirement for mortgagors of 5 percent or less;
   >
   > (B) allow the use of cash on hand as a source for downpayments; and

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[132] For a more complete description of the role these groups had in the passage of the affordable housing provisions of the GSE Act see Allen Fishbein, "Filling the Half-empty Glass: The Role of Community Advocacy in Redefining the Public Responsibilities of Government-Sponsored Housing Enterprises", Chapter 7 of Organizing Access to Capital: Advocacy and the Democratization of Financial Institutions, 2003, Gregory Squires, editor

[133] Fannie Mae Foundation, "Making New Markets: Case Study of Countrywide Home Loans", 2000, http://content.knowledgeplex.org/kp2/programs/pdf/rep_newmortmkts_countrywide.pdf.

[134] Applicable to the low- and very low-income group, defined as less than 80% and 60% of median income respectively.

[135] Sections 1332 and 1333 http://en.wikisource.org/wiki/Housing_and_Community_Development_Act_of_1992/Title_XIII/Subtitle_A/Part_2/Subpart_B#Subpart_B

(C) approve borrowers who have a credit history of delinquencies if the borrower can demonstrate a satisfactory credit history for at least the 12-month period ending on the date of the application for the mortgage."[136]

3. Require Fannie and Freddie to affirmatively assist banks in meeting their CRA obligations.[137]

The GSE Act of 1992 effectively forced Fannie and Freddie to loosen their underwriting standards, greatly expand their acquisitions of loans to low- and moderate-income borrowers, become competitors of FHA, and provide a ready source of demand for CRA loans so as to help the GSEs meet their affordable housing requirements as set by HUD.

The significance of the request relating to loans with downpayments of 5% or less cannot be overstated. In 1992 a conventional loan with less than 5% down did not exist. Only FHA (and VA) insured such loans. By Congress mandating the GSEs to compete directly with FHA, the development of this highly risky loan product was pre-ordained.

The GSE Act of 1992 also hard wired the GSEs' capital requirements. Capital levels were set at 0.45% (222:1 leverage) for off-balance sheet assets such as MBS and 2.5% (40:1 leverage) for on-balance sheet assets such as mortgage loans. This allowed the GSEs to operate at much higher leverage levels as compared to their competitors.

These new capital levels worked in tandem with the risk based capital requirements noted earlier (**1988-B**). For example, on a Fannie MBS, Fannie was required to hold capital of 0.45% and the bank buying the MBS to hold 1.6%, for total capital of 2.05% and a leverage ratio of 49:1. If the bank held the same loan in whole loan (not securitized) form in its portfolio, its capital requirement was 4% for a 25:1 leverage ratio. If the same loan was part of a private MBS, the capital required of a bank holding the MBS was 8% for a 12.5: leverage ratio.

By using CRA as a justification for the GSE Act of 1992, it acted like a delayed action fuse leading to its passage. The GSE Act itself was the powerful trigger that set in motion a series of the events that would lead to the mortgage meltdown and the collapse of the housing market. By 1995 all the policies central to igniting a housing boom built on weakened loan standards would be in place.

1992-C:

An element central to the GSEs was their ability to crowd out[138] their competitors. From the early 1990s until 2003, the GSEs' dominance over the mortgage market grew stronger and

[136] Section 1354, http://en.wikisource.org/wiki/Housing_and_Community_Development_Act_of_1992/Title_XIII/Subtitle_A/Part_3#Sec._1354.
[137] Id. Section 1335

stronger each year. Their combined share of all single family mortgages outstanding grew from 25.4% in 1990 to 46.8% in 2003.[139] The GSEs were able to grow so rapidly because of their advantageous charter provisions – in particular their access to unlimited amounts of low cost debt due to their implicit federal guarantee and their congressionally set high leverage levels. These government-granted advantages promoted an unrestrained appetite for growth and permitted them to aggressively protect and grow their share of the mortgage market.

Being a statutory duopsony[140], the GSEs had the ability to beat any competitor in any arena in which they chose to compete. This was the case with respect to both government (FHA) and private sector competitors. The GSEs' government advantages allowed them to dominate the market for all types of loans, be they traditional or "plain vanilla" or higher risk loans. As a result there wasn't enough spread left for the private sector to invest in these loans profitably. This helps explain why it is not surprising that Fannie and Freddie did not end up with the loans with the highest risk characteristics. Yet given that their MBS and portfolio investments were leveraged at 222:1 and 40:1 respectively, high risk loans with a single layer of risk (such as a downpayment of 3% or 0%) represented an extremely high risk for such thinly capitalized entities.

In general the GSEs' competitors were relegated to the higher risk portions of the market: subprime, Alt-A, second mortgages, jumbo lending, and ARMs. However, even in the subprime, Alt-A and ARM markets segments, the GSEs would aggressively compete for the lower risk portions of these markets. This forced the GSEs' competitors to either focus on loans with more risk layering or invent more exotic loan instruments, loans where spreads and profit margins were higher. In economic terms, these factors acted to crowd out the GSEs' competitors (largely banks, traditional subprime lenders, securities firms, and insurance companies). In response to this crowding out, their competitors moved further out the risk curve in search of higher yields.

HUD was required to consider GSEs' ability to lead the market when it set their affordable housing goals.[141] As HUD increased the GSEs' goals in response to this requirement, crowding out resulted from the GSEs' advantages which allowed them to take the lowest risks (including the lower risks among high risk loans), decrease profit margins in the industry, gain market share, and absorb most of the industry's profits.

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[138] "Crowding out" refers to the government providing a service or good that would otherwise be a business opportunity for private industry. Wikipedia

[139] Source FHFA, http://www.fhfa.gov/webfiles/14597/SFMOutstanding1990to2009Q1.xls

[140] BusinesssDictionary.com, A duopsony is a "market situation in which only two buyers create the entire demand for a commodity supplied by many sellers, a mirror image of duopoly."

[141] http://en.wikisource.org/wiki/Housing_and_Community_Development_Act_of_1992/Title_XIII/Subtitle_A/Part_2/Subpart_B#Subpart_B

1992-D:

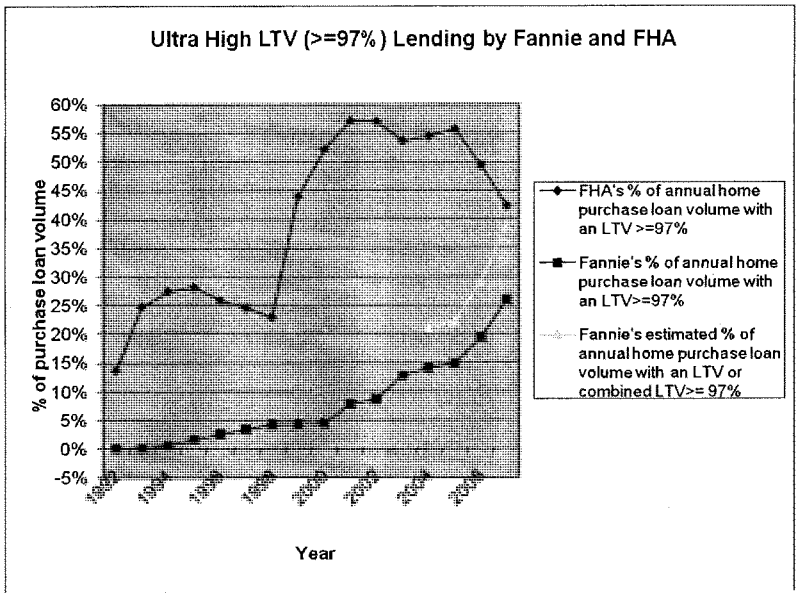
Chart 22 compares the growth of FHA's and Fannie's >=97% LTV business from the key date of 1992, the year the GSE Act was passed.[142] The GSE Act caused first Fannie and eventually Freddie to compete with FHA; Chart 22 illustrates this competition. The >=97% LTV business was key to helping the GSEs meet their affordable housing goals.[143] As HUD set higher goals, the portion of the GSEs' business with downpayments of 3% or less increased. Goal increases took effect in 1996, 2000, 2005, 2006, and 2007. FHA's own >=97% LTV activity about doubled from 1998 to 1999 (increasing from 23% to 44%), putting new pressure on the GSEs. The GSEs' performance was being compared to FHA. As FHA's LTVs increased, this impacted the GSEs' mandate to lead the market, a mandate enforced by HUD. Fannie's percentage of purchase loan volume with >=97% LTV increased about 8-fold from 1997 to 2007.[144]

[142] In 2000 100% LTV loans with private mortgage insurance became available. In about 2002 the use of combination 1st and 2nd mortgages started taking substantial market share from the private mortgage insurance industry. By about 2004 80% first and 20% second combination loans became prevalent. By 2007 only about 2/3 of Fannie and Freddie's business with a down payment of 5% or less had mortgage insurance. The other 1/3 consisted of combination loans. (Source: Fannie and Freddie 10-Qs). An 80% first and 20% second combination loan did not require mortgage insurance since the LTV on the 1st mortgage did not exceed 80%.

[143] For example, in 2007 50.9% of Fannie's Special Affordable Purchase Loan goal was met with loans with LTVs of greater than 95% (effectively equal to or greater than 97%).

[144] FHA data found in FHA's 2009 Actuarial Review, Exhibit IV-5, the GSEs' data found in HUD document - "The GSEs' Funding of Affordable Loans: a 2000 Update", Table 9a covers 1997-2000 (http://www.huduser.org/portal/publications/pdf/workpapr13.pdf), HUD document – "Profiles of GSE Mortgage Purchases in 1999-2000", Tables 14a & b (1999 & 2000), HUD document – "Profiles of GSE Mortgage Purchases in 2001-2004", Tables 14a & b (2001-2004), and HUD document – "Profiles of GSE Mortgage Purchases in 2005-2007", Tables 14a & b (2005-2007). The last 3 HUD documents are found at http://www.huduser.org/DATASETS/gse/profiles.html.
Note: while the document entitled "The GSEs' Funding of Affordable Loans: a 2000 Update (2000 Update)" refers to an LTV ratio of "95% and over", this is incorrect and should read ">95%". This is clear because all the LTV categories shown in 2000 Update at Table 9a have this overlapping error and because the document entitled "Profiles of GSE Mortgage Purchases in 1999-2000" (Profiles 1999-2000) covers some of the same data and in Table 14a-2000 defines the category correctly as "95%<LTV". The number of >95% loans shown in this document tie precisely to 2000 Update. For example, Fannie's total home purchase loans with an LTV of >95% for 2000 is listed in Profiles 1999-2000, Table 14a (2000) as 51,855 loans and precisely ties to the total as listed in 2000 Update, Table 9a also for Fannie.

Chart 22:



Sources: FHA's 2009 Actuarial Study, Fannie's 2007 10-K, HUD"s Office of Policy Development and Research - Profiles of GSE Mortgage Purchases in 1999 and 2000, in 2001-2004, and in 2005-2007 (found at http://www.huduser.org/portal/datasets/gse/profiles.html) Compiled by Edward Pinto

The fact that by 2007 Fannie would roughly match FHA's percentage of >=97% loans in 14 years is nothing short of spectacular. In 1991 FHA did over $7 billion of home purchase loans with down payments of 3% or less to the GSEs' volume of $0. By 2007 FHA was doing an estimated $16 billion in such risky loans compared to an estimated **$140 billion** by the GSEs (includes both LTVs and combined LTVs >=97%). In 2000 the GSEs first started acquiring 0% down loans. By 2007 about half of the $140 billion in loans acquired by the GSEs with LTVs or combined LTVs of >=97% are estimated to have had down payments of 0%.[145]

While working for GE Capital's mortgage insurance subsidiary in the early 1990s I completed a research study on the relationship of house price movements and current and original LTVs in neighborhoods. Neighborhoods with high current LTVs tended to be ones with a high usage of FHA financing. These neighborhoods with high current LTVs experienced larger price declines

[145]Data noted in this paragraph was derived from Fannie's 10-Q Credit Supplement and FHA's 2009 Actuarial study.

than similarly priced neighborhoods with low current LTVs. This effect of a high level of low down payment lending on a neighborhood was dubbed the "FHA effect". Too little combined equity among owners in a neighborhood leaves little cushion to absorb the inevitable ups and downs in home prices. Prices sink as demand plummets **AND** supply soars. A stressed homeowner looks out the window and sees a sea of for sale signs and adds his (either voluntarily or by being foreclosed). Neighborhoods with high equity levels experience plummeting demand, however supply does not necessarily soar as these homeowners don't have to sell – they have staying power. This helps protect the entire neighborhood.

1992-E:

The dollar volume of announced CRA commitments announced by banks in 1992 ($33.708 billion) is nearly quadruple the **cumulative** volume over 1977-1991 ($8.808 billion). The increase is largely due to the banks announcing proposed mergers simultaneously with large new multi-state or national CRA commitments (called unilateral agreements by the National Community Reinvestment Coalition or NCRC).

1992-F:

FHA's annual foreclosure start rate hits 1.79%; almost double the 1% level in 1961. Notwithstanding this troubling foreclosure trend, government housing policies were being put in place that mandated loosened underwriting standards, as part of a well-publicized effort to increase the homeownership rate, ultimately to 70% by the end of 2006.[146]

1992-G:

Self-denominated[147] subprime loan volume accounts for a 9% share of total origination volume (combined volume of conventional and government lending). Market share declines to 8% by 2003[148] as the GSEs and FHA expand their subprime lending, almost all of which is not denominated as subprime even though the borrowers are credit impaired as they have a FICO <660.

1992-H:

Countrywide was consulted by Fannie Mae in 1992 during the design of Fannie Mae's Community Home Buyers Program.[149]

Countrywide and Fannie Mae announce a $1.25 billion commitment to originate Fannie Mae's affordable home mortgages, including reduced down payment loans:[150]

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[146] HUD Issue Brief, December 2000, p. 1, http://www.huduser.org/Publications/PDF/homeownership.pdf
[147] These are subprime loans that were denominated as subprime by the originator. Subprime borrowers usually have impaired credit. There are many other types of subprime loans that were not called subprime. These include most FHA loans (those with a FICO below 660) and Fannie and Freddie loans with a FICO below 660.
[148] Source Inside Mortgage Finance
[149] Supra., Fannie Mae Foundation

> "The $1.25 billion of affordable-housing mortgages is the largest of its type to date and includes an innovative "second review" by Countrywide of mortgage applicants who do not initially qualify. Many of the affordable-housing loans will use Fannie Mae's Community Home Buyer's Program (CHBP). CHBP provides flexible underwriting criteria, including loans up to 95 percent of the home's value, with a provision for a 3 percent down payment by the borrower and a 2 percent contribution from gifts or other assistance programs."

Countrywide's founder and CEO, Angelo Mozilo, appears to have decided upon the same strategy as Fannie's Jim Johnson. In Mozilo's case he plans to use copious amounts of affordable housing to cement his relationship with the GSEs and HUD.

1993-A:

By February Fannie has approved 260 underwriting variances on nearly $5 billion of loans relating to 169 Community Home Buyers Programs (CHBP). These were just the variances to Fannie's standard CHBPs, which already benefited from loosened underwriting. Eighty percent of the dollar volume of variances was granted to banks subject to CRA. Variances included "allowing adjustable rate mortgages instead of fixed rate mortgages, three and four family properties instead of single family properties, down payments of less than 3%, combined loan-to-value ratios that exceed 100%, waiver of counseling requirements, allowing third party originations, and accepting seller contributions beyond [Fannie's] limits."[151]

The variances ACORN received in February 1993[152] were evidence that Fannie had understood Congress' intent as these variances matched up almost perfectly with the flexibilities Congress had asked the GSEs to study 5 months earlier. ACORN's request would be a portent of where Fannie, Freddie, and the mortgage industry would be pushed in terms of loosened underwriting.

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[150] Countrywide press release, July 8, 1992, http://www.thefreelibrary.com/COUNTRYWIDE,+FANNIE+MAE+ANNOUNCE+RECORD+$8+BILLION+COMMITMENT+TO...-a012311554

[151] Fannie Mae Credit Policy document, "Variances to Community Homebuyer and Housing Initiatives Program, April 6, 1993. Document contained in the author's files. The author understands that variances from Fannie and Freddie's "standard" affordable housing programs continued throughout the housing boom period and were a significant factor in meeting affordable housing goals. See also at **2000-H** for a statement by the Fannie Mae Foundation that Fannie offered the greatest level of underwriting flexibilities to its largest customers like Countrywide. Document contained in the author's files.

Variances represent approved changes from published CHBP requirements. They are approved as a variance to the published rule. The variance might be applied to the entire commitment (example: $500 million) or limited to a portion (example: $40 million of the $500 million commitment).

[152] Id.

The approved variances allowed:

1. Downpayments of the lesser of $1000 or 3%;
2. Cash on hand acceptable as a downpayment[153]; and
3. More marginal credit history.

As these variances suggest, Fannie's growing volumes of affordable housing acquisitions had quite different underwriting standards and risk characteristics than its traditional "prime" loans (see **1991**). The line between prime and nonprime or subprime loans was no longer clear. Since these loans were being purchased by Fannie, they were presumed to meet Fannie's risk standards and thus presumed to be "prime". One thing was clear – from a risk perspective most affordable housing loans (with or without variances) were no longer "prime" loans.

1993-B:

By mid-1993 Fannie launches its Community Home Buyer Program to compete directly with FHA's core 203(b) insurance program. It had a 3% down payment provided by the borrower and 2% from other sources.[154]

1993-C:

Nominal home prices begin an unprecedented and ultimately unsustainable 13 year boom with homes experiencing a cumulative price increase of 150%.

1993-D:

In the spring the [Boston] Fed released data on the loan applications it had used for its 1992 study. This allowed others to perform a careful evaluation of the study and its conclusion that minorities had a 56% higher rejection rate than whites with similar characteristics.

Critics of the Boston Fed study based their concerns on a broad range of perceived shortcomings, ranging from data deficiencies and the omission of key variables to questions about the study's theoretical and conceptual context.[155]

One such study was done by Mark Zandi, who used the same statistical techniques the Fed used:

> "One critical factor the Fed failed to consider was the state of the economy and housing markets in Boston during 1990."

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[153] Cash on hand was not accepted as a source of one's downpayment because it could not be verified as to source or duration. Without this restriction, it would be easy for the seller to increase the sales price and provide the cash for the downpayment to the buyer.

[154] Fannie Mae Credit Policy document, "Summary Comparison of Proposed 3% CHBP Requirements with FHA 203(b) Requirements", July 22, 1993. Document contained in the author's files.

[155] Supra. James H. Carr and Isaac F. Megbolugbe, p. 278

> "Home prices were declining. Homes selling at prices among the bottom third during the period fell by 19%. Mid-priced homes experienced declines of 9%, high-priced homes only 2%."
>
> "With low-priced homes falling more rapidly in value than higher-priced homes, purchasers of lower-priced homes were rejected by lenders more often."
>
> "Because black and Hispanic homebuyers generally purchase lower-priced homes. Boston lenders rejected blacks and Hispanics in greater proportion than whites. This was not discrimination per se, but simply good underwriting."
>
> "The Fed study also curiously omits other variables important in explaining mortgage-lending decisions. These include whether the applicant's credit history met the lender's guidelines; whether the borrower submitted information that could not be verified; the presence of a cosigner; and the loan amount."
>
> "Including these variables in the statistical analysis reduces the rejection rate for a black or Hispanic from 60% greater than a white applicant's to 23% greater."
>
> "Nor does the Fed study make adjustments for what appear to be obvious data encoding errors. One mortgage applicant was listed with a loan-to-value ratio of 946%. Correcting for this and other errors in the initial loan-to-value ratio further reduces the rejection rate for blacks and Hispanics -- to 14% greater than that of white applicants."
>
> "The Fed researchers elected not to use a matched sample because they did not want to prejudge the causes of rejection. But having determined the significant factors influencing mortgage lending in their unmatched analysis, it would then seem appropriate to conduct the analysis using a matched sample."
>
> Using a matched sample does away with the impact of race on mortgage lending decisions. The probability that a black or Hispanic will be rejected falls from 14% greater than a white applicant to a statistically insignificant 3% greater."[156]

Another was done by Stanley Liebowitz:

> "The banking industry stands accused and convicted, by the media and others, of engaging in lending practices that discriminate against minorities. When the New York Times reported this week that 'shamed and embarrassed' lenders were 'finally' opening their doors to minority groups, it quoted one advocacy lawyer as saying: 'It's a little hard to cheer too loudly; we are still in the early stages of overcoming decades of prejudice and neglect.'"

[156] Mark Zandi, "Boston Fed's bias study was deeply flawed", American Banker, August 19, 1993, http://www.highbeam.com/doc/1G1-14227092.html

> "The authors of the Fed study claim that they scrupulously weeded out errors by examining the data for inconsistencies. But a collcague and I performed several checks on the raw numbers and were astonished to discover literally hundreds of errors or likely errors."
>
> "The first item to catch our attention was net worth. There are 20 mortgage applicants having a net worth in the range of a negative half million dollars, meaning they already owed that amount. There are 27 mortgage applicants who, even if they devoted 50% of their incomes to paying off their debts, would need more than10 years to get out of the red."

Mr. Liebowitz goes on to cite numerous other discrepancies, including.

There is one discrepancy pointed out by Liebowitz that I can shed some light on:

> "A second problem with the Boston Fed study is its mixing of loan applications for different property types and different repayment periods. Lenders are very likely to apply different lending criteria to different types of properties. A loan for a multifamily home, for example, is more risky than a loan for a single-family home, since the multiunit homeowner has the additional burden of dealing with tenants."
>
> "When mortgages in the Fed study are grouped according to the type of property being purchased, the results run counter to the study's conclusion."
>
> "For condominiums, which constitute about a fourth of all applications in the sample, there is no relationship between race and mortgage acceptance."
>
> "For multi-unit homes, which make up approximately a seventh of the applications, there is only weak evidence of discrimination. And most of it is due to a single loan application that clearly has errors: a white individual with a yearly income of $52,000 borrowing $979,000 to purchase a house with a price of $118,000! The payments on the loan total only $633 a month, making this one of the loans with a negative interest rate. The loan was approved, causing the Fed researchers to conclude that this was an instance of whites receiving favored treatment. It is far more likely that the true loan amount was only $79,000, or some amount in that range, and that race was irrelevant."[157]

Many of the lenders in the Boston study would have applied Fannie Mae underwriting guidelines (or Freddie Mac's which were similar). As noted at 1985-A Fannie undertook a top-to-bottom review of its underwriting standards in the spring and summer of 1985. This review was prompted by Fannie's adverse experience with loosened underwriting practices in the early 1980s and resulted in the announcement of new standards in August of 1985. As part of that

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[157] Stan Liebowitz, The Wall Street Journal, September 1, 1993, http://www.utdallas.edu/~liebowit/1993wsj.pdf Also see Theodore Day and Stan Liebowitz, "Mortgage Lending to Minorities: Where's The Bias?" http://www.utdallas.edu/~liebowit/mortgage/mortgages.pdf

study Fannie found that small single-family rental properties,[158] particularly those with 3 or 4 units presented a much higher risk of default than a single unit owner occupied unit or a 1 or 2 unit rental property. Fannie quite logically placed more stringent downpayment and other underwriting requirements on properties with a rental or investment component, particularly 3- and 4-unit properties. Even with these more stringent standards, in early 1992 Fannie was experiencing a serious delinquency rate of 5% on loans on 3-4 unit properties[159] compared to 0.66% on single unit properties.[160]

Boston had approximately 85,000 housing structures with 1, 2, 3, or 4 units. Sixty percent of these structures had a single unit, 18% had 2 units and an estimated 21% had 3 or 4 units.[161] The Boston Fed study consisted of 2247 white applicants and 685 minority applicants. The study found that 7.7% of white applicants were approved for a loan on a 2-4 unit structure and 18.3% were denied a loan on a 2-4 unit structure and that 24.8% of minority applicants were approved for a loan on a 2-4 unit structure and 34.4% were denied a loan on a 2-4 unit structure.[162] Minority applications were heavily skewed to 2-4 unit properties for which more stringent underwriting standards would have applied. As Liebowitz notes, looked at as a group, he found only "weak evidence of discrimination" with respect to 2-4 unit properties , which could be mostly accounted for by one application with clear errors.

Nobel Prize winner Gary Becker has pointed out that if discrimination were occurring, default rates should be lower for the group discriminated against due to the application of more stringent standards. Minorities experience default rates that are at least as high as whites.[163]

A Federal Reserve and Freddie Mac study of FHA loan performance released in 1996 but based on loans underwritten in 1987-1989 set out to test Becker's hypothesis:

> "This approach follows from the theoretical foundations of the economics of discrimination (Becker, 1971). The basic premise is that biased lenders will require higher expected profits for loans to minority borrowers and hold minority applicants to underwriting standards in excess of those required for other applicants. Thus discrimination results in lower expected default costs for loans originated for marginally qualified nonminority borrowers. This study employs a rich FHA data set, comprising a large number of individual loan records, to evaluate the performance of mortgage borrowers. Results of the analysis fail to find evidence of better performance on loans

[158] Federal lending rules define single family housing one with 1-4 units. Since a maximum of one unit can be owner-occupied, a 2, 3, or 4 unit property has 1, 2, and 3 rental units respectively. This makes the rental portion an investment or business property,

[159] However these high risk loans accounted for less that 1% of Fannie's acquisitions.

[160] Data from a random sample review of Fannie Mae's single-family acquisitions for the period October 1988-January 1992, dated 3.10.1992. Document contained in the author's files. In 1990 the Loan Performance database with 7 million loans (primarily from Freddie Mac) reported a serious delinquency rate for 2-4 unit properties that was 3.28 times the rate on 1-unit owner-occupied homes. Document contained in the author's files.

[161] U.S. Census, American Community Survey, 2003 Data Profile, Boston, Massachusetts http://www.census.gov/acs/www/Products/Profiles/Single/2003/ACS/Tabular/160/16000US25070004.htm

[162] Dennis Glennon and Mitchell Stengel, An Evaluation of the Federal Reserve Bank of Boston's Study of Racial Discrimination in Mortgage Lending, Office of the Comptroller of the Currency, Working Paper 94 -2 April 1994, http://www.occ.treas.gov/ftp/workpaper/wp94-2.pdf

[163] Supra. James H. Carr and Isaac F. Megbolugbe, p. 278

granted to minority borrowers. Indeed, black borrowers are found, all else being equal, to exhibit a higher likelihood of mortgage default than other borrowers. **These findings argue against allegations of substantial levels of bias in mortgage lending (emphasis added).**"

"**The empirical results do not support a finding of widespread racial bias in mortgage lending (emphasis added).** The main empirical finding is that, after controlling for a wide variety of loan, borrower, and property-related characteristics, default rates for black borrowers are higher than those for white borrowers."[164]

The point of the above is to demonstrate that there is substantial controversy regarding the accuracy of the Boston study, a study that was used to support a wholesale abandonment of traditional underwriting standards (e.g.**1993-E** below).

1993-E:

The Federal Reserve Bank of Boston strongly endorses the abandonment of traditional underwriting standards and favorably noted Fannie and Freddie's embrace of more flexible underwriting standards:

"Underwriting Standards

Property Standards and Minimum Loan Amounts: These standards should be checked for arbitrary rules as to the age, location, condition, or size of the property. Such standards could negatively affect applicants who wish to purchase two– to four–family homes, older properties, or homes in less expensive areas.

Obligation Ratios: Special consideration could be given to applicants with relatively high obligation ratios who have demonstrated an ability to cover high housing expenses in the past. Many lower–income households are accustomed to allocating a large percentage of their income toward rent. While it is important to ensure that the borrower is not assuming an unreasonable level of debt, it should be noted that the secondary market is willing to consider ratios above the standard 28/36.
Down Payment and Closing Costs: Accumulating enough savings to cover the various costs associated with a mortgage loan is often a significant barrier to homeownership by lower–income applicants. Lenders may wish to allow gifts, grants, or loans from relatives, nonprofit organizations, or municipal agencies to cover part of these costs. Cash–on–hand could also be an acceptable means of payment if borrowers can document its source and demonstrate that they normally pay their bills in cash.

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[164] James A. Berkovec, Glenn B. Canner, Stuart A. Gabriel, and Timothy H. Hannan, Mortgage Discrimination and FHA Loan Performance, *Cityscape: A Journal of Policy Development and Research,* Volume 2, Number 1, pp. 9 and 21, February 1996
U.S. Department of Housing and Urban Development • Office of Policy Development and Research, http://www.huduser.org/Periodicals/CITYSCPE/VOL2NUM1/berkovec.pdf

Credit History: Policies regarding applicants with no credit history or problem credit history should be reviewed. Lack of credit history should not be seen as a negative factor. Certain cultures encourage people to "pay as you go" and avoid debt. Willingness to pay debt promptly can be determined through review of utility, rent, telephone, insurance and medical bill payments. In reviewing past credit problems, lenders should be willing to consider extenuating circumstances. For lower–income applicants in particular, unforeseen expenses can have a disproportionate effect on an otherwise positive credit record. In these instances, paying off past bad debts or establishing a regular repayment schedule with creditors may demonstrate a willingness and ability to resolve debts.

Employment History: It is important to distinguish between length of employment and employment stability. Many lower–income people work in sectors of the economy where job changes are frequent. Lenders should focus on the applicant's ability to maintain or increase his or her income level, and not solely on the length of stay in a particular job.

Sources of Income: In addition to primary employment income, Fannie Mae and Freddie Mac will accept the following as valid income sources: overtime and part–time work, second jobs (including seasonal work), retirement and Social Security income, alimony, child support, Veterans Administration (VA) benefits, welfare payments, and unemployment benefits.[165]

1993-F:

As reported by the New York Times, Attorney General Janet Reno put banks on notice with her November 1993 testimony before the Senate Banking Committee:

> "'In our view, the lending industry should be subjected to the type of investigation that our department has conducted for many years in other civil rights areas, including the review of all components of an institution's operation over an extended period of time,' she said. 'It is particularly important to focus on the lender's marketing, branching and advertising practices.'"

The New York Times further reported that Shawmut Bank had had its merger request turned down by the Fed that same month. It added:

> "Shawmut, knowing that it was under investigation, had already put in place a program of insured mortgages with low down payments, available to people with limited credit histories, or whose incomes were stable even though they moved from job to job. Up to 33 percent of an applicant's income can go toward housing -- a figure higher than bankers generally accept -- and the program includes other sharp departures from industry standards."

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[165] Federal Reserve Bank of Boston, "Closing the Gap", April 2002, http://www.bos.frb.org/commdev/commaff/closingt.pdf

The story went on to note that Phillip (Rick) Freer, director of compliance at the comptroller of the currency's office, said:

> "'If it is a pattern or practice that we believe has been discriminatory, we feel very strongly that the regulation requires us to refer it to the Justice Department,' he said."[166]

Banks were in a quandary. Unless they could prove that their standard credit guidelines relating to downpayment, credit, and income did not have a disparate impact on minorities, they had to replace them with "innovative or flexible" guidelines.

1994-A:

CEO Jim Johnson announces Fannie's Trillion Dollar Commitment to low- and moderate-income housing. Just 3 years before Johnson had announced a $10 billion commitment[167], but the passage of the GSE Act of 1992 necessitated a much larger commitment – 100 times as large. While the sum of a trillion dollars has become commonplace today (largely thanks to the financial crisis brought on by the mortgage meltdown), this is the first time such a massive sum came into common parlance to describe a government related housing finance initiative. The total capital that would support this commitment was less than $15 billion. Ultimately, Fannie and Freddie would announce a total of $5 trillion in such commitments – most being highly leveraged and benefiting from loosened lending and all representing the off-budget "free lunch" so desired by Congress and HUD. These acquisitions were leveraged by the GSEs at about 60:1.

Fannie made clear to its employees and supporters that the Trillion Dollar Commitment and the affordable housing mission it represented was key to protecting Fannie's privileges under its charter. "Protect the franchise" became Fannie's mantra and it would do anything to achieve that end:

> "But, under Johnson, Fannie Mae had a reputation for never losing a fight. 'The old political reality was that we always won, we took no prisoners, and we faced little organized political opposition' is how Daniel Mudd, son of journalist Roger Mudd and Fannie's last real C.E.O., later described Fannie's golden years."[168]

By protecting the franchise, Fannie and Freddie, who eventually joined in, were able to generate growing profits, growing stock prices, and growing salaries and bonuses. For example, Fannie's stock price increased by 10 times from the early 1990s' to late 2000.[169]

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[166] New York Times, "Lending-Bias Rules Create Quandary for Banks", November 28, 1993, http://www.nytimes.com/1993/11/28/business/lending-bias-rules-create-quandary-for-banks.html?sec=&spon=&pagewanted=1

[167] Having been responsible for Fannie's affordable housing program up to 1987, I can state that Fannie's 1991 $10 billion commitment was extraordinary given its size, even for Fannie Mae.

[168] Bethany McLean, "Fannie Mae's Last Stand", Vanity Fair, February 2009, http://www.vanityfair.com/politics/features/2009/02/fannie-and-freddie200902

[169] http://quote.morningstar.com/stock/chart.aspx?t=FNM&culture=en-US

1994-B:

Fannie introduces a 97% LTV with private mortgage insurance. It is implemented over the objection of Fannie's chief credit officer:

> "Some senior executives, including the company's chief credit officer at the time, were opposed to the loans, in large part because a Fannie Mae experiment with 5% down loans in Texas in the early 1980s was disastrous, with one in four borrowers defaulting."[170]

This level of defaults would be matched **nationwide** by FHA for its 2007 book year and by Fannie for its **nationwide** 2007 book year of loans with LTVs>=95% and/or a FICO<659. [171]

As noted earlier, Texas had a strict homestead property requirement that contributed to its having the highest LTVs at loan origination in the nation. The disastrous experience with 5% down loans in Texas in the early 1980s impacted Fannie, the private mortgage insurers, and FHA:[172]

1. Fannie had a 24.1% default rate with respect to 30-year fixed rate loans on 1981-1982 Texas originations with 5% down, a 14.1% default rate with 10% down, an 8.1% default rate with 20% down, and a 3.8% experience with 25% down;
2. Private mortgage insurers had a 23% claim rate with respect to 1981 Texas originations with 5% down and a 10% claim rate on loans with 10% down; and
3. FHA had a 35.6% default rate with respect to its Texas 1981 book of 30-year fixed rate loans with 0%-5% down, a 31% default rate with 6%-10% down, a 27.6% default rate with 11%-20% down, and a 13.3% e with 21-30% down.

Two lessons should have been learned. First, high LTV lending suffers disproportionately high default rates when home prices come under stress. Second, FHA lending with its broader use of loosened lending standards, experiences an even higher default rate. This level of loan defaults is evidence that the loans are not sustainable.

1994-C

Self-denominated subprime continues to lag Fannie and FHA in maximum LTV limits on home purchase loans. In a survey that covers 11 of the largest subprime originators[173], 3 have an LTV limit of 90%, 1 has 85%, 6 have 80%, and 1 has 70% on "A-" loans. In 1989 almost all had a

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[170] WSJ, "Why Calls Are Escalating to Clip Fannie Mae's, Freddie Mac's Wings", July 14, 2000, http://online.wsj.com/article/SB963527598420670221-search.html?KEYWORDS=Freddie+Mac&COLLECTION=wsjie/6month

[171] Source: FHA 2009 Actuarial Study, p. F-3 and author's estimate for Fannie's 2007 national book of loans with LTVs >=95% and/or FICOs <660. This estimate is based on Fannie's Q.1.10 Credit Supplement, pp. 6-8, http://www.fanniemae.com/ir/pdf/sec/2010/q1credit_summary.pdf;jsessionid=N4QBC0GJYCHBJJ2FQSISFGI

[172] Supra. Fitch Mortgage Default Model" pp. 6-8. Document contained in the author's files.

[173] Inside Mortgage Finance "The 2009 Mortgage market Statistical Annual, Vol 1, p. 227. Data on top 25 originators not available prior to 1996, therefore 1996 ranking used.

maximum of 80%. On "B" loans nine have a maximum LTV of 80%, 1 has 75%, and 1 has 65%.[174]

1994-D:

HUD's Best Practices Initiative was agreed to by the Mortgage Bankers Association of America and undertaken by HUD in 1994[175] after HUD threatened to go to Congress to get CRA broadened to apply to mortgage bankers. Countrywide would be the first national lender to sign up and it would ultimately announce $1 trillion in Best Practices commitments.

> "A group of lenders not subject to CRA--and more directly under HUD's purview--are the nation's mortgage banks. In mid-September [1994], the Mortgage Bankers Association of America-whose membership includes many bank-owned mortgage companies, signed a three-year master best-practices agreement with HUD. The agreement consisted of two parts: MBA's agreement to work on fair-lending issues in consultation with HUD and a model best-practices agreement that individual mortgage banks could use to devise their own agreements with HUD. The first such agreement, signed by Countrywide Funding Corp., the nation's largest mortgage bank, is summarized on this page. Many have seen the MBA agreement as a preemptive strike against congressional murmurings that mortgage banks should be pulled under the umbrella of the CRA."
>
> "MBA used the occasion of its annual convention, held in October, as the official kickoff for orchestrating the wholesale signing of best-practices agreements. MBA officials--who stressed that signing an agreement didn't give HUD any additional regulatory power over a mortgage bank (sic). Secretary Cisneros and Assistant Secretary Achtenberg commemorated and encouraged participation in speeches--frequently pitching the voluntary nature of the agreements. Often, the agreements were spoken of as partnerships between regulated and regulator. Countrywide president and former MBA president Angelo Mozilo stated in a speech that his firm's agreement was not 'a forced march at all.'"[176]

1994-E:

Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 (Riegle-Neal) greatly expanded opportunities for interstate branch banking, usually to be accomplished through

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[174] Wholesale Directory, 1994 edition, Wholesale Access. Document contained in the author's files

[175] "Since 1994, HUD has signed Fair Lending Best Practices (FLBP) Agreements with lenders across the nation that are individually tailored to public-private partnerships that are considered on the leading edge. The Agreements not only offer an opportunity to increase low-income and minority lending but they incorporate fair housing and equal opportunity principles into mortgage lending standards. These banks and mortgage lenders, as represented by Countrywide Home Loans, Inc., serve as industry leaders in their communities by demonstrating a commitment to affirmatively further fair lending." Found at: http://www.hud.gov/local/hi/working/nlwfal2001.cfm

[176] Steve Cocheo, "Fair-lending pressure builds", ABA Banking Journal, Vol. 86, 1994 http://www.questia.com/googleScholar.qst?docId=5001707340

merger. This greatly expands the opportunities for community groups to negotiate CRA commitments from banks involved in mergers. In an article entitled "Community Investment Act: Ensuring Credit Adequacy or Enforcing Credit Allocation", it is reported that there is a rule of thumb for calculating such CRA commitments - around one half of 1 percent of assets per year.[177]

1995-A:

CRA regulations are revised to be more quantitative and outcome based. A bank's performance was compared to its market competitors. Banks were measured on their use of "innovative and flexible" lending standards. As summarized by Fed Chairman Bernake in 2007, the combination of Riegle-Neal and performance based regulations joined CRA's stick (denial of a merger application) with CRA's carrot (announce a big enough CRA commitment and get your application approved). [178]

Large banks desiring an "outstanding" rating needed to outperform their competitors.[179] Since virtually all large banks desired an outstanding rating in order to facilitate merger approvals, a game of leapfrog ensued. This helps explain the dramatic growth of CRA commitments over the next 12 years. Announced CRA commitments totaled $4.5 trillion over the 1995-2006, 75 times the commitment volume for the 18 year period 1977-1994. CRA (and the GSEs' affordable housing goals) allocated credit based on mandates that were operated largely independently of

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[177] Vernon McKinley, *Regulation*, 1994, No. 4, http://www.cato.org/pubs/regulation/regv17n4/vmck4-94.pdf

[178] "Further attention to CRA was generated by the surge in bank merger and acquisition activities that followed the enactment of the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994. As public scrutiny of bank merger and acquisition activity escalated, advocacy groups increasingly used the public comment process to protest bank applications on CRA grounds. In instances of highly contested applications, the Federal Reserve Board and other agencies held public meetings to allow the public and the applicants to comment on the lending records of the banks in question. In response to these new pressures, banks began to devote more resources to their CRA programs. Many institutions established separate business units and subsidiary community development corporations to facilitate lending that would be given favorable consideration in CRA examinations." Fed Chairman Bernake, "The Community Reinvestment Act: Its Evolution and New Challenges", March 30, 2007, http://www.federalreserve.gov/newsevents/speech/bernanke20070330a.htm

[179] The new rules for large banks created a lending test that considers among other criteria, the number and amount of loans in low-, moderate-, middle-, and upper-income geographies in the bank's assessment area(s). Found at http://www.occ.treas.gov/fr/cfrparts/12cfr25.htm#%C2%A7%2025.21%20Performance%20tests,%20standards,%20and%20ratings,%20in%20general.

The rule also established a "performance context. An institution's performance under the tests and standards in the rule is judged in the context of information about the institution, its community, its competitors, and its peers." p. 22162, http://www.fdic.gov/news/news/financial/1995/fil9535.pdf

To achieve a rating of outstanding a bank needs to demonstrate "Extensive use of innovative or flexible lending practices in a safe and sound manner to address the credit needs of low- or moderate-income individuals or geographies." p. 22187, http://www.fdic.gov/news/news/financial/1995/fil9535.pdf

market conditions. The goal of these CRA commitments was to bring about "changes in underwriting standards to increase the flow of credit to previously underserved areas."[180]

CRA helps promote "too big to fail institutions" by rewarding banks that loosened their underwriting standards with the ability to consummate mergers. Ninety-four percent of the $4.5 trillion in post-1995 CRA commitments reported by the National Community Reinvestment Coalition[181] related to just 4 banks and banks they merged with. This demonstrates that bankers chose loosened underwriting in order to facilitate mergers. The four banks were Bank of America, Citibank, JP Morgan Chase, and Wells Fargo. This resulted in a cycle whereby the expansion of risky lending under CRA (and other affordable lending initiatives) placed other lenders in a situation where they had to offer similar products in order to compete. Additionally, the ideal merger candidates were other banks that had similar implemented "innovative and flexible" underwriting standards for CRA lending. The goal of invigorating CRA by forcing loosening of underwriting standards had been accomplished.

1995-B:

Significant subsidization of Fannie's affordable housing loans started in the mid-'90s. In 1995 Fannie recognized that its "average pricing of risk characteristics provides insufficient targeting of the subsidy. The majority of high LTV loans go to borrowers with income above 100% of the area median, 58% of the 91-97% LTV [loans]".[182] As a result Fannie went to great efforts to target loans with downpayments of 3% or less (one of its most risky products) to low and moderate-income borrowers.

The subsidy provided was significant. Fannie's Community Home Buyer Program (CHBP) loans had a negative net return on capital. A projected default incidence in excess of the maximum needed to achieve breakeven results in a negative net return. For example, the 1995 cohort of 91-95% LTV CHBP loans had a projected default incidence of 11.11. This was in excess of the break even default incidence rate of 8.89. Fannie's target return on capital was 15% in 1995. With respect to high-LTV community lending "an overall net return on capital of at least 3%" was expected."[183]

As part of the CHBP review undertaken in 1995, Fannie determined that:

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[180] Introduction of Organizing Access to Capital: Advocacy and the Democratization of Financial Institutions, p. 11, 2003, Gregory Squires, editor

[181] NCRC 2007 Annual Report, P. 6, http://www.community-wealth.org/_pdfs/articles-publications/cdfis/report-silver-brown.pdf

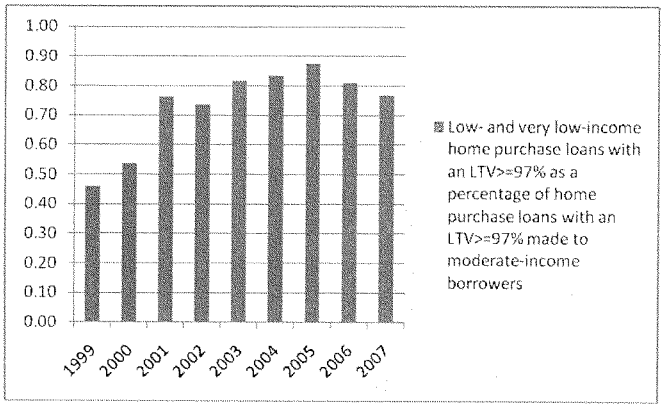
[182] Fannie Mae Credit Policy memo, "Risk Pricing – Idea for the August 3 and 4 meeting and Addressing Short-term Pricing Opportunities, July 21, 1995 Document contained in the author's files.

[183] Fannie Mae Credit Policy memo, "Community Lending Review", November 17, 1995. Document contained in the author's files. At this point in time Fannie was earning 25% return on equity.

> "the cumulative failure rate target for the high-LTV book of community lending business taken together shall not exceed 10 percent. The cumulative failure rate for no single community lending product line shall not exceed 12 percent."[184]

Chart 23 shows the increasing ratio of highly leveraged home purchase loans (LTV >95%) acquired by the GSEs that were made to low- and very low-income borrowers versus the same type of loans made to moderate-income borrowers. This is due to the low- and very low-income goals increasing faster than the moderate-income (net) goal. The ratio increased from 0.46 to an average of over .80 for 2003-2007:

Chart 23: Ratio of highly leveraged home purchase loans (LTV >=97%) acquired by the GSEs that were made to low- and very low-income borrowers versus the same type of loans made to moderate-income borrowers

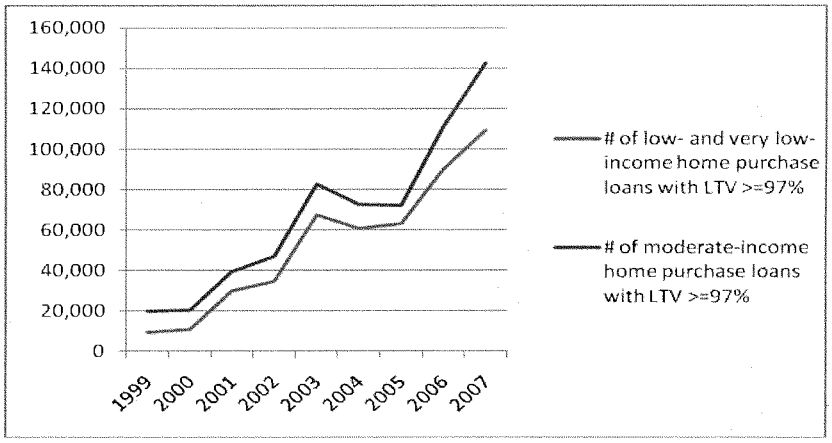


Source: HUD Office of Policy Development and Research and compiled by Edward Pinto

Chart 24 shows the rapid growth in the absolute number of Fannie's acquisition of home purchase loans with an LTV >95% made to moderate-income and low- and very low-income borrowers. In 1993 Fannie acquired virtually none of this type loan. In 2000 Fannie started acquiring 100% LTV home purchase loans and by 2007 most of its acquisitions of >95% loans had a 100% LTV.

[184] Id.

Chart 24: Fannie's annual purchases of highly leveraged home purchase loans (LTV >=97%) made to moderate-income versus and low- and very low-income borrowers



Source: HUD Office of Policy Development and Research and compiled by Edward Pinto

1995-C:

Fannie implements a long sought after goal of community groups when it mainstreams "flexible" lending standards with its public announcement of "Opening Doors with Fannie Mae's Community Lending Products".[185] Included are 97% LTV 1st mortgages, higher debt ratios, reduced or eliminated cash reserve requirements, use of nontraditional credit reports, expanded sources for closing cost assistance, and use of soft seconds. The use of higher debt ratios and reduced or eliminated cash reserve requirements harmed the most vulnerable home buyers because it left them without the necessary reserve financial capacity to meet the normal stresses encountered by homeowners, such as needing new roof, fixing a broken furnace, or paying rising real estate taxes. Lenders also could request variances allowing for even looser lending standards.[186]

> "Fannie Mae's guidelines previously limited the total obligations-to-income ratio for loans it purchases [for its Community Home Buyers Program (CHBP) and other community lending products] to 40 percent of a borrower's total income. The change

[185] "Opening Doors with Fannie Mae's Community Lending Products", p. 19, 1995 Document contained in the author's files.

[186] As noted at **1993** above Fannie had approved 260 underwriting variances related to affordable housing programs. The author knows that this practice continued for Fannie and Freddie, particularly with respect to the GSEs' largest customers.

> eliminated the limit in favor of a lender's discretion tailored to the needs of each borrower."[187]

CHBP already offered lower downpayments and more flexible underwriting.[188] The message was clear – Fannie had embraced underwriting flexibility in a big way.

1995-D:

HUD agrees to let Fannie and Freddie get affordable-housing credit for buying subprime securities that included loans to low-income borrowers.[189] Over the period 1997-2007 the GSEs purchase an estimated $707 billion in subprime MBS, about 30% of all such MBS issued and an additional estimated $154 billion in Alt-A private MBS, about 12.5% of all such MBS issued.[190]

1995-E:

In announcing its National Homeownership Strategy, HUD formalized and greatly expanded a long-standing policy goal – the reduction of downpayments:

> "Lending institutions, secondary market investors, mortgage insurers, and other members of the partnership should work collaboratively to reduce homebuyer downpayment requirements." HUD's 1995 "National Homeownership Strategy"[191]

HUD drafted the entire mortgage finance industry to implement it:[192]

> "Lending institutions, secondary market investors, mortgage insurers, and other members of the partnership should work collaboratively to reduce homebuyer downpayment

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[187] "Fannie Mae Makes Underwriting Guidelines More Clear and Flexible to Help More Families Achieve Homeownership", PR Newswire, January 9, 1995, http://www.highbeam.com/doc/1G1-16005735.html

[188] Id.

[189] http://www.washingtonpost.com/wp-dyn/content/article/2008/06/09/AR2008060902626.html

[190] Sources are multiple FHFA annual reports entitled "The Mortgage Markets and the Enterprises" and Inside Mortgage Finance's 2009 Mortgage Market Statistical Annual

[191] HUD's "National Homeownership Strategy – Partners in the American Dream", http://web.archive.org/web/20010106203500/www.huduser.org/publications/affhsg/homeown/chap1.html

[192] In 1995 HUD announced HUD's "National Homeownership Strategy". HUD announced that it had "forged a nationwide partnership that will draw on the resources and creativity of lenders, builders, real estate professionals, community-based nonprofit organizations, consumer groups, State and local governments and housing finance agencies, and many others in a cooperative, multifaceted campaign to create ownership opportunities and reduce the barriers facing underserved populations and communities." The goal was to make "financing more available, affordable, and flexible" in order to:

> Increase ownership opportunities among populations and communities with lower than average homeownership rates;
>
> Reduce downpayment requirements and interest costs by making terms more flexible, providing subsidies to low- and moderate-income families, and creating incentives to save for homeownership; and
>
> Increase the availability of alternative financing products in housing markets throughout the country.

Found at: http://www.huduser.org/publications/txt/hdbrf2.txt

> requirements. Mortgage financing with high loan-to- value ratios should generally be associated with enhanced homebuyer counseling and, where available, supplemental sources of downpayment assistance."
>
> "The amount of borrower equity is an important factor in assessing mortgage loan quality. However, many low-income families do not have access to sufficient funds for a downpayment. While members of the partnership have already made significant strides in reducing this barrier to home purchase, more must be done. In 1989 only 7 percent of home mortgages were made with less than 10 percent downpayment. By August 1994, low downpayment mortgage loans had increased to 29 percent." [193]

And this HUD "action item" on "Flexible Mortgage Underwriting Criteria":[194]

> "The partnership should support efforts to increase local lender awareness and use of the flexible underwriting criteria established by the secondary market, FHA, and VA."
>
> "In recent years many mortgagees have increased underwriting flexibility. This increased flexibility is due, at least in part, to local lender community reinvestment strategies and liberalized affordable housing underwriting criteria established by secondary market investors such as Fannie Mae and Freddie Mac. Yet, many prospective homebuyers still cannot qualify for a conventional mortgage."

In the 3 short years since passage of the GSE Act of 1992, the federal government had drafted virtually the entire housing finance industry into implementing its National Homeownership Strategy, a task made easier by the fact that:

1. *The GSEs' affordable housing mission was under HUD's regulatory control pursuant to the GSE Act;*
2. *Banks' CRA activities were under the control of their safety and soundness regulators, who announced new CRA performance based regulations in 1995;*
3. *Mortgage bankers had voluntarily agreed to HUD's Best Practices initiative in late-1994; and*
4. *FHA was, of course a part of HUD.*

It was self-described by HUD as "an unprecedented public-private partnership to increase homeownership to a record-high level over the next 6 years"[195] and the means would be widespread use of flexible and innovative underwriting standards to increase the homeownership rate for low- and moderate-income families.

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[193] HUD's "National Homeownership Strategy – Partners in the American Dream", http://web.archive.org/web/20010106203500/www.huduser.org/publications/affhsg/homeown/chap1.html
[194] Id.
[195] Id.

The goal of loosened lending standards would now be acted upon by FHA, which until 1992 had been the federal government's main vehicle for high risk and high leverage home lending, the GSEs following the mandates of the GSE Act, mortgage banks following the dictates of HUD's Best Practices Initiative, and banks following the new outcome based CRA regulations. These policy initiatives allowed loosened lending standards to take root and change credit cultures.

The goal previously noted from the 1991 Senate Banking, Housing, and Community Development committee report was now well on its way to being accomplished - lenders were abandoning lending guidelines meeting safety and soundness standards and following the lead of the GSEs as they moved aggressively and convincingly to expand what were perceived by Congress and HUD to be historically narrow underwriting standards.

In a classic case of leap frog, large banks would need to out-perform each other in terms of flexible underwriting to get an outstanding CRA rating, HUD would push the GSEs to lead the primary market in low- and very low-income (consisting of large banks, mortgage bankers, and FHA all working to implement the National Housing Strategy) and traditional subprime lenders would be forced further out the risk curve as the competition was slowly shrinking their traditional market.

CRA and HUD's Best Practices Initiative would ultimately provide trillions of dollars in low- and moderate-income loan supply and Fannie and Freddie trillions of dollars in corresponding demand. All of these programs targeted low- and moderate-income families, particularly those with incomes below 80% of median.

1995-F:

HUD announces permanent goals to replace interim goals set out in the GSE Act. The low- and moderate-income goal is raised to 40% (applicable to 1996) substantially above the GSEs' baseline level of 30% that they had experienced prior to passage of the GSE Act. The low- and moderate-income baseline may be inferred by looking at Fannie and Freddie's goal attainment in 1993 of 34.1% and 30.0% respectively.[196] It is not surprising that Fannie's attainment in 1993 was somewhat higher than Freddie's. Fannie's attainment in 1993 had already increased over the level earlier in the decade due to the 1991 announcement of a $10 billion 'Opening Doors' affordable housing program:

> "[Fannie's CEO Jim Johnson] also pointed out the acceleration of the company's housing efforts through the creation of Fannie Mae's National Housing Impact Division in 1991 and its $10 billion 'Opening Doors' affordable housing program to serve low-income families and those with special housing needs. 'The $10 billion goal will be achieved by

[196] Statement of Ira G. Peppercorn, General Deputy Assistant Secretary for Housing U.S. Department of Housing and Urban Development, House Subcommittee on Capital Markets, Securities and Government Sponsored Enterprises, Committee on Banking and Financial Services, July 30, 1998, http://financialservices.house.gov/banking/73098hud.htm

> the middle of 1993, a year and a half ahead of schedule, and will help put a total of 180,000 families into affordable housing,' Johnson said."[197]

Also for the first time, a Special Affordable (low- and very low-income) goal of 12% (applicable to 1996) is added (note: loans meeting the Special Affordable goal also counted towards the low- and moderate-income goal). The statutory minimum for the Special Affordable goal was 1%. The baseline may be inferred to be 7% by looking at Fannie and Freddie's actual attainment in 1993 (while HUD tracked performance, there was no formal goal) of 10.0% and 7.2% respectively.[198] Once again, Freddie's attainment is the best indicator of the level experienced prior to 1992.

As a result the GSEs are required to develop and implement additional underwriting flexibilities in order to serve these higher goals. The new Special Affordable goal would be particularly challenging given its focus on 1. very low-income families (<60% of median) and 2. low-income families living in low-income neighborhoods (<80% of median).[199]

1995-G:

The percentage of conventional (all sources) and government loans with an LTV>90% (effectively >=95%) is 26%, more than triple the level of 7% in 1992 (the year the GSE Act was passed).[200]

1995-H:

The GSEs give their best pricing and the greatest underwriting flexibilities to their largest lenders. The top 10 lenders' share increases from 25.8% in 1995 to 71.8% in 2007[201].

1995-I:

Countrywide was an independent mortgage banker, the largest of a vanishing breed. Originator market share had been shifting either to banks directly or to bank or insurance company subsidiaries. In 1995 the top 10 originators had a market share of 25.8% with only 6.1% represented by independent mortgage bankers, almost all of which was accounted for by Countrywide. By 2007 Countrywide's share would grow to 16.8% - more than 1 out of every 6 mortgages.[202]

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[197] "Fannie Mae's Johnson Says Corporation Ready to Meet Housing Goals in Legislation", PR Newswire, March 31, 1993, http://www.thefreelibrary.com/FANNIE+MAE%27S+JOHNSON+SAYS+CORPORATION+READY+TO+MEET+HOUSING+GOALS+IN...-a013133485

[198] Supra. Statement of Ira G. Peppercorn

[199] See fn. 2, Table 1 of HUD's Profiles of GSE Mortgage Purchases in 1999 AND 2000, http://www.huduser.org/portal/datasets/GSE/profiles19_00.pdf

[200] OTS Mortgage Market Trends, First Quarter 1997, Table 1, http://files.ots.treas.gov/19710.html

[201] Inside Mortgage Finance, "The 2009 Mortgage Market Statistical Annual"

[202] Id.

Countrywide recognized early on that affordable housing could be the means for making itself indispensible to the GSEs and growing its market share. In 1995 Countrywide was Fannie's largest customer and "very aggressive in its origination practices, and they like to test the limits of investment quality underwriting."[203] Groundbreaking variances included a 95% LTV ARM, 2 unit properties up to 95% LTV, and an ARM HELOC [home equity line of credit].[204] In 1994 Countrywide was the largest participant in Fannie's Community Home Buyer Program originations accounting for a 30% share of CHBP (about double its share of Fannie's overall business) and its performance was 30% worse than the control group.[205] Countrywide's early embrace of the GSEs' affordable housing initiatives provided the glide path for its future growth.

In addition to Countrywide's commitment under HUD's Best Practices initiative, it was indirectly subject to the affordable housing goals of Fannie and Freddie, an initiative designed to spur CRA and CRA-like lending. Throughout the 13-year period 1995-2007, Countrywide was Fannie and Freddie's (on a combined basis) largest (1995, 1996, 1998, 2002, 2003, 2005, 2006, and 2007) or second largest customer (1997, 1999, 2000, 2001, and 2004). In 2007 Countrywide was by far Fannie's largest customer (3 times larger than #2) and Freddie's second largest customer (not far behind #1) and accounted for 29% and 16% of Fannie's and Freddie's business respectively.[206]

Given Fannie and Freddie's escalating affordable housing goals, much of the $789 billion in Countrywide's "Best Practices" originations would have gone towards fulfilling these goals. Being in a preferred position as one of Fannie and Freddie's most significant customers had many perks, including highly advantageous pricing and underwriting flexibilities. Countrywide needed to originate huge amounts of HUD's "Best Practices" loans in order to maintain its #1 position and attendant perks with the GSEs.

1995-J:

The national homeownership rate increases from 64.2% in 1994 to 65.1% in 1995, on its way to a high of 69.2% in 2004.

1995-K:

Home sales continue to increase for the 5th straight year. Based on past experience, a correction would have been expected in about 1995, instead the sales boom continues for 11 year more years.

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[203] Fannie Mae document, Countrywide Credit Variance document dated August 24, 1995. Document contained in the author's files. Document contained in the author's files.
[204] Id.
[205] Fannie Mae Credit Policy memo, "Community Lending Review", November 17, 1995, Document contained in the author's files. Document contained in the author's files.
[206] Inside Mortgage Finance, "The 2009 Mortgage Market Statistical Annual"

1995-L:

Securitization usage is most advanced in the FHA/VA market, which is not surprising as securitization began with Ginnie Mae in 1970.[207] The conventional market is second, led by the GSEs. The jumbo and self-denominated subprime markets are the least advanced in the use of securitization (through 2003).

Chart 25:[208]

Securitization Rates

	Loan type			
Year	FHA/VA	Conventional	Jumbo	Subprime
1995	101.1%	45.6%	23.9%	28.4%
1996	98.1%	52.5%	21.3%	39.5%
1997	100.7%	45.9%	32.1%	53.0%
1998	102.3%	62.2%	37.6%	55.1%
1999	88.1%	67.0%	30.1%	37.4%
2000	89.5%	55.6%	18.0%	40.5%
2001	102.5%	71.5%	31.4%	54.7%
2002	92.6%	72.8%	32.0%	57.6%
2003	94.9%	75.9%	35.1%	58.7%

NOTE: Subprime securities include both MBS and ABS backed by subprime loans. Securitization rate = securities issued divided by originations in dollars.
SOURCE: *Inside MBS & ABS.*

1996-A:

The state of the subprime market before the GSE and conforming lenders (including commercial banks) entered the market in a big way was described as follows:[209]

> "One the of the burning questions in the minds of many conforming market lenders is: Should we be joining the ranks of the nonconforming lenders like ContiMortgage, Ford Consumer, Option One Mortgage, Beneficial Finance, The Money Store and others?"
>
> "Returns on equity (ROEs) are generally high the thinking goes and it's viewed as far less of a commodity business than Fannie/Freddie lending. Hopefully, that means substantially better margins. And, importantly, prevailing wisdom is that we mortgage bankers understand credit risk, having dealt with it forever."

[207] http://www.ginniemae.gov/issuers/issuers.asp?Section=Issuers
[208] Souphala Chomsisengphet and Anthony Pennington-Cross, January-February 2006, "The Evolution of the Subprime Mortgage Market", ABS stands for asset backed security. http://research.stlouisfed.org/publications/review/06/01/ChomPennCross.pdf
[209] Thomas LaMalfa and David Olson, "Market efficiencies and nonconforming lending", Mortgage Banking, April 1, 1996, http://www.allbusiness.com/government/government-loans/551822-1.html

> "The market has shifted significantly from the decades when finance companies ruled the nonconforming market. In the 1970s, finance companies had nearly the entire market; today they have perhaps 20 percent. This would include such firms as Household Finance, Beneficial and Avco."
>
> "There were very few independent mortgage brokers in the market and no asset-backed or mortgage-backed securities."
>
> "During the 1980 to 1985 period we witnessed the emergence of Fannie Mae and Freddie Mac as significant players in the secondary mortgage market. There was a substantial increase in the average loan size because of inflation and greater willingness to lend larger amounts secured by liens on real estate. Mortgage pricing became more closely tied to national rates. The market shifted from thrifts originating loans and holding them in portfolio funded by saving accounts to tradable securities held by banks, insurance companies, mutual funds and others. We also saw the debut of wholesale mortgage companies that bought mortgages from smaller firms and turned them into securities."
>
> "During the 1985 to 1993 period more wholesalers emerged that only bought loans from mortgage brokers, companies like Advanta and ContiMortgage."

LaMalfa and Olson concluded that pricing reflects costs:

> "From other research we have conducted, charge-offs of nonconforming lenders over a business cycle average 12 basis points for A loans, 33 basis points for B loans, 55 basis points for C loans, and 100 to 150 basis points for D loans. Other niches such as nonowner-occupied properties, less- documentation loans, and loans with higher LTVs add to losses. In addition to the losses themselves, there are extra costs involved in underwriting these loans and the extra cost of attempting to collect payments on delinquent loans."[210]

They also found a competitive market, but not one without risks:

> "Going back to the criterion for a competitive market, one of the pieces of evidence to explore is whether firms fail in the market being examined. And we found that not all firms automatically earn profits in the nonconforming mortgage industry. Some examples of casualties of higher-risk mortgage lending include Citicorp Mortgage (substantial losses from no-income-verification loans and high LTV mortgage programs), Dartmouth Plan (high losses from third-party paper), ITT Consumer Finance (losses from high bankruptcies) and Landmark Equity (high delinquency rates). Other anecdotal evidence

[210] Id.

includes the fact that HFC and American General withdrew from the closed-end mortgage market because of insufficient profits."[211]

1996-B:

The subprime market as described by LaMalfa and Olson was about to change dramatically as the GSEs train their sights on this market since it is key to meeting their growing affordable housing goals as mandated by HUD.

Prior to the mid-1990s, the mortgage loans fit into a series of well-defined risk categories based on the past credit performance of the applicant. Traditionally, prime loans had a grade of "A" and subprime loans had grades ranging from "A-minus", to "B", "C", and "D". It was a fairly orderly market with Fannie and Freddie and other prime investors acquiring "A" loans, leaving the "A-minus" to "D" subprime grades to others. There was minimal overlap between the two sectors. Even the lenders for the two segments were different, with the subprime market being serviced by lenders that specialized in subprime lending and servicing.

The GSE Act disrupted this traditional structure. The GSEs were, for the first time, expected to compete with FHA and other subprime lenders for the lower risk ("A-minus" and "B") segments of the subprime market. In the mid-1990s the GSEs began to see the "A-minus" subprime segment as fertile ground for expansion. By the late 1990s the GSEs were expanding into the "B" segment. "A-" and "B" loans constituted 87% of the subprime market in 1998.[212] From the GSEs' perspective this allowed them to turn what they judged to be lower risk "subprime" loans into "prime" loans acceptable to the GSEs. From the point of view of competitors, the GSEs were cherry-picking. In the end, the GSEs' expansion into subprime turned out to be a much higher risk than they had anticipated.

Given the affordable housing goals rich nature of "A-minus" and "B" subprime borrowers, the GSEs used the same cross-subsidy approach already noted with respect to high LTV and Community Home Buyer Program loans. This combination of cross-subsidization and the GSEs' government conferred advantages led to narrower spreads on this lower risk, but huge slice of the subprime market. In order to protect their market share and profits, the traditional subprime lenders moved out the risk curve where risk premiums and spreads were higher and competition from the GSEs was less. Over time this included the remainder of the subprime market ("C" and "D" loans) and "A-minus" and "B" loans with higher risks due to risk layering (e.g. a combination of two or more risks on the same loan, such as high LTV, adjustable interest rates, reduced loan documentation, reduced or eliminated cash reserves, and higher debt ratios).

By 1996 FICO scores, which were invented in 1989, had become the common means for evaluating a borrower's credit history. FICO scores, in combination with automated

[211] Id.

[212] http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2000_register&docid=page+65093-65142

underwriting systems, accelerated the GSEs' shift into subprime since it allowed them to be more precise in their efforts to cherry pick the better subprime loans.

Fannie and Freddie's funding advantages not only allowed them to seek out the lower risk end of these high risk categories, it also allowed them to garner the lion's share of the industry's profits. In 1996 this was described as follows:

> "The real culprit in the demise of the thrifts is the tax and regulatory preferences given the duopoly, Fannie Mae and Freddie Mac. They grew strong on the thrifts' lunch (breakfast and dinner too). Fannie and Freddie currently account for more than 40% of all secondary market activity. Between them they extract more than $3 billion of net income from the mortgage finance business. Based on what we saw occur in the conforming market, we fear their market share is on the road to becoming the lion's share. [Proposed] entry into the jumbo and B-D [subprime] markets will give the agencies renewed growth prospects well into the 21st century."
>
> "In the end, everything is driven by the bottom line. He who has the cheapest unit costs and highest return on equity wins the game."[213]

In October 1996 the same warning was delivered to the Mortgage Bankers Association at its national convention:

> "Here's the premise, it's simple and straight forward: the GSEs, Fannie Mae and Freddie Mac, are eating your companies' and the industry's breakfast and lunch. They are siphoning its revenues and profits. They commoditize the market. They increase the cost of credit. **They create mega-liabilities with miniscule capital to support it** [emphasis added]."[214]

From the mid-'90s onward the GSEs were moving out the risk curve, to higher LTV loans, "A-minus" and "B" subprime loans and Alt-A loans. Their competitors were crowded into the shrinking pool of loans remaining. However, as the efficiency of private mortgage backed security issuance increased in late 2003 through 2006 (as evidenced by the percentage of "AAA" and "AA" securities obtained from a given pool of loans), banks and Wall Street became more adept at competing with Fannie and Freddie and allowed them to expand the shrinking pool.

The affordable housing goals, which provided Fannie and Freddie with permanence and market preeminence in exchange for a mission, moved the GSEs into the higher risk segments of subprime and Alt-A markets. Clear evidence exists relating to the GSEs crowding out of

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[213] Tom LaMalfa, "Revelations on the B-D and Jumbo Markets from Freddie Mac's Chairman and CEO", 1996. Document contained in the author's files.

[214] Tom LaMalfa, speech delivered to the Mortgage Bankers Association at its national convention. Document contained in the author's files.

subprime lenders from the mid-1990s through the early-2000s and, ultimately HUD would formally encourage these efforts (see **2000-E**):

Freddie indicates that in 1996 about 10% to 35% of borrowers who obtained mortgages from the subprime market could have qualified for a conventional loan through Loan Prospector, its automated underwriting system;[215] At America's Community Bankers annual Secondary Market Conference, Freddie CEO Leland Brendsel telegraphed Freddie's intention to take "about half" of the non-conforming ("B-D") market when he noted that with credit scoring, it is finding that about half the loans called "B-D" qualify for purchase by Freddie.[216]

1996-C

The new CRA regulations herald major changes:

> "In January 1996, the Community Reinvestment Act (CRA) regulation, revised to reward performance, not process, became effective for thousands of community banks in the United States. Regulators and bankers alike entered this new CRA arena with some degree of trepidation. New rules to learn and new concepts to understand presented challenges to everyone."[217]

1996-D

In a study entitled "Credit Risk, Credit Scoring, and the Performance of Home Mortgages" by the Fed's Division of Research and Statistics[218] is the canary in the coal mine, as it pulls together from multiple sources unequivocal evidence as to the high risks posed by "innovative or flexible" loan features such as low down payments and impaired credit/low FICOs. The full study is so compelling, it should be read by anyone attempting to understand the disconnect between mortgage default risk and the government's insistence on loosened and flexible lending.

Notwithstanding the overwhelming evidence presented from multiple sources as to the high risk nature of loans with such underwriting, the authors literally miss the forest because of the trees, a view that will confuse and mislead succeeding researchers.

- The authors cite a massive seasoned loan study, observing that "delinquency rates are low for each loan type" and note a 4% rate on government-backed seasoned loans. They

[215] OCC Working Paper – Economic Issues in Predatory Lending http://www.occ.treas.gov/workingpaper.pdf
[216] Tom LaMalfa, "Revelations on the B-D and Jumbo Markets from Freddie Mac's Chairman and CEO", 1996
[217] Office of Comptroller of the Currency, New Opportunities to Excel Outstanding CRA Actions for Community Banks, December 1996,
http://www.occ.treas.gov/cra/excel.htm
[218] Federal Reserve, Division of Research and Statistics, "Credit Risk, Credit Scoring, and the Performance of Home Mortgages", http://www.federalreserve.gov/pubs/bulletin/1996/796lead.pdf

neglect to point out that this rate is 10 times the rate on conventional loans with a FICO of >=660.[219]

- They provide and then ignore Freddie Mac's experience that loans made in early 1994 to borrowers (regardless of credit) with less than 80% of median income and a down payment of less than 20% have a foreclosure rate after 1.5-2 years of 51.4 times that of a loan to a borrower (regardless of income) with a FICO >660 and a down payment of 20% or more. Freddie would be forced by HUD's implementation of the affordable housing goals to raise the percentage of its business going to borrowers with <80% of median income from 7% in 1993 to 27% in 2008.
- The authors favorably and casually point out the growing prevalence of affordable housing lending, but ignore the fact that borrowers with income below 80% of median have much higher usage of high risk innovative or flexible underwriting features than higher income borrowers.

[219] On Chart 24 FICOs of >660, 621-660, and <621 are denominated as "high", "medium", and "low" respectively. This is misleading given that in 1989 the median FICO for individuals with mortgages was about 730, with only 18.3% having a FICO below 660 (8.4% were >= 620 and <660 and 9.9% were below 620). In 1989 the 620-660 group would have roughly translated into the "A-" subprime grade and the <620 group into the "B", "C", and "D" grades. With respect to first time homebuyers taking out a mortgage, data from both 1989 and 1994 indicate that 13.3% and 14.5 % respectively of these new homebuyers had a FICO below 660. Source: Equifax. Documents contained in the author's files.

By 2008 approximately 25% of individuals with mortgages had a FICO below 660, with approximately 7% being >=620 and <660 and 18% being below 620 (data unavailable regarding first time homebuyers). Source: Moody's/Economy.com, which document is contained in the author's files. All of the increase from 1989 to 2008 is concentrated in homeowner-borrowers with FICOs below 620 (subprime grades of "B", "C", and "D"). Fannie and Freddie increased their share through whole loan acquisitions of the "A-" and "B" grades and through private MBS purchases of "AAA" tranches made up of "A"-"D" grade subprime loans.

However, there was much more dramatic growth in the ratio of homebuyers purchasing with a downpayment of <=3%. In 1989 only 1 in 230 homebuyers made a downpayment of 3% or less. From this fact it may be concluded that in 1989 virtually none of the borrowers with a FICO below 660 made a down payment of <=3%. The ratio of homebuyers of any FICO making a downpayment of <=3% steadily increased over the next 18 years so that by 2003 and 2007 respectively it stood at 1 in 7 and 1 in 3 (see Chart 55).

Chart 26:[220]

Relative foreclosure rates for selected categories of mortgage loans, by credit score range

Indexed values (1 = any income and LTV <81% and FICO >660)

Loan-to-value ratio and borrower income	*Credit score*		
	Low *<621 FICO*	Medium *621-660 FICO*	High *>660 FICO*
All loans			
Borrower income (percentage of area median income)			
Less than 80	36.8	13.9	2.2
80 to 120	35.3	10.2	1.7
120 or more	31.1	8.9	1.1
All	33.9	10.3	1.5
Loan-to-value ratio less than 81 percent			
Borrower income (percentage of area median income)			
Less than 80	32.0	11.0	1.8
80 to 120	29.0	7.4	1.1
120 or more	22.0	6.7	0.7
All	26.9	7.9	1.0
Loan-to-value ratio 81 percent or more			
Borrower income (percentage of area median income)			
Less than 80	51.4	23.0	4.4
80 to 120	47.4	15.8	3.6
120 or more	46.7	12.9	2.8
All	47.6	15.3	3.3

Note. The loans are for single-family owner-occupied properties and were purchased by Freddie Mac in the first six months of 1994. Index of foreclosure rate covers loans foreclosed by December 31, 1995; the index sets the average foreclosure rate equal to 1 for loans with borrower generic credit bureau scores of more than 660 and loan-to-value ratios of less than 81 percent. The credit score ranges correspond to generic credit bureau scores as follows: low = less than 621, medium = 621–660, and high = more than 660. Area median income is the median family income of the property's MSA or, if location is not in an MSA, the median family income of the property's county. Borrower income is as of the time of loan origination.
Source. Freddie Mac.

[220] Supra. Federal Reserve, "Credit Risk, Credit Scoring, and the Performance of Home Mortgages"

Succeeding studies quote the misleading statements contained in this Fed study, but fail to look at the actual data. For example, a congressionally mandated Fed study in 2000 entitled "The Performance and Profitability of CRA-Related Lending"[221] concludes based on the Freddie data shown above that:

> "Affordable home loans that did not feature layering of risk performed similarly to loans in the rest of Freddie Mac's portfolio."[222]

"Missed" is the fact that low FICO (<620) loans made to low income borrowers with a **greater than 20% down payment** were 32 times more likely to foreclose than high FICO (>660) loans to borrowers of any income with a greater than 20% down payment. For downpayments of less than 20% the foreclosure rate increases to 51.4 times.

1997-1999

The GSEs inroads into the "A-minus" and "B" subprime market threaten the existing subprime players. In 1997-1999, subprime grades "A-minus" accounted for 55.1%, B for 25.7%, C for 17.1% and D for 2.2% (by count and excluding loans not graded) of subprime loans[223] and the distribution of subprime mortgages by borrower FICO score indicates that the range of the 25th to 75th percentiles for A-minus was 590-670 (630 average) and for B was 550-610 (570 average).[224], [225] These closely match the FICO ranges most sought after by the GSEs.

1997-A:

HUD begins a practice with the GSEs' affordable housing goals that will continue until 2008 – goals increases are heavily skewed towards lending to low-income in low-income areas and very low-income borrowers located anywhere rather than the moderate-income borrower.[226] In 1996 the moderate- income component was 28% (the difference between the 40% low- and moderate-income goals and the 12% low- and very low-income goal). By 2007 it was 30% (the difference between the 55% and the 25% low- and very low-income goal), a modest increase over 11 years of 2%. Over the same period, the low- and very low-income component increased from 12% to 25%, more than doubling. **Eighty-seven percent of the increase in low- and moderate-income**

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[221] Federal Reserve, "The Performance and Profitability of CRA-Related Lending", 2000 http://www.federalreserve.gov/boarddocs/surveys/craloansurvey/cratext.pdf

[222] Id.

[223] OTS Mortgage Market Trends: What About Subprime Mortgage?" http://files.ots.treas.gov/19010.pdf

[224] Id.

[225] As noted earlier, Fannie and Freddie had a strategy to actively compete for A- and B subprime. However, once such a loan was pulled into Fannie or Freddie's acquisition totals, it was no longer denominated subprime. In order to create an appropriate market share comparison, Fannie and Freddie's acquisitions of loans to borrowers with 620-659 FICO corresponded to A- subprime loans and loans to borrowers with <620 FICO (average of about 585-590) corresponded to B subprime loans.

[226] Moderate-income borrowers were defined as those with incomes between 80% and 100% of the area median; low-income borrowers were those with incomes between 60% and 80% of the area median with a property located in a low-income (<80% of median income) census tract or non-metropolitan county; and very low-income borrowers were those with incomes below 60%.

goals from 1996 to 2007 was due to increases in the Special Affordable goals (low- and very low-income group). Doubling the acquisition percentage for loans to low- and very low-income borrowers necessitated that the GSEs reach much further down the demand curve.[227] This required a major expansion of their efforts to ease home purchase requirements by further lowering downpayments, accepting smaller cash reserves, reducing closing costs, and developing numerous other leverage increasing flexibilities.

Chart 27 – GSE Affordable Housing Goals:[228]

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Low & Mod Housing Goal	40%	42%	42%	42%	42%	50%	50%	50%	50%	52%	53%	55%	56%
Fannie actual	45%	45%	44%	46%	50%	51%	52%	52%	53%	55%	57%	56%	54%
Freddie actual	41%	43%	43%	46%	50%	53%	50%	51%	52%	54%	56%	56%	51%
Special Affordable Goal	12%	14%	14%	14%	14%	20%	20%	20%	20%	22%	23%	25%	27%
Fannie actual	15%	17%	15%	18%	19%	22%	21%	21%	24%	24%	28%	27%	26%
Freddie actual	14%	15%	16%	18%	21%	23%	20%	21%	23%	26%	26%	26%	23%
Underserved goal	21%	24%	24%	24%	24%	31%	31%	31%	31%	37%	38%	38%	39%
Fannie actual	25%	29%	27%	27%	31%	33%	33%	32%	32%	41%	43%	43%	39%
Freddie actual	28%	26%	26%	27%	29%	32%	31%	33%	34%	43%	44%	43%	38%

Compiled by Edward Pinto

1997-B:

HUD commissioned the Urban Institute in 1997 to study Fannie and Freddie's credit guidelines.[229] It advised:

> "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."

[227] In 1998 the low- income and very low-income groups had a 55% and 50% homeownership rate respectively. This compared to a 64% rate for moderate-income homeowners.http://www.owlnet.rice.edu/~econ461/papers/w9284.pdf

[228] FHFA Mortgage Market Note 10-2, http://www.fhfa.gov/webfiles/15408/Housing%20Goals%201996-2009%2002-01.pdf.pdf

[229] Urban Institute, http://www.urban.org/publications/1000205.html

Translation – do away with the Three Cs of Mortgage Credit entirely and mortgage lending practices would be greatly improved. By 2000 the GSEs had done away with downpayments, had raised debt ratios, entered the "A-minus" and "B" subprime market and re-entered the low doc/no doc market.

1997-C:

Total home market value to total replacement cost ratio increases from 1.34 to 1.65 by 2005. By 2008 it declines back to 1.34.

1997-D:

The number of investor property loans as a percentage of all home mortgages increases to 7% (from 1991-1996 it ranged from 5.1-6.6%) eventually reaching 17.3% in 2005.

1997-E:

An income tax law change in 1997 made speculating in homes a vocation for many homeowners. A married couple could live in a home for 2 years and pay zero tax on the first $500,000 of capital gains upon sale.[230]

1997-F:

No thought was given by HUD as to the unintended consequences which would result as the private sector got crowded out of their traditional subprime business. The large commercial banks and thrifts were also being squeezed by Fannie and Freddie across a broad array of loan products. They were forced to move further out the risk curve and were attracted to the subprime sector by the higher margins on the portion of subprime not being taken by the GSEs. The banks had a competitive advantage over traditional subprime lenders - lower funding costs. This was cited as a reason for First Union's acquisition of The Money Store in March, 1998:

> "First Union will be able to finance Money Store's loans more cheaply than Money Store could on its own."[231]

The commercial bank share of the self-denominated subprime market went from 0% in 1997 to 25.8% in 2006 (comprised of HSBC, Citi, Wells, WaMu, and Chase). Include Countrywide, which was relying more and more on its thrift charter by 2006, and bank market share percentage increases to 32.6% of the self-denominated subprime market in 2006.

During the period 1997-2003 Fannie, Freddie, and FHA's share of tracked subprime lending[232] increased from 51% to 67% - evidence that the government's strategy was working.[233] Said

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[230] http://www.nytimes.com/2008/12/19/business/19tax.html

[231] NYT, "First Union to Acquire Money Store for $2.1 Billion", "http://www.nytimes.com/1998/03/05/business/first-union-to-acquire-money-store-for-2.1-billion.html

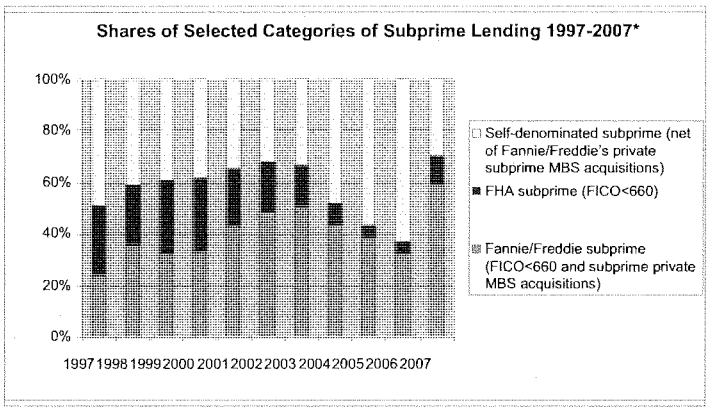
[232] Data is not available to create a year-by-year total for all subprime loans (both Self-denominated Subprime and loans with a FICO less than 660). Tracked subprime uses the available data which consists of Self-denominated

another way, the private sector's share shrank from 49% to 33%, a reduction of 33%. Much of this increase occurred in 2001-2003, post-HUD's encouragement in 2000 (see 2000-E below). This doubled the pressure on the traditional lenders in the self-denominated subprime market as the government entities took share from this market segment and the large commercial banks and thrifts increased their share of the self-denominated subprime market as noted earlier.

Subprime (whether or not acquired by the GSEs), GSE acquisitions with a FICO less than 660, and FHA insured loans with a FICO less than 660.

[233] Subprime loans are defined as ones to borrowers with "weakened credit histories that include payment delinquencies and possibly more severe problems such as charge-offs, judgments, and bankruptcies." There are two varieties of subprime loans: those initially denominated as such and those not so classified but with a FICO below 660. Tracking total subprime by year is difficult. For purposes of this analysis tracked subprime consists of self-denominated subprime as reported by Inside Mortgage Finance and loans with a FICO below 660 that were acquired by Fannie or Freddie or insured by FHA. Setting the subprime demarcation line at a 660 FICO is appropriate both in terms of objectively defining a credit impaired loan and because Fannie and Freddie had a policy of peeling off the lower risk "A-" and "B" subprime business. It is illogical to exclude loans previously considered subprime only because the loans were acquired by Fannie and Freddie. The default experience of Fannie and Freddie on loans with a FICO <660 supports this conclusion. For example, as **of 3.31.10 Fannie's serious delinquency rate on loans with a FICO<620, >=620 and <660, and >=660 was 17.9%, 13.2% and 4.2% respectively. The default risk imbedded in loans with a FICO below 660 was excessive given Fannie and Freddie's 222:1 statutory leverage ratio on their MBS guarantees and 30:1 on their portfolio investments.**

Chart 28:[234]



Sources: Inside Mortgage Finance, FHA's 2009 Actuarial Study, HUD data, and OFHEO data. Compiled by Edward Pinto

* Fannie and Freddie had a strategy to actively compete with subprime lenders for A-minus and B subprime loans, which constituted 87% of the traditional subprime market in 1998. However, once such a loan was pulled into Fannie or Freddie's acquisition totals, it was no longer denominated subprime. In order to create an appropriate market share comparison, the total of Fannie and Freddie's acquisitions of loans to borrowers with 620-659 FICO (corresponds to A-minus subprime loans) and loans to borrowers with <620 FICO (average of about 585-590 and corresponds to B subprime loans) along with their purchases of subprime private MBS is compared to the volume of loans denominated as subprime (net of Fannie and Freddie's purchases of subprime private MBS) and FHA insured loans to borrowers with <660 FICO.

1997-G:

After the passage of the GSE Act of 1992, FHA faced competition from Fannie and Freddie for both the low downpayment and low FICO segments of the market. Much like the private sector, FHA responded by shifting to higher risk loans, as noted by this 1997 commentary.

> "The advent of credit scoring has put FHA behind the eight ball. Adverse selection is occurring and accelerating. Since 1980 the FHA foreclosure rate has been on an upward trend, from an annual rate of 0.7% to 2.5% today. With Fannie, Freddie, and nonprime

[234] Important note: There is a lack of year by year disclosures on <660 FICO loan acquisitions pre-2000 for Fannie and pre-2001 for Freddie (whole loans only and excluding Fannie and Freddie's acquisitions of subprime "AAA" private MBS). A reasonable estimate for the missing years back to 1997 was able to be made by extrapolating backwards based on published total book levels of these types of loans at 2001 (Fannie) and 2000 (Freddie) along with a comparison to the acquisition levels for 2001 only (Fannie) and 2000 only (Freddie).

> lenders using credit scores to pick off the mortgages with the best investment characteristics, FHA is finding it necessary to increase risk to maintain market share."[235]

1998-A:

The goals of HUD's best Practices Initiative (now encompassing over 117 mortgage bankers) was described as follows:[236]

> "The companies and associations that sign "Best Practices" Agreements not only commit to meeting the responsibilities under the Fair Housing Act, but also make a concerted effort to exceed those requirements. In general, the signatories agree to administer a review process for loan applications to ensure that all applicants have every opportunity to qualify for a mortgage. They also assent to making loans of any size so that all borrowers may be served and to provide information on all loan programs for which an applicant qualifies.... The results of the initiative are promising. As lenders discover new, untapped markets, their minority and low-income loans applications and originations have risen. Consequently, the homeownership rate for low-income and minority groups has increased throughout the nation. However a near 30% gap currently exists between the homeownership rate of white Americans and their African-American and Hispanic counterparts. In an effort to reduce this disparity, HUD signed "Best Practices" Agreements with an additional 7 lending institutions in FY 1998. Furthermore, 10 expired agreements were re-signed."

See Fannie Mae Foundation's review of Countrywide's affordable housing lending activities at **2000-H**.

1998-B:

The National Community Reinvestment Coalition (NCRC) graphically describes the link between mergers and CRA dollars:

> "The rise of unilateral [CRA] agreements also accounts for the fluctuation in dollar amounts on an annual level. For example, 1998 was a year of mega-mergers that included the Bank of America and Nations Bank merger as well as Citigroup's acquisition of Travelers; CRA pledges totaled $812 billion as a result. The following years saw fewer mega-mergers and considerable less reinvestment dollars. CRA pledges shot up again in 2003 and particularly 2004. The year 2004 experienced watershed mega-

[235] Tom LaMalfa, "Holm Mortgage Finance Report", January, 1997. Document is contained in the author's files.
[236] HUD, "Building Communities and New Markets for the 21st Century", FY 1998 Report , p. 75, http://www.huduser.org/publications/polleg/98con/NewMarkets.pdf

> mergers as Bank of America acquired Fleet, JP Morgan Chase acquired Bank One, and Citizens gobbled up Charter One."[237]

Total CRA commitment volume for the year 2004 was $1.631 trillion.[238]

1998-C:

Real home prices begin an unprecedented and ultimately unsustainable boom which lasts 9 years, about twice as long as the booms in the late-1970s and late-1980s and 4-5 times as large in terms of cumulative percentage increase relative to each of the two earlier booms.

1998-D:

Gross equity extraction from housing, as a percent of GDP breaks out from its range of 2.5% to 3.8% from 1993-1997. It increases to 4% of GDP and eventually reaches 11.5% in 2005.

1998-E:

Price-to-rent ratio begins to rise rapidly reaching an all-time high in late 2005/early 2006.

1998-F:

Leveraged lending exerts constant market stimulation, muting price corrections. A nine year period begins with virtually no MSA price corrections, more than double any such period since 1976 (earliest data available).

1998-G

Once again concerns are raised about the impact on borrowers who purchase a home as a result of "flexible underwriting standards" (see **1988-B**):

> "After the warm and fuzzy glow of 'flexible underwriting standards' has worn off, we may discover that they are nothing more than standards that led to bad loans. Certainly, a careful investigation of these underwriting standards is in order. If the 'traditional' bank lending processes were rational, we are likely to find, with the adoption of flexible underwriting standards, that we are merely encouraging banks to make unsound loans. If this is the case, current policy will not have helped its intended beneficiaries if in future years they are dispossessed from their homes due to an inability to make their mortgage payments. It will be ironic and unfortunate if minority applicants wind up paying a very heavy price for a misguided policy based on badly mangled data."[239]

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[237] NCRC 2007 Annual Report, P. 6, http://www.community-wealth.org/_pdfs/articles-publications/cdfis/report-silver-brown.pdf

[238] Id.

[239] Theodore Day and Stanley Liebowitz, "Mortgage Lending to Minorities: Where's The Bias?" p. 25, January, 1998, http://www.utdallas.edu/~liebowit/mortgage/mortgages.pdf

1998-H

Bear Stearns begins packaging CRA loans into Fannie, Freddie and private securities.[240] It reported the average CRA portfolio has:

- at least 30 percent loans with 5% down or less;
- a high percentage of loans with less than a 660 FICO score (20-25%). A disproportionately large percentage can be below a 620 FICO score; and
- A high percentage of loans with "favorable" (flexible) underwriting standards.

Banks were advised:

- "Forget about FICO scores and high LTV levels. Almost everyone evaluating your portfolio assumes that the scores will be low (many 660 and less) and LTVs will be high (90 percent and greater);" and
- "Mortgage insurance is a "nice to have" amenity, but not a "need to have;" credit enhancements can be added later through subordinated securities."[241]

Notwithstanding FHA's poor experience over decades with respect to similar loans, Bear Stearns, the GSEs, and others adopted the view espoused by community groups:

> "To many lower-income homeowners and CRA borrowers, being able to own a home is a near-sacred obligation."[242]

[240] Dale Westoff, Bear Stearns, Packaging CRA loans into securities, Mortgage Banking, May 1, 1998, http://www.allbusiness.com/personal-finance/real-estate-mortgage-loans/677967-1.html
[241] Id.
[242] Id.

Stage 3: HUD uses all of its policy levers along with FHA in an effort to force the housing finance industry to undertake a major leap in low- and very low-income home lending. Unprecedented increases in homeowner leverage follow, along with the continued expansion of over-leveraged loan funding institutions and more highly leveraged mortgage backed securities and structured finance transactions.

1999-A:

FHA doubles its percentage of loans with a downpayment of <5% in one year, from 23% in 1998 to 44% in 1999[243] and increases its home purchase share from 12% to 15%.[244]

1999-B:

Ultra-low down payment loans (LTV>95%) were affordable housing goals rich and contributed disproportionately to meeting affordable housing goals, particularly the Special Affordable goals (low- and very low-income borrowers). The GSEs' reliance on ultra-low down payment loans increases significantly after 2000 due to HUD's substantial increase in the GSEs' Special Affordable goal from 14% to 20% (this goal was raised further after 2004):

[243] FHA's 2009 Actuarial Study, Exhibit IV-5, p.42

[244] Sources: FHA's 2009 Actuarial report (found at: http://www.hud.gov/offices/hsg/comp/rpts/actr/2009actr_exhecm.pdf), Exhibits III-4, IV-4, and HUD's PDR Historical Data Table 16, found at http://www.huduser.org/portal/periodicals/ushmc/spring10/hist_data.pdf

Chart 29 - Affordable Housing Goals and Fannie and Freddie's Acquisition of Loans with LTVs >95% (Green highlight indicates richer in goals contribution relative to low- and moderate-income goal):

LTVs >95%	1999	2000	2001	2002	2003	2004	2005	2006	2007
Fannie									
% of all home purchases	4.1%	4.3%	7.1%	7.7%	11.5%	12.9%	14.8%	19.4%	25.9%
% of low and mod	7.1%	7.4%,	12.7%	12.7%	19.3%	21.7%	23.4%	31.0%	40.7%
% of geograph. targeted	6.9%	7.2%	12.4%	12.4%	18.9%	21.0%	22.9%	28.5%	37.1%
% of special affordable	7.2%	8.4%	15.7%	14.7%	22.9%	25.3%	30.9%	39.6%	50.9%
Freddie									
% of all home purchases	5.1%	5.9%	5.3%	7.9%	10.3%	6.5%	8.0%	9.8%	19.3%
% of low and mod	6.2%	10.1%	10.7%	8.5%	12.7%	9.0%	13.2%	15.0%	33.2%
% of geograph. targeted	5.6%	9.4%	10.1%	7.5%	12.2%	8.5%	12.8%	14.2%	29.3%
% of special affordable	7.2%	12.6%	15.5%	9.7%	15.4%	11.5%	18.2 %	20.3%	39.4%

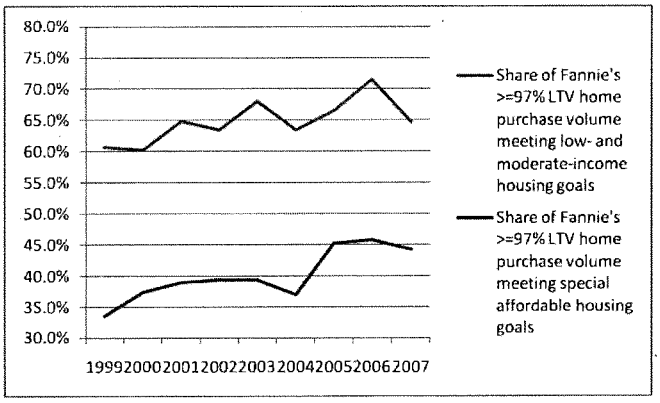
Source: HUD Office of Policy Development and Research and compiled by Edward Pinto

Note: Similar data is not available for other goals rich loan categories such as FICOs below 660 and the "AAA" tranches of private MBS. It is believed that each of Fannie's seven high risk attributes loan groupings (euphemistically called key loan risk attributes by Fannie)[245] were goals rich (yielded an above average percentage of loans meeting affordable housing goals).

The GSEs focused on the "affordable housing yield" of a particular product category. As noted in Chart 29, loans with LTVs >95% (effectively meaning downpayments of <=3%) came to be relied on more and more by the GSEs because of their contribution to meeting affordable housing goals. Chart 30 elaborates on this point. In 1999 about 60% of loans with downpayments of less than 3% met low- and moderate-income goals; however by 2006 this had increased to over 70%. High affordable housing yields were important because as the goals increased, the loans not meeting goals counted in the denominator, which necessitated offsetting acquisitions that would count in the numerator. By the early 2000s the GSEs were exercising care not to acquire too many loans not meeting affordable housing goals since these loans would inflate the denominator and not count in the numerator.

[245] Fannie 2010 First Quarter Credit Supplement, p. 6, http://www.fanniemae.com/ir/pdf/sec/2010/q1credit_summary.pdf;jsessionid=N4QBC0GJYCHBJJ2FQSISFGI

Chart 30:



Source: HUD Office of Policy Development and Research and compiled by Edward Pinto

1999-C:

In July, HUD Secretary Cuomo announced:[246]

> "[a] policy to require the nation's two largest housing finance companies to buy $2.4 trillion in mortgages over the next 10 years to provide affordable housing for about 28.1 million low- and moderate-income families."
>
> "Cuomo said the historic action by HUD raises the required percentage of mortgage loans for low- and moderate-income families that finance companies Fannic Mae and Freddie Mac must buy from the current 42 percent of their total purchases to a new high of 50 percent - a 19 percent increase - in the year 2001. The percentage will first increase to 48 percent in 2000 [while the planned 2000 increase was not promulgated, both Fannie and Freddie exceeded the planned increase with a 50% attainment]."
>
> "Commenting on the action, President Clinton said: 'During the last six and a half years, my Administration has put tremendous emphasis on promoting homeowners and making housing more affordable for all Americans. Our housing programs and institutions have been a success. Today, the homeownership rate is at an all-time high, with more than 66 percent of all American families owning their homes. Today, we take another significant

[246] HUD Press Release, "CUOMO ANNOUNCES ACTION TO PROVIDE $2.4 TRILLION IN MORTGAGES FOR AFFORDABLE HOUSING FOR 28.1 MILLION FAMILIES", July 29, 1999, http://archives.hud.gov/news/1999/pr99-131.html

step. Raising the GSEs goals will help us generate increased momentum in addressing the nation's housing needs.'"

"Under the higher goals, Fannie Mae and Freddie Mac will buy an additional $488.3 billion in mortgages that will be used to provide affordable housing for 7 million more low- and moderate-income families over the next 10 years. Those new mortgages and families are over and above the $1.9 trillion in mortgages for 21.1 million families that would have been generated if the current goals had been retained."

"Fannie Mae Chairman Franklin D. Raines joined Cuomo at the news conference in which Cuomo announced the HUD action. Raines committed Fannie Mae to reaching HUD's increased Affordable Housing Goals."

HUD's mid-1999 announcement, made in concert with Fannie's CEO Frank Raines, of dramatically higher goals likely explains the GSEs' introduction of the no down payment mortgage in 2000. FHA doubled the percentage of its loans with an LTV >=97% from 23% in 1998 to 44% in 1999, also adding additional pressure on the GSEs to go to the zero downpayment loan.

1999-D:

Self-denominated subprime lending enters a new phase as subsidiaries of commercial bank and thrift holding companies become major originators of subprime loans for the first time and account for significant market share.

This is a reaction to crowding out by the GSEs. The GSEs have commoditized the plain vanilla 30-year first mortgage market with a resultant reduction in spreads. HUD favorably cites this trend in its 2000 affordable housing goals rulemaking (see **2000-E** below). Moving out the risk curve to self-denominated subprime, banks and thrifts find wider spreads compared to traditional prime loans. Bank holding companies also have lower borrowing costs than non-depository subprime lenders. At the same time the GSEs' so called prime acquisitions now extend to "A-" and "B" subprime loans, as the GSEs look to meet increasing affordable housing goals. HUD also favorably cites this trend in its 2000 affordable housing goals rulemaking (see **2000-E** below).

In 1997 there are no bank holding companies among the top 25 subprime originators.[247] In 1997 KeyCorp (holding company for Key Bank) purchases Champion Mortgage, a smaller subprime lender not among the top 25.[248] In March 1998 First Union becomes the second bank entrant

[247] Inside Mortgage Finance reports the top 25 self-denominated subprime ("B" & "C") lenders for the years 1995-2006. References to subprime originator rank and market share arSe from Inside Mortgage Finance.
[248] http://www.thefreelibrary.com/KeyCorp+Completes+Acquisition+of+Champion+Mortgage+Co.,+Inc.-a019727811

with its purchase of The Money Store[249] (ranked #2 in subprime originations in 1997 with a 4.8% share and #5 in 1998 with a 4.2% share). By 1999 seven bank holding companies are pursuing are among the top 25 with a combined market share of 23.1% of subprime originations (Bank of America - 9.1% share, Citibank[250] – 3.9% share, First Franklin (purchased by National City Bank in 1999) – 2.8% share, First Union/The Money Store – 2.7%, Long Beach Mortgage (purchased by Washington Mutual in 1999) – 2.0% share, Chase Manhattan – 1.7% share, and Norwest Bank (purchased by Wells Fargo in 1998) – 0.9% share).

In 2000 Key Corp and Old Kent[251] make it into the top 25. In 2000 the total subprime share of these eight[252] bank holding companies increases to 36.3%. In 2005 Regions Bank makes it into the top 25 (#23 with a 1.3% share) through its Equifirst subsidiary that it purchased in 1999.[253]

The attractiveness of wider spreads is exemplified by National City purchase of First Franklin:

> "In the late 1990's, under former CEO David Daberko, National City began a strategy to increase the yields on it assets. In 1999, the company purchased First Franklin Financial Corp., a large subprime mortgage lender. Instead of selling the loans, as most mortgage companies do, National City retained many of the loans to enhance its net interest spreads. It also aggressively originated loans brought to the company by third-party mortgage brokers, as well as originating a large number of home equity loans."[254]

Two things are striking about the late 1990s expansion of retail bank holding companies into self-denominated subprime. First, prior to entering the subprime market nine of the ten retail bank holding companies[255] had a lengthy and substantial history of CRA lending as demonstrated by their cumulative announced CRA commitments totaling $1.086 trillion prior to 1999 (see **Chart 31** below). Second, the nine subprime related banks (including banks they acquired) were responsible for 93% of the $1.169 trillion in CRA commitments announced prior to 1999.

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[249] NYT, "First Union to Acquire Money Store for $2.1 Billion", "http://www.nytimes.com/1998/03/05/business/first-union-to-acquire-money-store-for-2.1-billion.html

[250] Citicorp purchased Associates First Capital in 2000. Associates ranked #3 with a 6.9% share in 1999.

[251] Old Kent entered the subprime market in about 1997. In an article entitled "Bad Loans Made Good", Business Week reports: "Old Kent, the 18th-largest mortgage banker in the country, generates more than $11 billion of mortgages--most of which is of the highest credit quality. It recently started targeting so-called subprime, or "b and c," mortgage customers who have spotty credit records. The subprime market offers higher profit margins...." October 26, 1998, www.businessweek.com/1998/43/b3601155.htm

[252] The ninth, First Union, exited subprime in 2000 when it shut down The Money Store. http://www.highbeam.com/doc/1G1-63029428.html

[253] "Barclays to Acquire EquiFirst from Regions Financial Corporation", January 19, 2007 http://www.thefreelibrary.com/Barclays+to+Acquire+EquiFirst+from+Regions+Financial+Corporation.-a0157931579

[254] Wikipedia, National City Corp, http://en.wikipedia.org/wiki/National_City_Corp.

[255] Other than the ten retail bank holding companies already mentioned, only three additional banks eventually made it onto Inside Mortgage Finance's top 25 subprime lenders list. None of these was a traditional retail bank. The three were: NetBank, an Internet bank, IndyMac, a thrift relying on wholesale and non-branch based deposits, and HSBC, an international bank.

These same nine banks (including banks they acquired) were responsible for 90% of all announced CRA commitments through 2008 (includes Bank of America's $1.5 trillion commitment announced in conjunction with its acquisition of Countrywide in 2008).[256]

Could the explanation be CRA and its reliance on flexible and innovative lending?

Chart 31: Announced CRA Commitments by Banks with Major Involvement in Subprime Lending (million = m. billion = b. trillion = t.):[257]

Bank	Acquired bank	CRA commitments announced prior to 1999	CRA commitments announced in 1999 or later
Key Bank		1987 ($5.5 m.) 1991 ($100 m.)	2000 ($400 m.)
First Union - acquired by Wachovia in 2001		1985 (no $ amt.) 1989 ($48 m.) 1991 ($10 m.) 1993 ($200 m.) 1995 ($319.4 m.) 1996 ($45 m.) 1996 ($500 m.) 1997 ($3 b.) 1998 ($13 b.)	1999 ($1 b.) 2001 ($35 b.)
Old Kent		1990 ($2.5 m.) 1992 ($10 m.)	1999 (no $ amt.)
Regions		None	None
Bank of America/ NationsBank	Continental Seafirst Barnett	1986 ($50 m.) 1991 ($1.5 b.) 1992 ($100 m.) 1992 ($316 m.) 1992 $2 b.) 1992 ($10 b.) 1993 ($400 m.) 1994 ($1 b.) 1997 ($140 b.) 1998 ($350 b.)	1999 ($70 b.) 2004 ($750 b.) 2008 $1.5 t.)
Citibank		1998 ($115 b.) 1998 ($115 b.)	2002 ($120 b.) 2003 ($200 b.) 2003 ($3 b.)
National City	Integra Union National	1990 ($248 m.) 1992 ($125 m.) 1994 $1.7 b.) 1995 ($267 m.) 1998 ($540 m.)	

[256] "Bank of America Completes Countrywide Financial Purchase", July 1, 2008http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-newsArticle&ID=1171009&highlight=

[257] Supra., NCRC 2007 Annual Report

Wells Fargo	Norwest First Interstate	1987 ($2 m.) 1989 ($3 m.) 1989 ($18 m.) 1990 ($18 m.) 1991 ($25 m.) 1993 ($2 b.) 1994 ($2 b.) 1994 ($272 m.) 1994 ($32 m) 1994 ($124 m.) 1996 ($41 m.) 1996 ($45 b.) 1998 ($15 b.)	
Washington Mutual	Home Savings Dime	1994 ($20 m.) 1995 $36.2 m.) 1997 ($75 b.) 1998 ($2 b.) 1998 ($35 b.) 1998 ($120 b.)	1999 ($2.5 b.) 2001 ($375 b.)
Chase	Chemical Bank One Texas Commerce Manufacturers Hanover First Chicago NBD	1987($6 m.) 1987 ($26 m.) 1989 ($1 m.) 1989 ($200) 1990 ($2 m.) 1991 ($72.5 m.) 1991 ($250 m.) 1993 ($66 m.) 1993 ($1 b.) 1995 ($18 b.) 1995 ($2 b.) 1995 ($2 b.) 1996 ($3 b.) 1996 ($7.5 m.) 1996 ($2 m.) 1997 ($5 m.) 1997 ($25 m.) 1998 ($6.7 b.) 1998 ($350 m.)	2001 ($350 m.) 2003 ($3.1 b.) 2003 ($500 b.) 2005 ($800 b.)

Compiled by Edward Pinto

2000-A:

In order to protect its market share, FHA increases the percentage of its loans with FICO scores below 660 from 42% in 1994 to 71% in 2000 and increases the percentage of its loans with an LTV>=97% from 14% in 1992 to 52% in 2000.[258] This allows it to maintain its share at about 9% over 1993-2000, the same as its average share for 1990-1992.

[258] FHA's 2009 Actuarial Report

2000-B:

FHA keeps the pressure on conventional and subprime lenders to further reduce downpayments and otherwise loosen lending standards (emphasis below in original):[259]

> **"Borrowers can purchase with a minimum down payment**. Without FHA insurance, many families can't afford the homes they want because down payments are a major roadblock. FHA down payments range from 1.25% to 3% of the sale price and are significantly lower than the minimum that many lenders require for conventional or sub-prime loans."
>
> **"With FHA loans, borrowers need as little as 3% of the "total funds" required.** In addition to the funds needed for the down payment, borrowers also have to pay closing costs, prepaid fees for insurance and interest, as well as escrow fees which include mortgage insurance, hazard insurance, and months worth of property taxes. A FHA-insured home loan can be structured so borrowers don't pay more than 3% of the total out-of-pocket funds, including the down payment."
>
> **"The combined total of out-of-pocket funds can be a gift or loan from family members**. FHA allows homebuyers to use gifts from family members and non-profit groups to cover their down payment and additional closing costs and fees. In fact, even a 100% gift or a personal loan from a relative is acceptable."
>
> **"FHA's credit requirements are flexible**. Compared to credit requirements established by many lenders for other types of home loans, FHA focuses only on a borrower's last 12-24 month credit history. In addition, there is no minimum FICO score - mortgage bankers look at each application on a case-by-case basis. It is also perfectly acceptable for people with NO established credit to receive a loan with this program."
>
> **"FHA permits borrowers to have a higher debt-to-income ratio than most insurers typically allow**. Conventional home loans allow borrowers to have 36% of their gross income attributed to their new monthly mortgage payment combined with existing debt. FHA program allows borrowers to carry 41%, and in some circumstances, even more."

Given the January 2000 date of the Quicken press release, it is reasonable to assume that the above represented FHA's standards in 1999. FHA was setting the loosened underwriting standard with its greatly expanded reliance on minimal downpayments[260], raised the total debt-to-income bar to 41% and beyond on very low downpayment loans[261] [262] and it had no minimum

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[259] Quicken press release, "Quicken Loans First To Offer FHA Home Mortgages Nationally On The Internet With HUD's approval, Intuit expands home ownership nationwide, offering consumers widest variety of home loan options", January 20, 2000, http://web.intuit.com/about_intuit/press_releases/2000/01-20.html

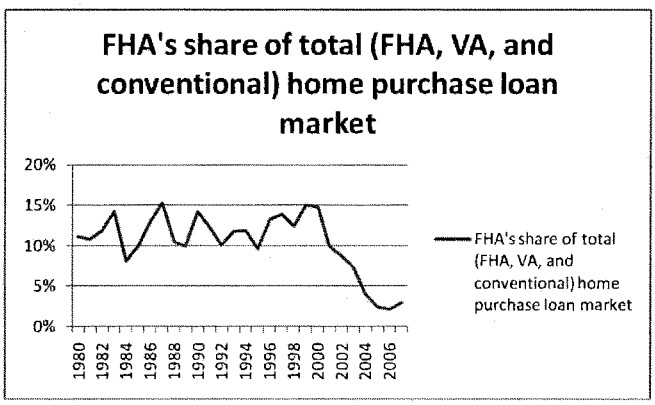
[260] It had doubled its percentage of loans with a downpayment of <=3% from 23% in 1998 to 44% in 1999.

[261] It was 38% in 1985, up from an earlier 35%.

FICO score. The GSEs and the private MBS sectors would not only emulate and expand upon FHA in these three regards, they would add their own loosened standards. For example, Fannie and Freddie would come to dominate the Alt-A- low doc/no doc market. The private MBS market would add ARMs to the mix (the GSEs and FHA had the funding/pricing advantage on 30 years fixed rate, fixed payment loans).

As Chart 32 demonstrates, over the period 1980-2001 FHA's market share of home purchase mortgages was in the range of 10 to 15%. It accomplished this by loosening it underwriting standards (see **Charts 19 and 22** above for its increasing reliance on lower and lower down payments). By 2002 it began to lose out to unrelenting competition from the GSEs (see Fannie's CEO Frank Raines' comment at **2002-A** below) and by 2004 to the added competition from the private self-denominated subprime market (see **Chart 27** above).

Chart 32:



Sources: Inside Mortgage Finance, FHA's 2009 Actuarial report, Exhibits III-4, IV-4, and HUD's PDR Historical Data Table 16. Compiled by Edward Pinto

FHA's parent, HUD, was the cause of this competition with its substantial increases in the GSEs' low- and very low-income goals and its insistence that the GSEs increase their competition with the self-denominated subprime market.

[262] Fannie had raised its total debt ratio to 40% in 1995. Total debt ratios generally ran 5-8% higher than the housing debt maximum.

2000-C:

Self-denominated subprime continues to lag Fannie, Freddie and FHA in maximum LTV limits on home purchase loans. In a survey that covers 14 of the 25 largest subprime originators[263] on "A-" loans only 1 has an LTV limit of 100%, 11 have 90%, and 2 have 85% on "A-" loans. On "B" loans 1 has a maximum of 90%, 10 have a maximum LTV of 85%, 2 have 80%, and 1 has 75%.[264]

2000-D

The National Community Reinvestment Coalition states:

> "In 2000 The Federal Reserve released a survey on the profitability of CRA-related loans made by the nation's five hundred largest banks, as required by the Gramm-Leach-Bliley Act. The survey found that the great majority of banks reported CRA loans made to low- and moderate-income borrowers to be as profitable as their overall lending. In addition, the CRA loans did not exhibit higher foreclosure rates."[265]

The Fed's survey actually found that on an institution basis, 44% either reported "somewhat lower" (25%) or "lower" (19%) profitability on CRA single-family loans as compared to non-CRA loans. When analyzed on a dollars basis, the difference was even less favorable for CRA lending. On a dollar weighted, 63% reported either "somewhat lower" (43%) or "lower" (20%) profitability on CRA single-family loans as compared to non-CRA loans. In fact 13% of CRA-related loans are break even or worse, versus 1% of all loans.[266]

NCRC also had similar wishful thinking with respect to default losses. On a dollar weighted basis, CRA loans had a reported 90+ day delinquency or non-accruing rate of 1.57% compared to 0.79% for non-CRA loans. Charge-offs on CRA loans were 0.23% compared to 0.15% on non-CRA loans.[267]

The Fed's 2000 study confirmed an earlier 1996 study by the Federal Reserve Bank of Kansas City, which found that 76% of CRA loans were less profitable, substantially less profitable, or not profitable. This report also documented a litany of loan subsidies and loosened credit undertaken by banks in order to facilitate CRA lending.[268]

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[263] List of top 25 subprime lenders is from Inside Mortgage Finance "The 2009 Mortgage market Statistical Annual, Vol. 1, p. 223.

[264] Wholesale Directory, 2000 edition, Vol. 12, No. 1, Wholesale Access. Document contained in the author's files

[265] John Taylor and Josh Silver, "The Essential Role of Activism in Community Reinvestment", Chapter 11, pp. 184-185 of Organizing Access to Capital: Advocacy and the Democratization of Financial Institutions, 2003, Gregory Squires, editor

[266] Supra. Federal Reserve, "The Performance and Profitability of CRA-Related Lending"

[267] Supra. Federal Reserve, "The Performance and Profitability of CRA-Related Lending"

[268] Federal Reserve Bank of Kansas City, "Community Reinvestment Act lending: Is it profitable?", Appendix B, p. 32 http://www.kansascityfed.org/PUBLICAT/FIP/prs96-2.pdf

In addition to reduced margins on CRA loans, bank margins were also squeezed on regular loans due to competition with the GSEs. As a result big banks moved further out on the risk curve in search of higher margins.

2000-E:

After a lengthy period of development, HUD Secretary Andrew Cuomo issues the final rule on affordable housing goals for Fannie and Freddie. HUD raises the GSEs' Low- and Moderate-income Goal from 42% applicable for 2000 to 50% for 2001-2003. At the time of this increase, it was noted that "HUD's recent increases in goals for 2001-2003 will encourage the GSEs to further step up their support for affordable housing."[269] As a result of this and earlier increases, the GSEs' affordable housing goals were 67% higher than those in effect as recently as 1995.

HUD's desire for the GSEs' to "further step up their support for affordable housing" essentially meant an increase in support for the Special Affordable Goals (low- and very low-income) and the Underserved/Geographically Targeted Goals[270]. While the Low- and Moderate- income Goal increased by 8%, virtually all of it was the result of an increase in the Special Affordable Goal which increased from 14% to 20%, representing a percentage increase of 43%. As noted earlier, placing most of the increase in housing goals on the Special Affordable (low- and very low-income) category required the GSEs to reach much further down the demand curve. This necessitated a major expansion of their efforts to ease home purchase requirements by further lowering downpayments and developing other leverage increasing flexibilities. It also required deeper subsidies as compared to the moderate-income group. For example, Special Affordable home purchase loans increased from 25% to 37% of all low- and moderate-income home purchase loans with an LTV>95%.

HUD's published regulation provided this justification for the substantial increase in the affordable housing goals:

> "(5) A-minus Loans. Industry sources estimate that subprime mortgage originations amounted to about $160 billion in1999, and that these loans are divided evenly between the more creditworthy ('A-minus") borrowers and less creditworthy ('B', 'C', and 'D') borrowers. Based on HMDA data for 200 subprime lenders, the Department estimates that 58 percent of the units financed by subprime loans qualified for the Low- and Moderate-Income Housing Goal in 1998, 29 percent qualified for the Special Affordable Housing Goal, and 45 percent qualified for the Geographically Targeted Goal."
>
> "Freddie Mac has estimated that 10 to 30 percent of subprime borrowers would qualify

[269] HUD's Affordable Lending Goals for Fannie Mae and Freddie Mac, http://www.huduser.org/publications/pdf/gse.pdf

[270] "Families living in low income census tracts (or counties in nonmetro areas, prior to 2005; nonmetro underserved areas are now also defined at the tract level) and in high-minority, middle-income census tracts (also defined in terms of counties in nonmetro areas prior to 2005), excluding high income, high-minority census tracts." http://www.huduser.org/Publications/PDF/AREUEA_Presentation.pdf.

for a prime conventional loan. Fannie Mae Chairman Franklin Raines has stated that half of all mortgages in the high cost subprime market are candidates for purchase by Fannie Mae. Both Fannie Mae and Freddie Mac recently introduced programs aimed at borrowers with past credit problems that would lower the interest rates for those borrowers that were timely on their mortgage payments."

"Freddie Mac has also purchased subprime loans through structured transactions that limit Freddie Mac's risk to the 'A' piece of a senior-subordinated transaction."

"However, there may be ample room for further enhancement of both GSEs' roles in the A-minus market. A larger role by the GSEs might help standardize mortgage terms in this market, possibly leading to lower interest rates."[271]

And:

"The subprime borrower typically is someone who has experienced credit problems in the past or has a high debt-to-income ratio. Through the first nine months of 1998, 'A-minus' loans accounted for 63 percent of the subprime market, with 'B' loans representing 24 percent and 'C' and 'D' loans making up the remaining 13 percent."[272]

And

"Because the GSEs have a funding advantage over other market participants, they have the ability to under price their competitors and increase their market share. This advantage, as has been the case in the prime market, could allow the GSEs to eventually play a significant role in the subprime market. As the GSEs become more comfortable with subprime lending, the line between what today is considered a subprime loan versus a prime loan will likely deteriorate, making expansion by the GSEs look more like an increase in the prime market [emphasis added]. Since, as explained earlier in this chapter, one could define a prime loan as one that the GSEs will purchase, the difference between the prime and subprime markets will become less clear. This melding of markets could occur even if many of the underlying characteristics of subprime borrowers and the market's (i.e., non-GSE participants) evaluation of the risks posed by these borrowers remain unchanged."

"Increased involvement by the GSEs in the subprime market might result in more standardized underwriting guidelines. As the subprime market becomes more standardized, market efficiencies might possibly reduce borrowing costs. **Lending to**

[271] http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2000_register&docid=page+65043-65092
[272] http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2000_register&docid=page+65093-65142

credit-impaired borrowers will, in turn, increasingly make good business sense for the mortgage market [emphasis added]."[273]

The default experience Fannie and Freddie experienced on loans with a FICO <660 demonstrates the fallacy of this conclusion. As of 3.31.10 Fannie's serious delinquency rate on loans with a FICO<620 was 17.9%, >=620 and <660 was 13.2%, and >=660 was 4.2%.[274] The default risk imbedded in loans with a FICO below 660 was excessive given Fannie and Freddie's 222:1 statutory leverage ratio on their MBS guarantees and 40:1 on their portfolio investments.

Before HUD encouraged the GSEs to push further into subprime, two trends developing from 1996 onward were impacting the self-denominated subprime market. First, the GSEs began to move aggressively to acquire "A-minus" and "B" quality subprime loans. Second, banks being crowded out by the GSEs had little choice but to move further out the risk curve into self-denominated subprime. While banks were at a funding disadvantage relative to the GSEs, they were at a funding advantage relative to traditional subprime lenders. Much like the FHA market which was quite distinct from the conventional/GSE market until the passage of the GSE Act of 1992, the self-denominated subprime market was also distinct from the conventional/GSE market. In 1996 the top 20 self-denominated subprime originators had a 43% share of the self-denominated subprime market. None of these 20 was among either Fannie or Freddie's top 50 sellers. By 2002 this had changed dramatically with 7 of the top 20 self-denominated subprime originators or affiliated companies, with a 39% subprime market share, now among the GSEs' top 50 customers. The subprime market was shifting from one consisting of lenders that specialized in subprime to a group of broader based mainstream lenders that offered a range of products including subprime. This was a logical response to the GSEs' aggressive foray into the "A-minus" and "B" grades of subprime. Now that the GSEs were more comfortable with subprime, it made sense for subprime share market to shift to originators who were large customers of the GSEs so as to be in a position to work both the traditional and GSE sides of the subprime market. The wide spread use of the GSEs' proprietary automated underwriting platforms in the late 1990s helped promote this trend. One underwriting system could be used to evaluate a broad spectrum of loans of varying quality grades. Those acceptable to one or both GSEs would be directed there with the remainder destined for a private execution.

The 7 subprime sellers to the GSEs were Countrywide (owned a bank), Wells Fargo (bank), Washington Mutual (bank), Chase Manhattan (bank), GMAC, Citigroup (bank), and Ameriquest Mortgage and accounted for 44% of total sales to the GSEs.[275] As HUD had expected, the line between so called prime and subprime loans did "deteriorate" and the difference between prime and subprime did "become less clear". Ameriquest is an excellent example. It was the 6th largest self-denominated subprime lender and Freddie's 17th largest customer in 2002.[276] [277] This opaqueness misleads the market since the extent of weakened or NTM lending taking place is hidden

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[273] Id.
[274] Fannie's Q.1:2010 Credit Supplement
[275] Inside Mortgage Finance's The 2009 Mortgage Market Statistical Annual
[276] Ameriquest's sales to Fannie that year were $0 and it was not among the GSEs' 100 largest customers in any year prior to 2002.
[277] Inside Mortgage Finance's The 2009 Mortgage Market Statistical Annual

In its rulemaking, HUD also described the affordable housing regulatory regime as established by Congress:

> "To fulfill the intent of [the GSE Act of 1992], the GSEs should lead the industry in ensuring that access to mortgage credit is made available for very low-, low- and moderate-income families and residents of underserved areas. HUD recognizes that, to lead the mortgage industry over time, the GSEs will have to stretch to reach certain goals and close the gap between the secondary mortgage market and the primary mortgage market. This approach is consistent with Congress' recognition that 'the enterprises will need to stretch their efforts to achieve' the goals."[278]

At the same time, other policy initiatives supporting HUD's National Homeownership Strategy were also mandating that virtually all segments of the industry stretch their efforts to increase lending to very low- and low-income families and residents of underserved areas. In order for industry to move further down the demand curve, ever more flexible and innovative underwriting standards were necessary.

HUD, a social policy agency, plays a central regulatory role in orchestrating a multi-faceted weakening of underwriting standards over many years. **It does not appear that any other country had ceded the role of underwriting standard setter to a non-prudential regulator.**

HUD's regulatory regime drove a race to the bottom:

1. *Numerous federal policies are pushing all market participants in the same direction at the same time – increase lending to very low- and low-income families and residents of underserved areas. HUD was at the center of these efforts, responsible for setting the GSEs' affordable housing goals, operating FHA, and implementing its National Homeownership Strategy and Best Practices Initiative. While it was not HUD's direct responsibility, CRA operated in tandem with HUD's initiatives. HUD's actions mandated dangerous leverage increases for the sole purpose of forcing the housing finance industry to create demand. By pushing all these levers simultaneously, few areas of the housing finance industry escaped HUD's impact.*
2. *As noted above in the Intuit/FHA announcement, HUD aggressively uses FHA to lead the market in loosening underwriting standards.*
3. *HUD sets higher GSE goals to force the GSEs to lead the conventional industry in providing access to mortgage credit for very low-, low- and moderate-income families and residents of underserved areas. HUD relies on the fact that the GSEs have the ability to underprice their competitors and that this will work to increase their market share. HUD finds ample room for further enhancement of the GSEs' role in the A-minus subprime market. In order to create demand to meet the higher goals, the GSEs are*

[278] http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2000_register&docid=page+65043-65092

forced further down the demand curve necessitating further loosening of their underwriting standards.

4. *The actions by the GSEs and FHA lead to crowding out forcing the rest of the industry further down the demand curve. To compete and maintain share, they respond by further loosening their underwriting standards.*
5. *This process was repeated multiple times.*

HUD's expectation that "[l]ending to credit-impaired borrowers will, in turn, increasingly make good business sense for the mortgage market" would unfold with calamitous results. For the above reasons along with other circumstances yet to unfold, subprime, Alt-A and other NTM lending expand in ways that HUD does not anticipate.

2000-F:

Fannie announces $2 trillion American Dream Commitment.[279] Announcement made to comply with increases in affordable housing goals being planned by HUD: "Cuomo Announces Action to Provide $2.4 Trillion in Mortgages for Affordable Housing for 28.1 Million Families."[280]

2000-G:

Increasing affordable housing goals (especially special affordable goals) and a corresponding need to capture share from FHA (in 2000 over 52% of FHA's loans have an LTV>=97%[281]) force Fannie and Freddie to introduce the no downpayment (100% LTV) mortgage. By 2007 about 38% of Fannie's purchase loans had an LTV or combined LTV (CLTV) >=97%, with about half of these having no downpayment. (See **Chart 22** above)

2000-H:

The Fannie Mae Foundation completes its "Making New Markets: Case Study of Countrywide Home Loans.[282] Notable findings include (all are quotes):

1. "Countrywide formed a Fair Lending Task Force to implement the Declaration of Fair Lending Principles and Practices.
2. By 1999 Countrywide had opened House America retail branches in 19 inner city locations across the nation.
3. [While not covered by CRA] it has pledged itself to be a leader in the affordable and fair lending arena.

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[279] "Fannie Mae's $2 Trillion 'American Dream Commitment' On Course with Over $190 Billion in 2000..." http://www.allbusiness.com/legal/banking-law-credit-regulation/6045369-1.html
[280] HUD press release, July 29, 1999, http://archives.hud.gov/news/1999/pr99-131.html
[281] FHA's 2009 Actuarial Study
[282] Supra., Fannie Mae Foundation

4. FHA loans constituted the largest share of Countrywide's activity, until Fannie Mae and Freddie Mac began accepting loans with higher LTVs and greater underwriting flexibilities.
5. ...Countrywide was consulted by Fannie Mae in 1992 during the design of Fannie Mae's Community Home Buyers Program.
6. Most of Countrywide's lending activity is shaped around the affordable housing programs of Fannie Mac, Freddie Mac, FHA, and the major private mortgage insurance companies.
7. Countrywide's "We House America Program" featured conventional loans with a 97% LTV along with maximum front- and back-end ratios of 28% and 36% with no exceptions. Note: in 1999 FHA was offering 98.75% LTV loans with a 41% back end-ratio with exceptions.
8. Countrywide tends to follow the most flexible underwriting criteria permitted under GSE and FHA guidelines. Because Fannie Mae and Freddie Mac tend to give their best lenders access to the most flexible underwriting criteria, Countrywide benefits from its status as one of the largest originators of mortgage loans and one of the largest participants in the GSE programs.
9. When necessary—in cases where applicants have no established credit history, for example—Countrywide uses nontraditional credit, a practice now accepted by the GSEs.
10. Countrywide performs a monthly statistical analysis of loan activity by retail branch that generates a denial disparity index, or DDI. This index is the ratio of denial rates for minority applicants to denial rates for white applicants. Generally, the overall DDI range for Countrywide is between 1.3 and 1. The industry average generally ranges between 2 and 1, which suggests that Countrywide's denial rates have a significantly weaker correlation with race and ethnicity than do those of other lenders. In cases in which a Countrywide branch has a high DDI, management closely examines the branch's activities to determine the reason for the denial disparity."
11. Although Countrywide is impressive in its outreach and efforts to help potential borrowers qualify for its loan products, it largely lacks programs for potential borrowers who cannot meet the requirements of the secondary market. The reason is that Countrywide is a mortgage banker, currently sells approximately 99 percent of its loans to the secondary market. Countrywide has, however, played a significant role in extending the reach of the secondary market by working with the GSEs to develop new affordable lending products. An example was the partnership with Fannie Mae to develop Fannie Mae's Community Home Buyer's program."

2001-A:

National median home price to median income ratio breaks out of narrow range of 2.9 to 3.1 (1988 to 2000) as it increases to 3.4, eventually increasing to 4.6 by 2006. (See **Chart 9**)

2001-2003:

The increases in the GSEs' affordable housing goals announced by HUD in late 2000 take effect in 2001. While the moderate-income component had a modest increase from 28% in 2000 to 30% in 2001, the low- and very low-income component increased dramatically from 14% to 20%. This change is magnified by the start of a refinance boom in 2001 due to lower interest rates. As a result of this boom:

1. Annual first mortgage origination volumes increase dramatically from $995 billion in 2000 to $2,100 billion in 2001, $2,720 billion in 2002, and $3,725 billion in 2003.[283]
2. At the same time the GSEs' share of this origination volume also increases dramatically from 28% in 2000 to 37% in 2001, 41% in 2002, and 44% in 2003.[284]

As a result, while the overall market grew 375% over 2000 to 2003, the GSEs' acquisitions grew by 585%. The impact of higher goals for 2001-2003 was magnified by the refinance boom that also started at the beginning of 2001. As a result the GSEs' had to replace their rapidly turning over existing single-family credit portfolio (totaling over $2 trillion at year end 2000[285]) with new acquisitions subject to the higher low- and very low-income mandates.

2001-B:

> "And, speaking of Fannie Mae and Freddie Mac, let it be said that they now control the subprime market, having through their Alt A, "A-" [and "B"] programs absorbed the largest and best parts of the 'old' subprime world. What are left are the "C" and "D" segments. Combined, they only account for 20 to 30 percent of all subprime mortgages. (The old subprime market was about 15 percent of the total market.) Fannie/Freddie programs using risk-based pricing now encompass most mortgages with FICO scores of around 540 and up."[286] [287]

In 2001 Josh Rosner[288] observed:

> "[I]t appears a large portion of the housing sector's growth in the 1990's came from the easing of the credit underwriting process. Such easing includes:
>
> - The drastic reduction in minimum down payment levels from 20% to 0%

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[283] Inside Mortgage Finance
[284] Id.
[285] FHFA
[286] Tom LaMalfa, "Holm Mortgage Finance Report", January, 200. Document contained in the author's files.
[287] While the GSEs applied risk-based pricing to high LTV and low FICO loans, the pricing adjustments were insufficient and still required cross-subsidies. This was well documented by the FHFA in its analysis of loans acquired by the GSEs in 2007 and 2008. See "Fannie Mae and Freddie Mac Single-family Guarantee Fees in 2007 and 2008", http://www.fhfa.gov/webfiles/14700/GFees72009.pdf
[288] Josh Rosner, "Housing in the New Millennium: A Home Without Equity is Just a Rental With Debt", June, 2001 found at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1162456

- A focused effort to target the "low-income" borrower
- The reduction in private mortgage insurance on high loan to value mortgages
- The increasing use of software to streamline the origination process and modify/recast delinquent loans in order to keep them classified as "current"[289]
- Changes in the appraisal process which led to widespread over-appraisal/over-valuation problems."

Rosner warned in the same article:

> "The virtuous cycle of increasing homeownership due to greater leverage has the potential to become a vicious cycle of lower home prices due to an accelerating rate of foreclosures."[290]

Also in 2001, James Grant observed: [291]

> "What could explain a bull market[292] in a non-earning asset in a non-inflationary era? Ample credit is the first answer.... In the first quarter, Fannie Mae, Freddie Mac and the Federal Home Loan Banks together expanded their book by $84.7 billion, or 12.7% annualized."

At about the same time Rosner and Grant were observing a bull market based on easy credit, a very different message came from Fannie's vice chair, Jamie Gorelick:

> "As it has for the past five decades the trend of increasing debt-to-value [LTV] ratios will continue in the current decade. Back in the '50s, the average ratio was just 20%—today it is 47%.[293] Where might it go? ... [a]s more lenders bring more low down-payment mortgages to the market, that will also boost the debt-to-value-ratio."[294]

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[289] The result is to reduce the chance of foreclosure conditional on 90 days of delinquency at which point the borrower qualifies for a modification. This new encouragement for workouts started in the mid-1990s and became a further magnet for bad credit. Increasing delinquency rates and foreclosures are signals of weak lending. With prevalent recasts, these signals are muted. FHA started its loan modification program in May 1996. See ABT, "An Assessment of FHA's Single-Family Mortgage Insuranee Loss Mitigation Program", p. 2, http://www.abtassociates.com/reports/ES-20007197399621.pdf

[290] Id.

[291] James Grant, "Mr. Market Miscalculates, The Bubble Years and Beyond", 2008, Axios Press

[292] Id. Earlier in the article Grant made note of the fact that house prices had just increased by 8.8% over the year ending Q.1:01

[293] This percentage includes the approximately 30% of homeowners without a mortgage. Netting this group out, increases the debt-to-value (LTV) ratio to about 62%. After the market collapse the average LTV of homeowners with a mortgage(s) reached about 90% in 2009.

[294] Supra., James Grant, Ms. Gorelick's remarks made in November 2001 at a convention of community bankers.

2001-2006:

Since the mid-1980s the charter advantages enjoyed by Fannie and Freddie made it virtually impossible for the private sector to compete head to head. In the origination market the GSEs' advantages resulted in commoditization of the plain vanilla mortgage. This drove spreads down and pushed originators/portfolio lenders out the risk curve. Overcoming the GSEs' benefits of high leverage, low borrowing cost, and implicit government guarantee had proved insurmountable. It was not for lack of trying. Companies with "AAA" ratings, such as GE Capital, Wells Fargo, AIG, and FGIC, had tried and failed. In general they found that their "AAA" rating was insufficient as Fannie and Freddie's implicit government guarantee and resulting high leverage gave the GSEs a pricing advantage that they could not overcome.[295] The only entities that had modest success in competing against Fannie and Freddie were another group of GSEs, the Federal Home Loan Banks (FHLBs). The FHLBs began setting up programs to compete with Fannie and Freddie in 1998.

HUD took notice of the effect this pricing advantage had had in the prime market and speculated that this "could allow the GSEs to eventually play a significant role in the subprime market."[296] Given the likely cross-subsidization that the GSEs would utilize to meet the recently increased affordable housing goals, HUD was expecting that this same distortion would now extend to the pricing on subprime loans.

> "As the subprime market becomes more standardized [commoditized], market efficiencies might possibly reduce borrowing costs."[297]

This same commoditization was occurring in the MBS market. In 1995 the GSEs had 30% of the mortgage market and private MBS had 8%. By 2003 the GSEs' share had risen to 49% while private MBS accounted for 15%. Big losers in share were the portfolio mortgage holders (mostly banks and thrifts) for the reasons noted above. Their share declined from 50% in 1995 to 30% in 2003. The buy/sell spread received by a broker-dealer (Wall Street) selling handling the trade on agency MBS was narrow as compared to private MBS and CDOs. Like originators, Wall Street moved out the risk curve to private MBS and CDOs backed by NTMs where the spreads were higher.

On November 1, 2001 banking regulators issued a final rule amending bank risk based capital rules to provide a 20% weight for "AAA" and "AA" tranches of private MBS, the same weight established in 1988 for Fannie and Freddie MBS. The new rule takes effect January 1, 2002[298]

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[295] This can be illustrated with a simple example. If a bank holds whole home mortgage loans in its portfolio, its risk based capital requirement is 4% (whole loans are given a 50% risk weighting). This results in a 25:1 leverage ratio. Now the bank takes the exact same loans, has Fannie or Freddie issue their MBS (requires 0.45% capital by the GSE) and buys back the MBS. Now the bank is required to hold 1.6% capital due to the 20% risk weighting for GSE MBS. Total capital required is 2.05% resulting in a leverage ratio of 49:1.

[296] http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2000_register&docid=page+65093-65142

[297] Id

[298] "In November 1, 2001 the Agencies revised their risk-based capital standards to permit banking organizations to rely on external credit ratings by Nationally Recognized Statistical Rating Organizations (NRSROs) to assign risk

and provided validation of the low risk level presented by these tranches not only for banks, but for all investors.

Coinciding with this regulatory change was a greater reliance on collateralized debt obligations (CDOs) and CDOs squared.[299] CDO volume was low prior to 2001 with cumulative volume totaling about $120 billion over 1998-2000 and the volume represented by single-family (SF) CDOs only totaling about 8% or $10 billion over the same period. CDOs represented an infinitesimal portion of the U.S. mortgage market, which totaled $2.8 trillion over 1998-2000. By 2004 annual CDO volume totaled $100 billion with single-family (SF) CDOs totaling 40% or $40 billion.[300] While only CDOs and CDOs squared volume equated to 1.3% of the total mortgage market in 2004, CDOs and CDOs squared volume represented about 5% of private MBS issuance volume., Most importantly, 78% of all private MBS tranches below "A" made their way into CDOs (see **Chart 33** below).

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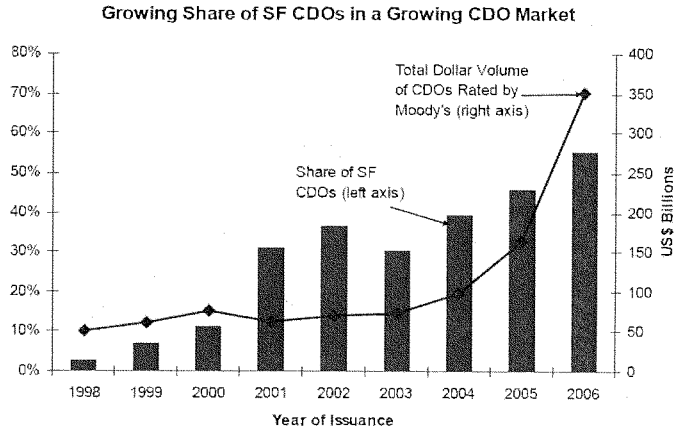
weight to certain...asset- and mortgage-backed securities. For example, subject to the requirements of the rule, mortgage-backed securities with a long-term rating of AAA or AA may be assigned to the 20 percent risk- weight category...." http://www.dallasfed.org/banking/notices/2005/not0566.pdf

[299] CDOs were securities comprised of rated tranches from private MBS. CDOs squared were securities comprised of rated tranches from CDOs.

[300] Jian Hu, Senior Vice President, Structured Finance – CDOs/Derivatives, Moody's Investors Service, "Assessing the Credit Risk of CDOs Backed by Structured Finance Securities: Rating Analysts' Challenges and Solutions", August 31, 2007 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1011184.

Chart 33: [301]



Note: The data in this chart does not include non-US$ denominated tranches and wrapped tranches.

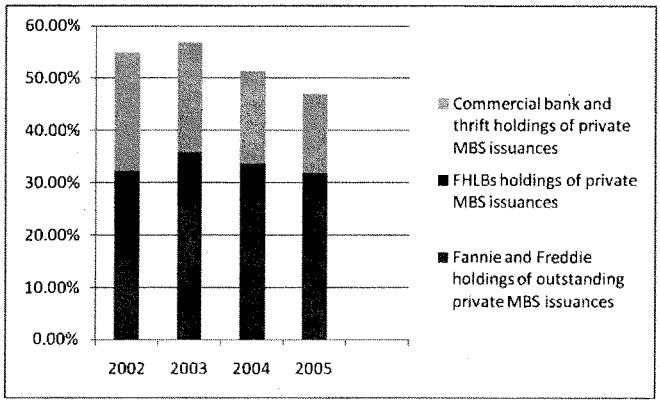
CDOs and CDOs squared were a significant help to the private sector in leveling the leverage playing field versus the GSEs.[302] The credit support for the "AAA" and "AA" tranches was provided by the lower rated and unrated tranches. While these lower rated tranches had higher yields than the "AAA" and "AA" tranches, finding buyers was still problem. Increasing the yields to attract more buyers would have made private MBS less competitive as compared to Fannie and Freddie's MBSs. CDOs and CDOs squared solved this problem by allowing MBS issuers and underwriters to create additional "AAA" and "AA" tranches out of the lower rated tranches – at lower yields and without providing any new credit support. By creating CDOs from these harder to sell tranches, additional tranches of the more desirable "AAA" and "AA" securities were created. Since these had narrower spreads, private MBS became more competitive with the GSEs' MBS. In effect the newly minted "AAA" and "AA"CDO tranches were now backing the old "AAA" and "AA" private MBS tranches.

[301] Jian Hu, Senior Vice President, Structured Finance – CDOs/Derivatives, Moody's Investors Service, "Assessing the Credit Risk of CDOs Backed by Structured Finance Securities: Rating Analysts' Challenges and Solutions", August 31, 2007 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1011184.

[302] The idea that CDOs opened the door for "AAA" private MBS to much more effectively compete with Fannie and Freddie for the very first time ever is not well known. However, the above analysis was confirmed on 8/7/10 by a principal of a hedge fund, with longstanding participation in the CMO, CDO and CDOs squared markets. This window of opportunity opened in 1H03 and closed by 2H05.

Fannie, Freddie and the Federal Home Loan Banks (FHLBs) were major drivers of the demand for the "AAA" tranches of private MBS (primarily subprime and to a lesser extent Alt-A).[303] As the private MBS market (measured by issuances outstanding) tripled in size from 2002-2005, going from $414 billion in 2002, to $586 billion in 2003, $864 billion in 2004, and $1.191 trillion in 2005. Fannie, Freddie and the Federal Home Loan Banks maintained a consistent 1/3 share throughout the 2002-2005 period. The next largest identifiable buyer group consisted of commercial banks and thrifts. Their share declined from about 20% to 15%.[304]

Chart 34:



Source: Inside Mortgage Finance's The 2009 Mortgage Market Statistical Annual and compiled by Edward Pinto

The following simplified example illustrates how CDOs and CDOs squared boosted leverage. Subprime MBS consisted of tranches with ratings ranging from "AAA" to unrated. The "AAA" and "AA" tranches accounted for about 80% and 11% respectively, with the remaining 9% made up of lower rated ("A", "BBB", and "BB") and unrated tranches. This yields $10 in "AAA" and "AA" rated tranches versus $1 in lesser rated and unrated tranches. Create a CDO using the rated tranches of a private MBS and the percentage of "AAA" and "AA" rated tranches increases to 95.4%.[305] This yields $21 in high rated tranches versus $1 in lesser rated and unrated tranches. Create a CDO squared using the rated tranches of a CDO and the percentage of "AAA" and "AA" rated tranches increases to about 98%; yielding $49 in high rated tranches versus $1 in lesser rated and unrated tranches. The credit support for the "AAA" and "AA" tranches has been reduced from 9% to 2%, increasing leverage relative to the "AAA" and "AA"

[303] Fannie, Freddie and the Federal Home Loans Banks (FHLBs).invested exclusively in "AAA" tranches.
[304] Inside Mortgage Finance, The 2009 Mortgage Market Statistical Annual, Vol. 2, p. 278
[305] http://www.mhhe.com/economics/cecchetti/Cecchetti2_Ch07_StructuredProducts.pdf

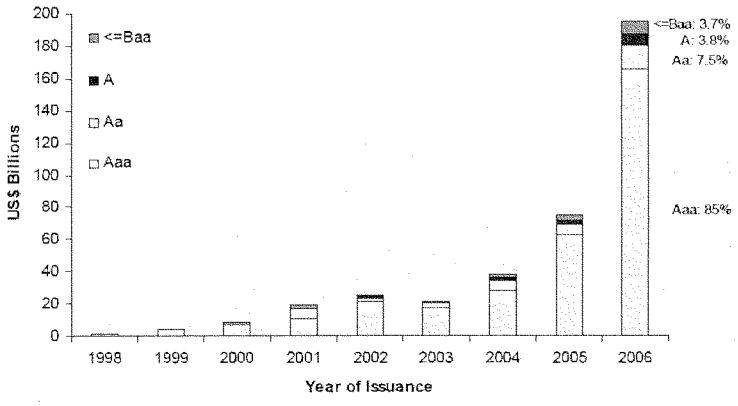
tranches from 10:1 to 49:1. Move the CDO into a structured investment vehicle (SIV) and leverage can be increased even further.

CDOs and CDOs squared did not directly increase the supply of private MBS since the raw materials for CDOs were tranches from private MBS. Likewise for CDOs squared, whose raw materials were tranches of CDOs. This was a zero sum relationship. However, due to the additional leverage CDOs and CDOs squared provided, they had a tremendous indirect impact on increasing the supply of private MBS. An apt analogy would be the development of new methods to "crack" petroleum.[306] This process did not add one barrel to the supply of petroleum. Yet the various by-products made available by the cracking process created explosive demand for the raw material – petroleum.

Chart 35 shows the dollar volumes and rating distribution of single-family CDOs.[307]

Chart 35:

Dollar Volume and Rating Distribution of SF CDOs



Note: The data in this chart does not include non-US$ denominated tranches and wrapped tranches. "<=Baa" represents securities rated Baa or below.

Fannie and Freddie's MBSs did not need to be structured with tranches having different ratings

[306] Wikipedia: Cracking is the process whereby complex organic molecules such as heavy hydrocarbons are broken down into simpler molecules (e.g. light hydrocarbons such as gasoline, diesel fuel, and liquefied petroleum gas) by the breaking of carbon-carbon bonds. This process was first developed in the 1890s. http://en.wikipedia.org/wiki/Cracking_%28chemistry%29

[307] Jian Hu, Senior Vice President, Structured Finance – CDOs/Derivatives, Moody's Investors Service, "Assessing the Credit Risk of CDOs Backed by Structured Finance Securities: Rating Analysts' Challenges and Solutions", August 31, 2007 http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1011184.

since their MBSs benefit from the implicit government guarantee. A Fannie MBS required Fannie to hold capital of 0.45% and the bank buying the MBS to hold 1.6%, for total capital of 2.05% and a leverage ratio of 49:1. While the private MBS/CDO/CDO squared execution still had a lower leverage ratio than a GSE MBS, the gap had been substantially closed. Again use of a SIV (Structured Investment Vehicle) could increase leverage further. Since the loans being securitized had higher margins, the overall execution was financially viable. So viable that Countrywide and other private MBS issuers were now in a position to offer pricing that allowed for an all-in execution for both GSE-conforming and non-GSE-conforming loans.

This impact may be illustrated by looking at the GSEs' share of Countrywide's business. From 2000 to mid-2003 (before the advent of heavy use of CDOs and CDOs squared), Fannie's and Freddie's share of Countrywide's prime conventional and total business averaged about 88% and 70% respectively. Their share of Countrywide's business declined dramatically as CDOs and CDOs squared, with the benefits of increased leverage, came into common usage. By early-2005 Fannie's and Freddie's share of Countrywide's prime conventional and total business had dropped by more than half, averaging about 37% and 27% respectively.[308]

In July 2005 Fannie noted "[S]trong CDO demand for subordinate bonds means lenders have a steady investor source for riskiest credit" was one of the "key drivers of growth in subprime."[309] The benefit of an all-in execution is illustrated by the following:

- Over the period April 2004 - January 2005, 90% of the conforming loans (based on size) in prime fixed and ARM private MBS met Fannie's standards and comprised 17% of collateral backing these MBS. These loans had a weighted average combined LTV of 92.4%, 40% were low doc/no doc, and 79% were interest only;
- Over the period April 2004 - January 2005, 62% of the conforming loans (based on size) in Alt-A private MBS met Fannie's standards and comprised 36% of collateral backing these MBS. These loans had a weighted average combined LTV of 95.8%, 56% were low doc/no doc, 60% were interest only, 24% were investor loans, and 21% were cash out; [310]

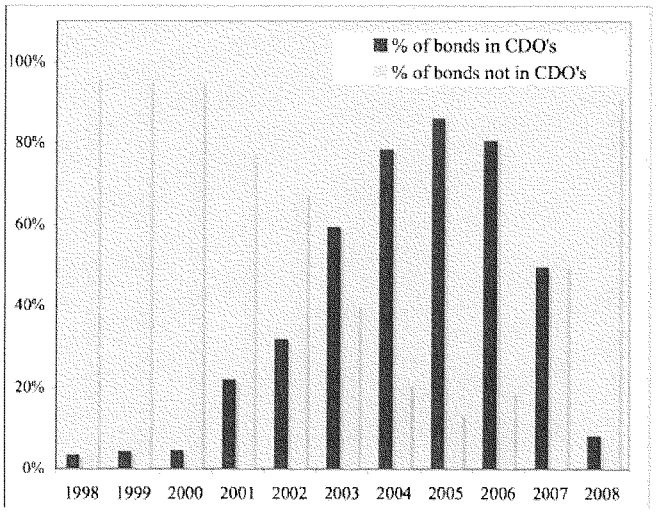
Adding to the pressure on Fannie was that Alt-A and Subprime "scored high relative to [its] core products – Alt-A: 30% total minority score [and] Subprime: 52% total minority score."[311] Alt-A also had a high score for 1-4 unit rental (investor) properties, providing the GSEs with another means of meeting their escalating goals.

CDOs provided the most benefit when comprised of tranches rated below "A". Since these tranches typically accounted for about 4% of a private MBS, CDOs quickly absorbed an

[308] Fannie Mae document released by the U.S. House Committee on Oversight and Government Reform, "Single Family Guarantee Business – Facing Strategic Crossroads", June 27, 2005
[309] Id.
[310] Id.
[311] Id.

increasing percentage of the lower rated tranches. By 2003, CDOs were utilizing 60% of lower rated tranches on subprime private MBS, up from 30% in 2002. By 2004 CDOs were absorbing 80%.[312]

Chart 36: Percent of mezzanine tranches (tranches rated below "A") from subprime MBS either in and not in CDOs



The policy justification for the GSEs' low capital requirement and risk based weight rested on the concept that since they only invested in low risk mortgage assets (generally true prior to passage of the GSE Act of1992) and were large holders of those assets, their risk was well diversified.[313] In an interesting parallel, similar logic was used by the rating agencies in rating CDOs. Using Moody's as an example, a separate area within Moody's was responsible for rating CDOs. This group relied on the underlying ratings given to the tranches by the residential MBS (RMBS) area of Moody's. These assets were viewed as a type of asset with limited downside risk:

[312] http://www.hks.harvard.edu/m-rcbg/students/dunlop/2009-CDOmeltdown.pdf

[313] Congress made the following finding in the GSE Act:"[c]onsidering the current operating procedures of the Federal National Mortgage Association, the Federal Home Loan Mortgage Corporation, and the Federal Home Loan Banks, the enterprises and the Banks currently pose low financial risk of insolvency." http://en.wikisource.org/wiki/Housing_and_Community_Development_Act_of_1992/Title_XIII

> "As a new kind of asset sourced from the consumer sector, subprime RMBS were also perceived to yield substantial benefit of diversification."[314]

In both instances the fact that a lengthy period of loosened lending could cause a downturn in the housing market to turn into a broad and deep decline in home prices was missed. This turned the perceived benefit of diversification into an albatross.

The risk based capital standards for mortgage securities were the regulatory equivalent of the Heisenberg Uncertainty Principle, which holds that it is impossible to measure simultaneously both position and velocity of a microscopic particle with any degree of accuracy or certainty, since measuring one will invariably change the value of the other. The same principle may be applied to asset classes – – it is impossible to determine simultaneously both the credit risk of an asset and its appropriate risk weight with any degree of accuracy or certainty. Whenever an asset class is signaled out with a low risk designation thereby allowing for a low risk capital weight (i.e. greater leverage), forces are unleashed (such as increased demand and efforts to meet that demand) causing the category to morph to higher risk.

2002-A:

In April, Fannie's Chairman Franklin Raines described the competitive landscape for public funding for housing:[315]

> "As a result of both congressionally mandated lending requirements and its own $2 trillion American Dream Commitment, Fannie Mae has not-so-quietly become the largest single provider of mortgage funds to minority and low-income families, its chairman declared last week."
>
> "Not only is Fannie Mae 'by far' the largest supplier of mortgage money in the private sector, Franklin Raines proclaimed, the federally-chartered corporation is running 'neck and neck' with the Federal Housing Administration as the chief source of public funding for housing."
>
> 'The government is our only competitor,' Mr. Raines said."

The absurdity of a government sponsored enterprise viewing the government as its competitor was lost on Mr. Raines. Congress intended this competition in passing the GSE Act of 1992.

2002-B:

Alt-A volume as a percent of the overall market stayed quite small until 2004, equaling 5% or less through 2003. While there is little hard data on Fannie and Freddie's involvement in the Alt-

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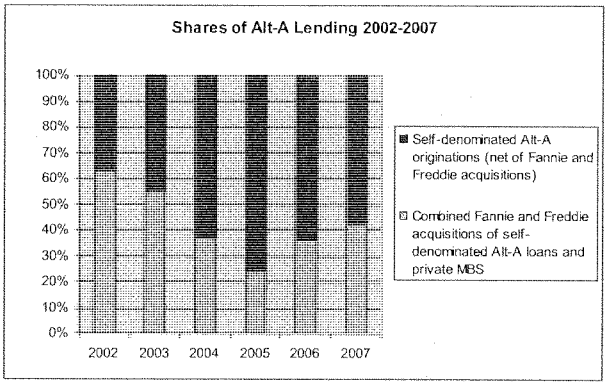
[314] Supra. Jian Hu

[315] "Fannie Mae Declares Itself a Leader In Reaching Out to the Underserved", National Mortgage News, April 1, 2002, http://www.encyclopedia.com/doc/1G1-84313517.html

A market prior to 2002, anecdotal evidence dates their re-entry to the late-1990s. This is supported by the fact that by 2002 they were the dominant purchasers of Alt-A loans (see **chart 36** below). The GSEs acquired an $84 billion in combined Alt-A whole loans and private MBS, amounting to 63% on a dollar and 75% on a loan count basis of Alt-A loans originated in 2002.

As shown above in **Chart 29**, the GSEs' share of Alt-A on a dollar basis declined to below 50% for 2004 and the years following.

Chart 37: Share of Alt-A Lending 2002-2007 (on a dollar basis)



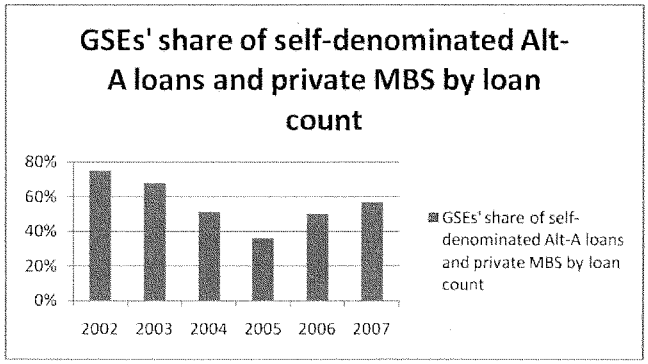
Sources: Inside Mortgage Finance, OFHEO's "Mortgage Markets and the Enterprises" annual reports and Fannie and Freddie Information Statements and Annual Reports. Compiled by Edward Pinto

It is important to note that the average loan size of the Alt-A loans and securities acquired by the GSEs was a little more than half that of those they did not buy. As a result their share on a number of loans basis dropped below 50% only in 2004 (see **Chart 38** below). Thus the GSEs accounted for an estimated 60% of the 5.5 million self-denominated Alt-A loans outstanding as of 6.30.08.[316] These 5.5 million loans had an outstanding balance of $1.3 trillion.[317]

[316] Self-denominated Alt-A loans are either ones reported as Alt-A by Inside Mortgage Finance or acquisitions reported as Alt-A by Fannie and Freddie. Based on the totals reported by each there does not appear to be overlap. For example, Inside Mortgage Finance reports Alt-A originations in 2003 of $85 billion of which $74.2 billion ended up in Alt-A private MBS. For the same year, FHFA (formerly OFHEO) reported that Fannie and Freddie acquired $77 billion in Alt-A whole loans. GSE acquisitions of $77 billion do include $12 billion of Alt-A private MBS tranches purchased by the GSEs. See OFHEO's Mortgage Markets and the Enterprises in 2003. p. 14, http://www.fhfa.gov/webfiles/2253/MME2003.pdf. Similarly for 2005 Inside Mortgage Finance reports $380 billion of Alt-A originations of which all but $48 billion ended up in private MBS. Fannie reports in its Q1:2008 Investor Summary on p.30 that it had $59.4 billion in Alt-A credit risk left from 2005 acquisitions (excludes any Alt-A private MBS acquisitions). http://www.freddiemac.com/investors/er/pdf/supplement_031109.pdfLikewise, Freddie reports in its 2008 Investor Supplement on p. 16 that it had $31.5 billion of Alt-A loans left from 2005 acquisitions (excludes any Alt-A private MBS acquisitions).
http://www.freddiemac.com/investors/er/pdf/supplement_031109.pdf).

[317] Derived from Fannie, Freddie, Inside Mortgage Finance, and New York Federal Reserve data

Chart 38:



Sources: Inside Mortgage Finance, OFHEO's "Mortgage Markets and the Enterprises" annual reports and Fannie and Freddie Information Statements and Annual Reports. Compiled by Edward Pinto

The GSEs' purchased large quantities of Alt-A loans in both whole loan and securitized forms. Alt-A whole loans were purchased in bulk transactions acquired from Wall Street firms and loan originators.

The GSEs' dominance of the Alt-A market on a loan count basis provided a seal of approval for Alt-A loans and paved the way for Alt-A's surge in popularity in 2004-2007. Over much of this period the GSEs were buying bulk whole loan Alt-A packages directly from lenders and Wall Street investment bankers.

Alt-A loans were affordable housing "goals rich" in non-owner occupied (NOO) single-family (1-4 unit) rental units and minority [underserved] borrowers which helped drive the GSEs' appetite for these loans. The following statement from Freddie confirms the role Alt-A played with respect to the affordable housing goals (particularly the underserved goal):

> "The Alt-A business makes a contribution to our HUD goals. This year [2004] the Alt-A bulk [whole loan] transactions contribute 2 basis points towards achieving our Low/Mod goals, 5 basis points to our Special/ Affordable goals, and 40 basis points to our underserved GSE goals. During 2003, the Alt-A bulk business contributed 10 basis points to our Low/Mod and Special/Affordable goals. However, the NINA {no income/no assets] business by themselves have a negative impact to goals due to the fact that borrower income is not disclosed." Internal Freddie Mac email from Mike May to Dick Syron, dated October 6, 2004 FMAC0013695 (contained in materials disclosed to the House Oversight and Government Reform Committee).

Also:

> "[since] NINA [no income/no asset] loans are minority rich, it will make it even more difficult to match the private market level of minority and underserved mortgage production." Internal Freddie Mac email from Donna Cogswell to Dick Syron, et. al. dated September 7, 2004 FMAC0013739 (contained in materials disclosed to the House Oversight and Government Reform Committee).

Also on page 11 of Mortgage Market Note 10-2, FHFA noted:

> "As the Alt-A market collapsed and underwriting standards tightened in 2008, the Enterprises' underserved areas goal performance suffered and, for the first time, one of the Enterprises, Freddie Mac, failed to meet the goal."[318]

OFHEO documented Alt-A whole loan purchases by Fannie and Freddie in 2002 and 2003:

> "Fannie Mae reported purchasing approximately $73.2 billion of low-documentation loans—mortgages to borrowers with good credit who chose to avoid the normal paperwork associated with getting a mortgage—in 2003, up from $51.8 billion in 2002....Freddie Mac purchased $3.9 billion of Alternative A loans in 2003, down from $14.5 billion in 2002."[319]

See Appendix E for further information on the contribution of Alt-A NOO single-family rental units to affordable housing goals.

2003-A:

The GSE Act of 1992 mandated the GSEs to dramatically increase the primary market's supply of affordable housing loans. The only means to accomplish this was by means of lower downpayments and the progressive weakening of underwriting standards through flexible underwriting. The GSEs subsidized high risk lending with their low risk business. The MBS guaranty portion of their businesses was low margin and did not yield sufficient subsidy for the task. The portfolio had much larger margins and could provide the needed subsidies. Growing the portfolio was the solution. The GSEs' combined mortgage portfolios increased from $136 billion in 1990 to $1.58 trillion in 2003.[320] Over time the high risk portion of the business grew and as the downpayment requirement shrunk, the cross subsidies needed became larger and the mispricing of risk became more unsustainable. As a result, the GSEs seriously under priced the risks they were taking on, thereby compounding the problem posed by their high level of leverage.

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[318] http://www.fhfa.gov/webfiles/15408/Housing%20Goals%201996-2009%2002-01.pdf.pdf
[319] http://www.fhfa.gov/webfiles/15408/Housing%20Goals%201996-2009%2002-01.pdf.pdf
[320] Source: FHFA

2003-B:

The GSE Act of 1992 required the GSEs to take affirmative steps to assist banks in meeting their CRA obligations. In an early 2003 press release,[321] Fannie notes that for the period 2000-2002, it purchased $394 billion in CRA lending. It also noted that after having stepped up its CRA efforts, more than half of these CRA acquisitions ($201 billion) occurred in 2002. This constituted about 50% of Fannie's low and moderate affordable housing acquisitions for 2002.[322]

2003-C:

Helped by CDOs and CDOs squared, Countrywide and its subsidiaries were able to achieve a position envied by other market participants due to its successful vertical integration of the entire mortgage value chain from retail, correspondent, and wholesale lending[323] to securities underwriter.

In addition to being the nation's largest originator, largest wholesale originator, largest loan servicer, Fannie's largest customer, and the nation's second largest retail originator, Countrywide was both a major issuer (through Countrywide Financial) and underwriter (through Countrywide Securities) of non-Agency or private MBS (PMBS):

- Countrywide Financial's market share of private MBS issuances grew from 1.9% in 1996 (with a rank of #13) to 10.1% in 2003 (with a rank of #1) and 13.4% in 2006 (again with a rank of #1).

- Countrywide Securities' underwriting market share of PMBS grew from 1.4% in 1997 (with a rank of #13) to 8% in 2003 (with rank of #4) and 10% in 2006 (with rank of #2).[324]

[321] "Fannie Mae Passes Halfway Point in $2 Trillion American Dream Commitment; Leads Market in Bringing Housing Boom to Underserved Families, Communities" http://findarticles.com/p/articles/mi_m0EIN/is_2003_March_18/ai_98885990/pg_3/?tag=content;col1

[322] In 2002 Fannie acquired about $804 billion in single family mortgages (FHFA's 2008 Report to Congress, http://www.fhfa.gov/webfiles/2331/FHFAReportToCongress2008final.pdf) and had achieved a 52% low and moderate-income goal (see Chart 27 above). This resulted in $418 billion in low- and moderate-income purchases.

[323] Retail originations are those made directly by the lender. Correspondent originations are those purchased from another lender that directly made the loans. Wholesale originations are those involving a loan broker.

[324] Inside Mortgage Finance

Chart 39 demonstrates that Countrywide was the largest source for private MBS tranches used to create CDOs for 9 of the 10 largest CDO underwriters:[325]

Chart 39: Top CDO underwriters, number of issues and largest residential MBS supplier:

Bank underwriting CDO	# Of CDOs issued	Largest Residential MBS supplier
Merrill Lynch	107	Countrywide
Citigroup	80	Countrywide
Credit Suisse	64	Countrywide
Goldman Sachs	62	Countrywide
Bear Stearns	60	Countrywide
Wachovia	52	Countrywide
Deutsche Bank	50	Countrywide
USB	46	Bear Stearns
Lehman	35	Countrywide
Bank of America	32	Countrywide
Total # of issues	697	

2003-D:

Countrywide's CEO, Angelo Mozilo, gives the prestigious Dunlop Lecture sponsored by Harvard's Joint Center for Housing Policy. This annual address is made "by a housing leader to highlight the importance of housing as a policy and research area at the university and in business."[326] Mozilo stated:

> "One of the more obvious resolutions to the 'Money Gap' is the elimination of downpayment requirements for low-income and minority borrowers. Current downpayments of 10% or less add absolutely no value to the quality of the loan. It is the willingness [credit history] and the ability of the borrower to make monthly payments that are the determinants of loan quality."[327]

> "From my point of view, if 80% of the sub-prime borrowers are managing to make ends meet and make the mortgage payments on time, then, shouldn't we as a Nation, be justifiably proud that we are dramatically increasing homeownership opportunities for those who have been traditionally left behind."[328]

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[325] Chart 30 found at http://www.hks.harvard.edu/m-rcbg/students/dunlop/2009-CDOmeltdown.pdf
[326] 2003 Dunlop Lecture, Harvard's Joint Center for Housing Policy, http://www.jchs.harvard.edu/publications/homeownership/M03-1_mozilo.pdf
[327] Id.
[328] Id.

The significance of Mozilo's 80% comment is that 20% of borrowers are not paying.

A 20% default rate with a 50% severity (the percentage of the loss relative to the mortgage balance) results in a 10% loss rate. Losses of this magnitude require an annual default risk premium of 2.5%-3%. This default incidence is unsustainable at the family level – loosened underwriting sets up many home owners for failure. It is unsustainable at the neighborhood level – as foreclosures spread they destroy neighborhoods.

In 2003 Countrywide was the nation's 8th largest subprime lender with a 6% market share. By 2006 it was #3 with a 6.8% share of a subprime market that was twice the size in 2003.[329]

2003-E:

While the self-denominated subprime market has grown in dollar volume, it has lost market share due to Fannie and Freddie in 2001-2003 (see **Chart 28** above and **Chart 40** below). This result was expected by HUD when it issued the GSEs' higher affordable housing goals in 2000. At the same time, substantial consolidation occurred with the top 25 lenders now having over twice the market share as in 1995:[330]

Chart 40:*

Total Originations—Consolidation and Growth

Year	Total B&C originations (billions)	Top 25 B&C originations (billions)	Top 25 market share of B&C	Total originations	B&C market share of total
1995	$65.0	$25.5	39.3%	$639.4	10.2%
1996	$96.8	$45.3	46.8%	$785.3	12.3%
1997	$124.5	$75.1	60.3%	$859.1	14.5%
1998	$150.0	$94.3	62.9%	$1,450.0	10.3%
1999	$160.0	$105.6	66.0%	$1,310.0	12.2%
2000	$138.0	$102.2	74.1%	$1,048.0	13.2%
2001	$173.3	$126.8	73.2%	$2,058.0	8.4%
2002	$213.0	$187.6	88.1%	$2,680.0	7.9%
2003	$332.0	$310.1	93.4%	$3,760.0	8.8%

SOURCE: *Inside B&C Lending*. Individual firm data are from *Inside B&C Lending* and are generally based on security issuance or previously reported data.

* B&C stands for "B" and "C" grade subprime lending.

Chart 41 provides further evidence of the effects of crowding out by the GSEs with respect to self-denominated subprime lenders. The GSEs' subprime loan acquisitions were almost entirely fixed rate. Virtually all of the GSEs' subprime loan (FICO <620) acquisitions were fixed rate.[331]

[329] Inside Mortgage Finance

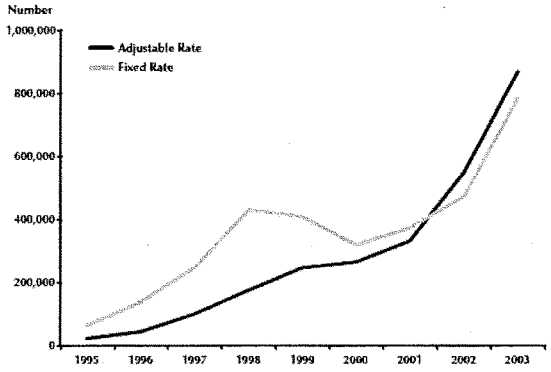
[330] Souphala Chomsisengphet and Anthony Pennington-Cross, January-February 2006 , "The Evolution of the Subprime Mortgage Market" http://research.stlouisfed.org/publications/review/06/01/ChomPennCross.pdf

[331] The earliest available data is from Fannie's Q.3:07 Credit Supplement. It shows that 91.5% of Fannie's acquisitions with a FICO <620 were fixed rate. It is believed that this percentage was applicable similar acquisitions

As the GSEs gained market share in 2001-2003, the subprime market responded by moving out the risk curve to ARM loans. In 1996-7 more that 2/3 of securitized self-denominated subprime loans were fixed rate. By 2002, subprime ARMs outnumbered fixed rate ones.[332]

Chart 41:

Number of Loans Originated



SOURCE: LoanPerformance ABS securities data base of subprime loans.

2004-A:

Piggyback or combination 1st and 2nd mortgage lending has been around for decades. It involves a borrower taking out two simultaneous or near-simultaneous mortgages. Usually the 1st is for 80% and the 2nd is for 10, 15, or 20% of the sales price or appraised value. The motivation is usually to either avoid the mortgage insurance requirement placed on the GSEs in their charters or to reduce the size of the 1st to the GSE conforming loan limit. The use of piggyback lending surged in the late 1990s. By 2004 over 34% of all purchase transactions had a piggyback loan and 71% had a downpayment of <=5%.[333] [334]

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made in earlier years. Found at p. 3, http://www.fanniemae.com/ir/pdf/earnings/2007/credit_supplement.pdf;jsessionid=RISU2ZKEYOXSHJ2FECISFGA

[332] Souphala Chomsisengphet and Anthony Pennington-Cross, January-February 2006 , "The Evolution of the Subprime Mortgage Market" http://research.stlouisfed.org/publications/review/06/01/ChomPennCross.pdf

[333] "Piggyback Mortgage Lending, SMR Research Corporation, 2004, pp. 6-7

[334] Piggyback transactions were generally structured as an 80/10/10 (80% 1st, 10% 2nd, and 10% equity), an 80/15/5 (80% 1st, 15% 2nd, and 5% equity) or an 80/20 (80% 1st, 20% 2nd, and 0% equity). Therefore, piggyback lending with a combine LTV>90% effectively meant a downpayment of 5% or zero.

Chart 42:

	2001	2002	2003	2004
% of home purchase transactions (units) with piggyback loans[335]	**14.1%**	17.53%	22.59%	32.76% (1st half)
% of piggyback home purchase transactions (units) with downpayment of <=5%[336]	50.05%	62.19%	66.65%	71.00% (1st half)
% of all home purchase transactions (units) attaining a downpayment of <=5% using piggyback financing	**7.06%**	**10.90%**	**15.06%**	**23.26%** (1st half)
% of all conventional home purchase transactions/all home purchase transactions (adjusted to account for government home purchase loans) with a downpayment of <=5% using private mortgage insurance[337]	21%/**19%**	21%/**20%**	20%/**19%**	18%/**17%**
% of all home purchase transactions (units) with a downpayment of <5% using FHA or VA financing[338] [339]	17% x82%= **14%** (FY)	15.6%x81%= **12.6%** (FY)	12.8x78%= **10%** (FY)	8.8%x78%= **6.9%** (FY)
% of all home purchase transactions with a downpayment of <=5% using any means above.	**40%**	**44%**	**44%**	**47%**

[335] Supra, SMR Research Corporation, p. 18

[336] Id. p. 32

[337] Federal Housing Finance Board. This data series tracks conventional (non-government) home purchase loans with an LTV >90% (effectively a downpayment of <=5%) and excludes presence of a 2nd mortgage, if any. Conventional lending totals adjusted downward to reflect all originations using Inside Mortgage Finance data on government loan originations.

[338] Supra. FHA 2009 Actuarial Study, p. 42, Exhibit IV-5. Based on the percentage of FHA loans with an LTV>95% (downpayment of <5%). Assumes VA has the same percentage. This methodology is believed to be conservative. Also "FHA Single-Family Activity in the Home-Purchase Market through November 2009", Table 1. http://www.hud.gov/offices/hsg/comp/rpts/fhamktsh/fhamkt1109.pdf
FHA share of home purchase loans increased by 27%, 28%, 40%, and 37% in each of 2001, 2002, 2003, & 2004 to account for VA loans (Inside Mortgage Finance 2009 Mortgage Market Statistical Annual, vol. 1, p.3).

[339] Few piggyback loans are used on government loans. See p. 28 SMR research Corporation

The percentage 2004 home purchase loans with a downpayment of <=5% totaled 47%, well over double the level of 21% in 1991.[340] However this understates the full impact. In 1991 only 1.24% of home purchase loans had a downpayment of <=3% and all were insured by FHA. By 2004 over 20% or 1 in 5 home purchase loans had a down payment of <=3% with FHA accounting for 1 in 10 of these loans (see **Chart 14**). HUD's goal of broadly reducing downpayments was being accomplished.

SMR's piggyback lending report contains a warning of the many factors aligning that could lead to "A Perfect Storm" of delinquencies by the end of 2005:[341]

1. Ten trillion dollars in home mortgage were originated over 2002-2004.[342] This has resulted in a largely unseasoned portfolio[343] which has dampened delinquency rates. As these loans season, rates will go up.
2. High LTV lending correlates with higher delinquency and default levels;
3. The volume of ARMs that will be re-pricing higher and the attendant payment shock;
4. The impact of interest only and other new exotic loans;
5. A much greater number of borrowers with high debt-to-income ratios;
6. The impact of subprime loans;
7. A expected rising bankruptcy rate in 2006;
8. "A strong possibility of home price depreciation in selected or regional markets, and maybe even in the national market."

About the same time as the SMR report was released, HUD released its affordable housing rules for 2005-2008. HUD noted:

> "Over the past ten years, there has been a 'revolution in affordable lending' that has extended homeownership opportunities to historically underserved households. Fannie Mae and Freddie Mac have been a substantial part of this 'revolution in affordable lending'. During the mid-to-late 1990s, they added flexibility to their underwriting guidelines, introduced new low-downpayment products, and worked to expand the use of automated underwriting in evaluating the creditworthiness of loan applicants. HMDA

[340] Based on Federal Housing Finance Board data series, FHA 2009 Actuarial study, and VA share data from Inside Mortgage Finance. Piggyback lending in 1991 had a maximum combined LTV of 90%, therefore it did not add to the total (see **1991-A**).
[341] Supra. SMR Research Corporation, pp. 36, 38-39
[342] Inside Mortgage Finance, The 2009 Mortgage Market Statistical Annual, vol. 1, p. 4
[343] Home mortgages outstanding at the end of 2004 totaled $7.835 trillion. Fed Flow of Funds, 1995-204, L.218, p. 87, http://www.federalreserve.gov/releases/z1/current/annuals/a1995-2004.pdf

> data suggest that the industry and GSE initiatives are increasing the flow of credit to underserved borrowers. Between 1993 and 2003, conventional loans to low income and minority families increased at much faster rates than loans to upper-income and non-minority families."[344]

This "revolution in affordable lending" had created a dangerously synchronized mortgage market with an unprecedented numbers of overleveraged loans made to an unprecedented number of overleveraged borrowers. HUD had fashioned a housing finance market ill-equipped to absorb the potential shock of declining prices.

2004-B:

A 300-plus page rulemaking by HUD is a veritable how-to-manual designed to force the GSEs onto a market leadership position with respect to the use of even greater levels of loosened lending.[345] The rule is issued by HUD Secretary Alphonso Jackson mandates increased goals for the GSEs. The Low- and Moderate- income Goal is raised from 50% in 2004 to 52% for 2005, 53% for 2006, 55% for 2007 and 56% in 2008.[346] While the Low- and Moderate- income Goal increases by 6% over a 5 year period, the Special Affordable Goal (low- and very low-income) increases from 20% to 27%. Thus HUD effectively decreases the moderate-income portion of the goal by 1%, while implementing a 7% increase in the harder to serve low- and very- low income component of the goals. Placing the entire increase in housing goals on the Special Affordable (low- and very low-income) category required the GSEs to once again reach further down the demand curve. To create this new demand necessitated another major expansion of efforts to ease home purchase requirements by further lowering downpayments and developing other leverage increasing flexibilities. It also required deeper subsidies as compared to the moderate-income group. For example, Special Affordable home purchase loans account for about 42% of all low- and moderate-income home purchase loans with an LTV>95% for 2005-2007.

> "These new affordable housing goals will help the GSEs achieve the standard that Congress intended-leading the mortgage finance industry in helping low- and moderate-income families afford decent housing," said HUD Secretary Alphonso Jackson. "These new goals will push the GSEs to genuinely lead the market."[347]

HUD was clear in its expectations of the GSEs

> "Millions of Americans with less than perfect credit or who cannot meet some of the tougher underwriting requirements of the prime market for reasons such as inadequate income documentation, limited downpayment or cash reserves, or the desire to take more cash out in a refinancing than conventional loans allow, rely on subprime lenders for

[344] Final Rule, p. 63645, http://fdsys.gpo.gov/fdsys/pkg/FR-2004-11-02/pdf/04-24101.pdf
[345] Final Rule, http://fdsys.gpo.gov/fdsys/pkg/FR-2004-11-02/pdf/04-24101.pdf
[346] http://www.huduser.org/Datasets/GSE/gse2007.pdf
[347] "HUD FINALIZES RULE ON NEW HOUSING GOALS FOR FANNIE MAE AND FREDDIE MAC", press release dated November 1, 2004, http://archives.hud.gov/news/2004/pr04-133.cfm

> access to mortgage financing. If the GSEs reach deeper into the subprime market, more borrowers will benefit from the advantages that greater stability and standardization create."[348]

Notwithstanding the GSEs' introduction of no downpayment lending in 2000, HUD was insistent that they increase their acquisitions of these high risk loans.[349] This is notwithstanding that 47% of all homebuyers in 2004 had a downpayment of <=5% and 19% Fannie's home purchase loans had a downpayment of <=3%.

HUD was continually evaluating the GSEs on the basis of how far they had to go before they would be "leading the market". However, achieving leadership as defined by HUD was always a stretch:

1. It was difficult for the GSEs to exceed the average in terms of the parameters HUD was measuring, since they were such a large portion of the market.
2. Given their charter advantages, they had a virtual lock on the lower risk "plain vanilla" business, which was not "goals rich" but counted in the denominator.
3. At the same time, crowding out by the GSEs pushed its competitors towards "goals rich" loans because they had higher risks with higher yields.
4. HUD's and other government initiatives (ex. CRA) also mandated large amounts of "goals rich" lending, not all of which was available for purchase by the GSEs. For example, much CRA business was done at below market rates and therefore was difficult to sell without taking a loss.[350]

If one were to look instead at how far the GSEs had come since 1993, particularly with respect to expanding low- and very low-income lending, the picture is quite different. Using Freddie as an example, in 1993 it had a baseline achievement of 22.8% for moderate-income and 7.2% for low- and very low-income lending.[351] Chart 43 shows the percentage point increase above these two baselines. While the moderate-income attainment shows only a minimal increase after 1994, the low- and very low income attainment increased dramatically and continuously.

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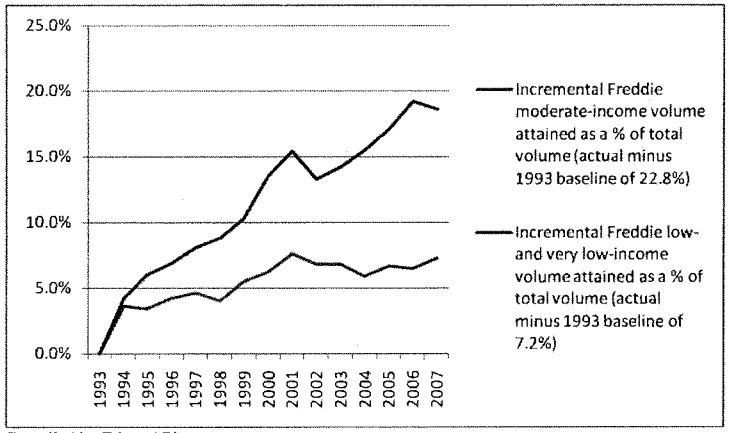
[348] Final Rule, p. 63601, http://fdsys.gpo.gov/fdsys/pkg/FR-2004-11-02/pdf/04-24101.pdf

[349] Id. In HUD's rule making, the word "downpayment is mentioned over 50 times, almost always in the context of them still being too high.

[350] Federal Reserve Bank of Kansas City, "Community Reinvestment Act lending: Is it profitable?", Appendix B, p. 32 http://www.kansascityfed.org/PUBLICAT/FIP/prs96-2.pdf. This 1996 study found that 76% of CRA loans were less profitable, substantially less profitable, or not profitable. This report also documented a litany of loan subsidies and loosened credit standards undertaken by banks in order to facilitate CRA lending.

[351] Source HUD. Freddie achieved a level of 30% low- and moderate-income lending in 1993, with a low- and very low attainment of 7.2%, for a moderate-income attainment of 22.8%. The goals process was more complicated that this example makes out. However, it illustrates the large increase in low- and very low-income lending attained by the GSEs.

Chart 43:[352]



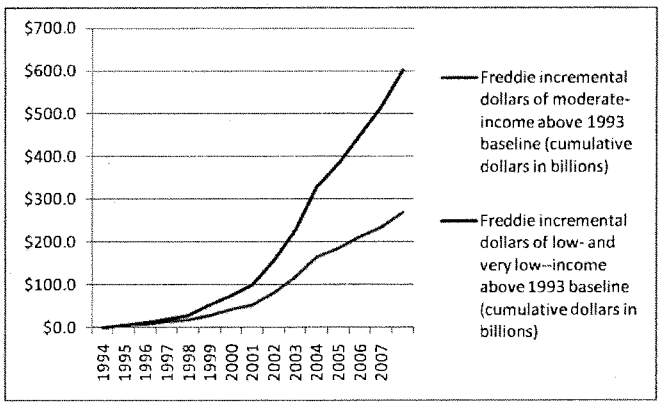
Compiled by Edward Pinto

Chart 44 converts the incremental increases shown in Chart 43 into cumulative dollar increases (in billions) of moderate- and low- and very low-income loans acquired.[353] HUD's policy of increasing the low- and very low-income goal while keeping increases in the moderate-income component modest caused Freddie's low- and very low-income acquisitions to grow much faster. Fannie's trend is similar, except with substantially larger volumes given its larger size. To generate the large volume of low- and very low-income loan acquisitions necessitated by HUD's increased goals, the GSEs needed to implement additional loosening of their credit standards. See **Chart 22** above for Fannie's growth trend for loans with an LTV>95%.

[352] Source: HUD"s Office of Policy Development and Research - Profiles of GSE Mortgage Purchases in 1999 and 2000, in 2001-2004, and in 2005-2007

[353] Id.

Chart 44:



Compiled by Edward Pinto

The impact of escalating affordable housing goals on the GSEs was dramatic. They would continue to loosen underwriting standards in an effort to meet the goals. Higher risk loans (e.g. loans with little or no downpayment or reduced amortization and borrowers with impaired credit, high debt ratios, or little or no documentation) would become a greater portion of the GSEs' credit risk portfolio. The mispricing[354] of the higher risk goals compliant business combined with the added default risk represented by these loans was a dangerous combination for any lender, but all the more so for ones as highly leveraged as the GSEs. For the most part the GSEs were not acquiring high risk loans and private MBS to increase profits; they were doing it in meet affordable housing goals. The GSEs' net interest margin and income decreased after 2003. But like Sisyphus in the myth, each time they would reach the latest goals, higher ones would apply for the following year.

[354] HUD saw the GSEs' expansion into subprime as a means to correct what HUD perceived to be mispricing or predatory pricing by subprime lenders. HUD noted in its 2004 rulemaking: "families living in inner-city, high-minority neighborhoods often have to rely on subprime lenders as their main source of mortgage credit. Studies indicate that many of these borrowers obtaining high cost loans could qualify for lower-cost, prime mortgage credit." p. 63601, http://fdsys.gpo.gov/fdsys/pkg/FR-2004-11-02/pdf/04-24101.pdf

To some significant extent this appearance of mispricing was created by the GSEs' inherent pricing advantages along with their ability to cross-subsidize their subprime-like loans with the profits from their low risk loans. Besides the obvious problems associated with mispricing risk, it sent a false pricing signal to the GSEs' competitors – subprime lenders. The mispricing of high risk credit features has been well documented by the FHFA in a July 30, 2009 report entitled "Fannie Mae and Freddie Mac Single-family Guarantee Fees in 2007 and 2008", http://www.fhfa.gov/webfiles/14700/GFees72009.pdf

Charts 45 and 46 from OFHEO (now FHFA) document trends of declining income, net interest margin, and return on common equity from 2003 through 2007.[355] Guarantee fees stay relatively level for Fannie while declining for Freddie, not a good sign given the increasing credit risk posed by affordable housing loans:

Chart 45:

Table 1. Fannie Mae Financial Highlights

SELECTED FINANCIAL HIGHLIGHTS[1]

(Dollars in Billions)

EARNINGS PERFORMANCE:	2003	2004	2005	2006	2007
Net Income ($)	8.1	5.0	6.3	4.1	-2.1
Net Interest Income ($)	19.5	18.1	11.5	6.8	4.6
Guarantee Fees ($)	5.4	3.8	4.0	4.3	5.1
Net Interest Margin (%)[2]	2.12	1.86	1.31	0.85	0.57
Average Guarantee Fee (bps)[3]	23.9	21.8	22.3	22.2	23.7
Return on Common Equity (%)[4]	27.6	16.6	19.5	11.3	-8.3
Dividend Payout Ratio (%)[5]	20.8	42.1	17.2	32.4	N/M

Source: Fannie Mae

N/M = Not Meaningful

[1] Data for 2003 are based on restated and revised financial results.

[2] Taxable equivalent net interest income divided by average earning assets.

[3] Guarantee fees divided by average MBS outstanding net of MBS held in portfolio.

[4] Calculated as annualized net income available to common stockholders divided by average common stockholders' equity.

[5] Paid common dividends as a percentage of net income available to common stockholders.

[355] Source: OFHEO, "Mortgage Markets and the Enterprises in 2007. pp. 33-34, http://www.fhfa.gov/webfiles/1164/MME2007revised.pdf

Chart 46:

Table 2. Freddie Mac Financial Highlights

SELECTED FINANCIAL HIGHLIGHTS[1]
(Dollars in Billions)

EARNINGS PERFORMANCE:	2003	2004	2005	2006	2007
Net Income ($)	4.8	2.9	2.1	2.5	-3.1
Net Interest Income ($)	9.5	9.1	4.6	3.4	3.1
Guarantee Fees ($)	1.7	1.4	2.1	2.4	2.6
Net Interest Margin (%)[2]	1.27	1.24	0.66	0.47	0.44
Average Guarantee Fee (bps)[3]	23.3	17.5	16.6	17.1	16.6
Return on Common Equity (%)[4]	17.7	9.4	8.1	9.8	-21.0
Dividend Payout Ratio (%)[5]	15.6	34.9	56.9	63.9	NM

Source: Freddie Mac
NM = Not Meaningful

[1] Data for 2003 are based on restated and revised financial results.

[2] Taxable equivalent net interest income divided by average earning assets.

[3] Guarantee fees divided by average MBS outstanding net of MBS held in portfolio.

[4] Ratio computed as annualized net income available to common stockholders divided by the simple average of beginning and ending stockholders' equity, net of preferred stock (at redemption value).

[5] Paid common dividends as a percentage of net income available to common stockholders.

HUD suggested:

> "While the GSEs can choose any strategy for leading the market, this leadership role can likely be accomplished by building on the many initiatives and programs that the enterprises have already started, including: (1) Their outreach to underserved markets and their partnership efforts that encourage mainstream lenders to move into these markets; (2) their incorporation of greater flexibility into their purchase and underwriting guidelines, (3) their development of new products for borrowers with little cash for a downpayment and for borrowers with credit blemishes or non-traditional credit histories; (4) their targeting of important markets where they have had only a limited presence in the past, such as the markets for minority first-time homebuyers; (5) their purchases of both newly-originated and seasoned CRA loans; and (6) their use of automated underwriting technology to qualify creditworthy borrowers that would have been deemed not creditworthy under traditional underwriting rules"[356]

[356] HUD Final Rule, p. 63606, http://fdsys.gpo.gov/fdsys/pkg/FR-2004-11-02/pdf/04-24101.pdf

HUD codified the Urban Institute's observation from 1998 regarding the need to gut the Three Cs of Mortgage Credit (see **1997-B** above) when it included the following as a formal finding upon which its rulemaking was based:

> "In addition to low incomes, barriers to homeownership that disproportionately affect minorities and immigrants include lack of capital for down payments and closing costs, poor credit history...."[357]

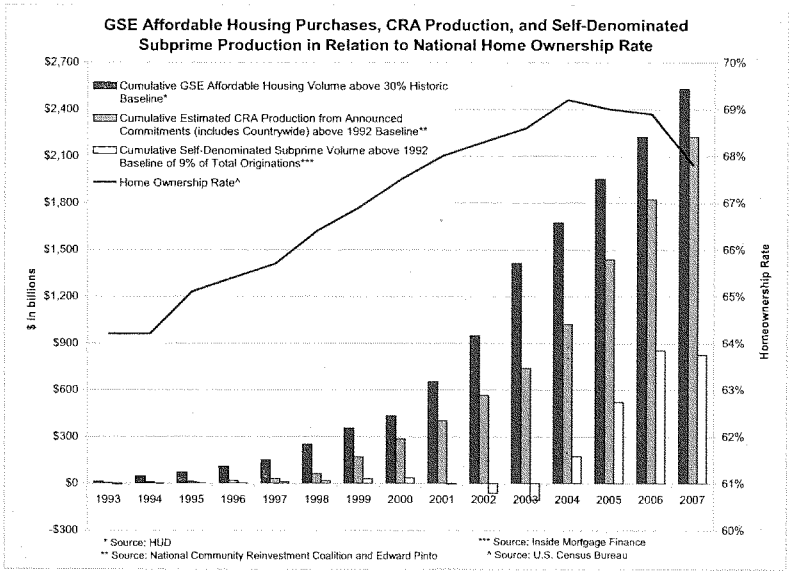
2004-C:

Chart 47 confirms that it was CRA and GSE affordable housing lending, not Self-denominated Subprime loans, that drove the homeownership rate upward for 10 years, reaching its peak in 2004. As Chart 47 demonstrates, subprime share had not grown during the period 1993-2003, declining modestly in 2001-2003. During this period the GSEs' and CRA's affordable housing share exploded. This conclusion is echoed by a former Office of Thrift Supervision Director:

> "Our record homeownership rate [increasing from 64.2% in 1994 to 68% in 2001], I'm convinced, would not have been reached without CRA [Community Reinvestment Act] and its close relative, the Fannie/Freddie requirements." - Ellen Seidman, Office of Thrift Supervision Director, before the Greenlining Institute on 10.2.01

[357] Id. p. 63645

Chart 47:



Compiled by Edward Pinto

* The calculation for subprime production is based on the cumulative surplus or deficit based on subprime's market share of 9% in 1993.

From 1993 to 2007 the GSEs acquired $3.6 trillion in additional low- and moderate-income loans than they would have acquired under their pre-1992 baseline where 30% of their acquisitions consisted of low- and moderate-income loans.

The impact of this expansion of highly leveraged lending on other market participants cannot be overestimated. Under HUD's National Housing Strategy virtually all market participants were under a mandate to use "flexible underwriting" on their low- and moderate-income lending. Once implemented, many of these flexibilities were made available to all borrowers. In a market place increasingly dominated by the GSEs and Countrywide, the GSEs' introduction of 97% LTV lending, followed by 100% LTV lending in 2000 was nothing short of cataclysmic. The market response was: if it's OK with Fannie and Freddie (the de facto standards setters) it must be OK for us. Over time, the growth of the GSE's flexible lending standards was reinforced by the widespread use of Fannie and Freddie's automated underwriting systems, even on loans not acquired by the GSEs. As the GSEs rolled out more flexible underwriting parameters in their systems, lenders were able to adjust their own standards on business not sold to the GSEs.

At the same time, Countrywide, one of the nation's largest originators, the GSEs' largest customer, and the largest originator of non-prime mortgages (i.e. subprime, Alt-A, and interest only/pay option ARMS), was constantly introducing new leverage increasing features, features that many of its competitors felt compelled to match. These included ever lower downpayments and higher debt ratios, greater use of interest only loans and pay option ARMs and the expansion of low doc/no doc lending. Countrywide's success and influence is evidenced by its market share of all originations increasing from 5.9% in 2000 to 16.8% in 2007.[358]

> "[The GSEs] were in many ways the fulcrum on which the financial crisis was leveraged. As the housing bubble inflated, Fannie and Freddie were there to buy up mortgages by the boatload, and their implicit government backing allowed them to raise money at bargain rates to fuel the binge."[359]

2004-D:

The GSEs' role in promoting the return of low doc/no doc lending has already been noted (**2002**). In the early 1990s Fannie and Freddie publicly announced they were no longer buying low doc/no doc loans because they were too risky.[360] Bad decisions over the objections of risk officers go back to Fannie's implementation of the 95% LTV mortgage over the objection of its chief risk officer in 1994. (**See 1994-B**)

In April 2004 David Andrukonis, Freddie's chief risk officer, expressed his concern to a colleague about the credit message being sent by Richard Syron, Freddie's CEO:

> "While you, Don and I will make the case for sound credit, it's not the theme coming from the top of the company and inevitably people down the line play follow the leader"[361]

Later in 2004 Freddie's CEO will make a bad decision contrary to its risk officer's advice that contributes substantially to its accumulation of non-traditional mortgages (NTMs):

> "In 1990 we called this product [low doc/no doc] 'dangerous' and eliminated it from the marketplace."[362]

Andrukonis went on to add:

> "We are less likely to get the house price appreciation we've had in the past 10 years to bail this program out if there's a hole in it."[363]

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[358] Inside Mortgage Finance

[359] Jacquelyn Smith, "Fannie And Freddie Bid Farewell To NYSE", June 16, 2010, http://www.forbes.com/2010/06/16/fannie-freddie-delist-nyse-markets-equities.html?partner=alerts

[360] "Haste makes...Quick Home Loans Have Quickly Become Another Banking Mess", Wall Street Journal, July 5, 1991, Document contained in the author's files.

[361] Internal Freddie Mac email from David Andrukonis to Tracy Mooney, dated April 1, 2004 FMAC0013656

[362] Internal Freddie Mac email from David Andrukonis to Paul Peterson, dated April 5, 2004 FMAC0013672

He also warned:

> "The potential for the perception and reality of predatory lending with this product [No Income No Assets] is great."[364]

However meeting the affordable housing goals trumped concerns about dangerous risks and predatory lending:

> "The Alt-A [(low doc/no doc] business makes a contribution to our HUD goals."[365]

2004-E:

Fannie announces its next $2 trillion commitment.

> "Fannie Mae Launches Major Initiative to Tackle America's Toughest Housing Problems; Pledges to Help Raise Minority Homeownership Rate to 55 Percent over Next Ten Years."
>
> "Fannie Mae, the nation's largest source of financing for home mortgages, today joined its partners to announce its pledge to help 6 million families -- including 1.8 million minority families -- become first-time homeowners over the next decade. The pledge boosts the company's commitment to President George W. Bush's Minority Homeownership Initiative and will help raise the minority homeownership rate from 49 percent currently to 55 percent, with the ultimate goal of closing the gaps between minority homeownership rates and non-minority homeownership rates entirely."
>
> "Fannie Mae's new commitment to first-time home buyers is part of the next stage of the company's "American Dream Commitment," a plan announced in 2000 to provide $2 trillion in private capital for 18 million minority and underserved Americans to own or rent a home by the end of the decade. Having met the $2 trillion goal and the company's previous Trillion Dollar Commitment launched in 1994, Fannie Mae, along with many others -- including its lender, mortgage insurer, non-profit, real estate, home builder, housing finance agency, and other federal, state, and local government partners -- has now provided over $3 trillion in funds for over 28 million underserved families in 10 years. In 2003 alone, these strong partnerships allowed Fannie Mae to achieve a record level of more than $240 billion in mortgage purchases serving minority families."

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[363] Id.
[364] Internal Freddie Mac email from David Andrukonis to Dick Syron, dated September 7, 2004 FMAC0013766
[365] Internal Freddie Mac email from Mike May to Dick Syron, dated October 6, 2004 FMAC0013694

2004-F:

Fannie and Freddie are the only market participants with knowledge of virtually the entire mortgage market (particularly the high risk market) and the accumulating levels of NTMs:[366]

1. **GSE market:** the GSEs closely tracked each other's business. They also had detailed information about many if not most of the conforming (based on loan size) loans they did not acquire.
2. **FHA market:** The GSEs tracked FHA volume since it was goals rich.
3. **Alt-A market:** the GSEs were not only the largest purchasers of Alt-A loans (in whole loans and securitized form), they had detailed information about many if not most of the Alt-A loans and securities that they did not acquire. This is because they were shown many packages (along with transaction details) that they declined to acquire.
4. **Subprime market:** the GSEs were not only the largest purchasers of loans with a FICO <660 that were not denominated subprime, they were also the largest purchasers of self-denominated subprime tranches. They had detailed information about many other subprime loans and securities that they did not acquire. This is because they were shown many packages (along with transaction details) that they declined to acquire.
5. **Option ARM market:** While the GSEs had systems constraints that limited their purchases of option ARMS, they did purchase both whole loans and private MBS tranches. They were presented with many packages that they did not acquire.

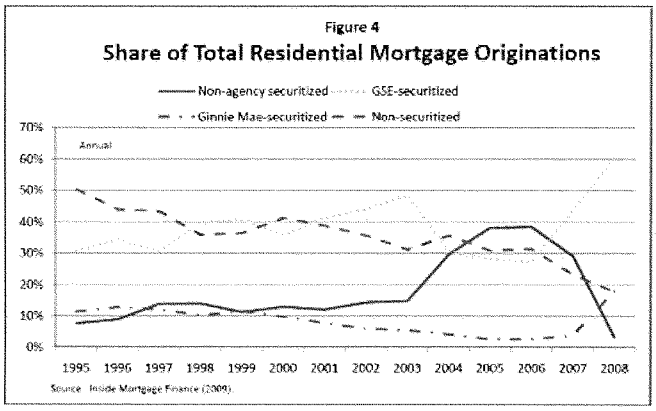
[366] Supra., "Single Family Guarantee Business – Facing Strategic Crossroads", June 27, 2005, In this summary document, Fannie sets forth the lengths it went to track the entire market, its various segments, and the risk characteristics by segment. See examples at pp. 29, 33, and 45.

III. The Perfect Storm:

Some argue that the substantial decline in the GSEs' market share in 2004 -2006 demonstrates that the private sector caused the mortgage meltdown. This argument fails for a number of reasons already mentioned – most particularly that government policies pushed the entire mortgage market to loosen lending standards. As predicted by community advocacy groups in 1991, Fannie and Freddie would need to be forced to loosen their underwriting standards before the originating lenders would do the same.

While the GSEs' share did decline in 2004-2006, many observers underestimate this decline. For example, economist and Nobel Laureate Paul Krugman relied on Chart 48 which was prepared by the Financial Crisis Inquiry Commission (based on data from Inside Mortgage Finance) when he observed: "During [2004-2005, the years with the greatest price increases], Fannie and Freddie were sidelined by Congressional pressure, and saw a sharp drop in their share of securitization."[367]

Chart 48:



Source: FCIC

Krugman came to the wrong conclusion as to why Fannie and Freddie lost share, particularly in 2004. Those reasons are detailed below. One thing is certain; it was not due to congressional pressure or a lack of effort to acquire the business that would allow them to attain their rising affordable housing goals. In late 2004 Fannie and Freddie made clear their intentions with

[367]Paul Krugman, "Things Everyone in Chicago Knows: Which happen not to be true", NYT, June 3, 2010 http://krugman.blogs.nytimes.com/2010/06/03/things-everyone-in-chicago-knows/

respect to the subprime and nonprime markets,[368] markets that were rich with loans needed to meet these goals.[369] They informed their largest customers, which now included many of the top subprime originators:[370]

> "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 the subprime 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."[371]

While the GSEs' share numbers shown on Chart 48 are correct as far as they go, they do not give the entire picture. By limiting the GSEs' business to just their own securitizations, their share is substantially understated, particularly for the Professor Krugman's key years of 2004-2005. Instead of dropping below 30% as Chart 48 shows, it averaged about 42% for these two years. This is because:

1. Fannie, and to a lesser extent Freddie, purchased whole loans that were not ultimately securitized by them. These loans are included in the "non-securitized" category, but should be added to the GSEs' total share.
2. The GSEs were substantial purchasers of "non-agency securitized" subprime (see **Chart 33** above) and Alt-A MBS. **Over 2003-2007 their purchases totaled $641 billion for subprime and $154 billion for Alt-A, representing 33% and 12% of all such subprime and Alt-A issuances.** These securities need to be added to the GSEs' total share and deducted from the "non-agency securitized" share. The FHLBs were also major purchasers of such securities (see **Chart 33** above for their subprime acquisitions). Fannie, Freddie, and the FHLBs only purchased "AAA" tranches of non-agency

[368] Alt-A and Subprime "scored high relative to [its] core products – Alt-A: 30% total minority score [and] Subprime: 52% total minority score." Alt-A also had a high score for 1-4 unit rental (investor) properties, providing the GSEs with another means of meeting their escalating goals. Source: Fannie Mae document released by the U.S. House Committee on Oversight and Government Reform, "Single Family Guarantee Business – Facing Strategic Crossroads", June 27, 2005

[369] Alt-A and Subprime "scored high relative to [its] core products – Alt-A: 30% total minority score [and] Subprime: 52% total minority score." Fannie Mae document released by the U.S. House Committee on Oversight and Government Reform, "Single Family Guarantee Business – Facing Strategic Crossroads", June 27, 2005

[370] Neil Morse, "Looking for New Customers," *Mortgage Banking*, December 1, 2004

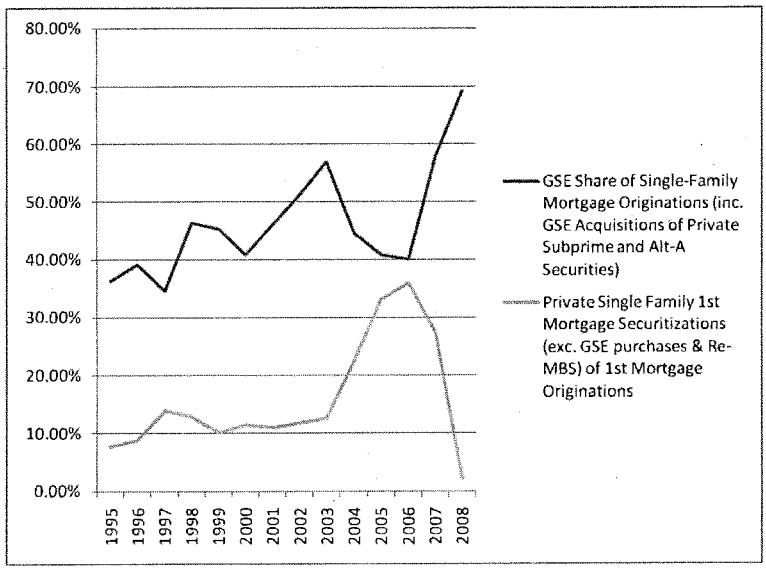
[371] Id.

securities and, given the combined volume of their purchases, created demand for such tranches. As has already been described, CDOs and CDOs squared were extensively used to convert the less desirable lower rated MBS tranches into "AAA" and "AA" tranches, thereby facilitating the private or non-agency securities market's rapid expansion.

3. Total mortgage originations and the "non-agency securitized" amount include second mortgage originations. Fannie and Freddie were extensive buyers of first mortgages made as part of a piggy back first and second. These loans were usually high risk and generally had combined LTVs of 95% and 100%. As a result the GSEs' lending (as were subprime and Alt-A non-agency securities) was dependent on these loans. It is more accurate to compute the various shares using only total first mortgage originations.
4. Total "non-agency securitized" includes a small amount of re-MBS of existing issuances that do not represent new originations. These need to be deleted from the "non-agency securitized" share.

Chart 49 shows the GSEs' total and non-agency securitized shares adjusted as noted above:[372]

Chart 49:

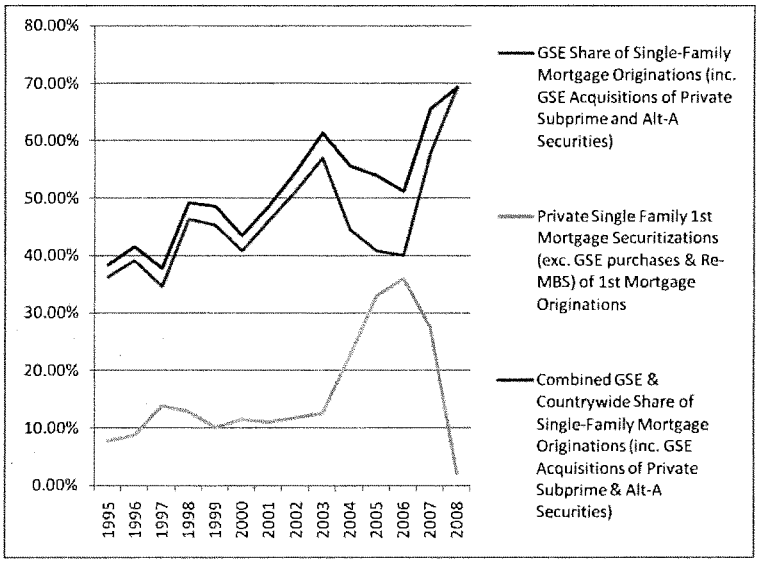


Source: Inside Mortgage Finance and compiled by Edward Pinto

As has already been noted, Countrywide operated as the GSEs' alter ego for many years. In 2004 and 2005 Countrywide moved a substantial portion of its business away from the GSEs. Chart 50 adds an additional line as compared to Chart 34 – the share of total single-family 1st mortgage originations represented by combining the GSEs' business with Countrywide's volume not sold to the GSEs:

[372] Fannie and Freddie data from FHFA 2008 Report to Congress found at: http://www.fhfa.gov/webfiles/2335/FHFA_ReportToCongress2008508rev.pdf and non-agency securitizations and total 1st mortgage origination volume from IMF.

Chart 50:



Source: Inside Mortgage Finance and compiled by Edward Pinto

Over the period 1993-2004 the government implemented what it viewed as a successful 12-year long effort to force the adoption of loosened credit standards:

> "The main point is that aggressive mortgage financing can boost demand for housing, and that demand can drive up house prices. As interest rates fall and loan terms relax, borrowers have more buying power to raise the offer price on home purchases. In the late 1990s, with a hot labor market and stock market, housing demand was fueled by a combination of population growth, income, wealth, supportive government policy, and easy credit."[373]

But the housing market had become highly leveraged and vulnerable to price declines.

After 12 years of government policies imposing unrelenting pressure on the housing finance market to throw out the Three Cs of Mortgage Credit and implement vastly weakened underwriting standards, 2004 became the year of the perfect storm.

[373] HUD PDR, May 2005, HUD Contract C-OPC-21895, Task Order CHI-T0007, "Recent House Price Trends and Homeownership Affordability", p. 46

The Self-denominated Subprime and Alt-A segments quickly morphed from lagging backwaters of housing finance to hot markets taking some share from Fannie and Freddie, although as noted above the GSEs' all-in decline was not as large as generally thought, particularly given that the GSEs were the largest purchasers of Subprime and Alt-A private MBS. The Self-denominated Subprime and Alt-A segments experienced a dollar volume increase of 85% over 2003, their market share increasing from 10% to 18%.[374] It is notable that in 2004 the GSEs purchased $180 billion or 45% of all private subprime MBS issued versus $82 billion and 40% in 2003.

The Self-denominated Subprime and Alt-A segments grew for many reasons:

- As loosened lending standards were introduced to meet affordable housing mandates, they quickly spread through much of the mortgage industry;
- Government housing policies had long stoked demand with high leverage and loosened underwriting standards – a trend that played to subprime and Alt-A's strong suit.
- These policies (including the GSEs' unfettered growth) and low interest rates had driven first mortgage origination volume to unimaginable levels (quadrupling from $995 billion in 2000 to $3.725 trillion in 2003). The origination industry was left with sizable excess capacity as origination volume declined[375] by 30% to $2.590 trillion in 2004 compared to 2003.[376] However, instead of declining in volume like the overall market, self-denominated subprime and Alt-A volume increased by 85% in 2004 over 2003.[377] **Originators were in a scramble for market share and a further loosening of underwriting standards was the means.**
- A yawning affordability gap brought on by the resulting decade long bull market in housing;[378]
- An up-tick in mortgage rates resulted in a shift to ARMs, interest only loans, and loans with lower qualifying rates, all of which increased the amount a borrower could borrow on a given amount of income. As a result these loans were generally utilized the most in those markets with the greatest affordability gaps due to price run-ups.[379] ARMs were

[374] Inside Mortgage Finance, The 2009 Mortgage Market Statistical Manual, Volume 1, p. 3
[375] Largely due to refinance burnout as 30 year fixed rates had dropped from an average of 8.05% in been 2000, to 6.54% in 2001, to 6.54% in 2002, to 5.83% in 2003. Thirty year rates averaged 5.84% in 2004 and 5.87% in 2005. Source: Inside Mortgage Finance, The 2009 Mortgage Market Statistical Manual, Volume 1, pp. 10-11
[376] Inside Mortgage Finance, The 2009 Mortgage Market Statistical Manual, Volume 1, p. 3
[377] Id. p. 4
[378] According to the S&P/Case-Shiller 10 city home price index, home prices increased by 112% over the 10 1/2 year period from April 1993 to December 31, 2003. Home prices would go on to increase by a further 40% over the period January 1, 2004 to June 30, 2006.
[379] Fannie Mae document, "Single Family Guaranty Business – Facing a Strategic Crossroads, 6.22.05

also a product where the GSEs' funding advantages were less, resulting in a shift to their competitors;[380]

- The GSEs were hit even harder by the volume drop from 2003 to 2004. Their core market consisted of non-jumbo conventional fixed rate loans. This market dropped by about 42% from 2003 to 2004;[381]

- A private sector anxious to regain share after having been increasingly marginalized by the GSEs since the mid-1980s;

- A risk-based capital regulatory structure that over-incented the creation of "AAA" and "AA" securities and helped spur the creation of CDOs and CDOs squared.[382]. After years of frustration, private MBS executions are finally able to compete with the leverage levels long enjoyed by the GSEs. A traditional private MBS consisted of about 91% "AAA" and "AA" tranches. Combine with a CDO and the percentage of "AAA" and "AA" tranches goes to about 95%.[383] Repeat with a CDO^2 and the percentage goes to about 98%. Overly aggressive ratings were handed out by rating agencies particularly on collateralized debt obligation (CDOs) and CDOs squared[384];

- The private sector's development of an integrated loan origination and securitization process that could compete with the GSEs in terms of both price and efficient execution[385]. This development was led by Countrywide and emulation attempts were being undertaken by Lehman and Bear Stearns;

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[380] One of the GSEs' strengths was their ability to fund fixed rate loans. Their charter advantages allowed them to borrow long-term at low rates, something banks and many other investors could not match. ARMs were a better match to banks' and other investors' funding sources. The GSEs had much less of a funding advantage on ARMs.

[381] FHFA

[382] Risk-based capital regulations set 8% as a risk-adjusted capital requirement. A 20% weight is placed on both "AAA" and AA" private MBS and Fannie and Freddie MBS, thus requiring 20% x 8% or 1.6% in risk based capital, resulting in a 62.5:1 leverage ratio. An unsecuritized mortgage loan held on a bank's balance sheet had a 50% weight thus requiring 50% x 8% or 4% in risk based capital, resulting in a 25:1 leverage ratio. This created a tremendous financial ineentive to maximize "AAA" and "AA" tranches of private MBS and minimize tranches with ratings below "AA".

[383] http://www.mhhe.com/economics/cecchetti/Cecchetti2_Ch07_StructuredProducts.pdf

[384] CDOs were securities comprised of tranches from private MBS. CDOs squared were securities comprised of tranches from CDOs. CDOs (and CDO squared) are leverage boosters. A plain subprime RMBS yielded about 91% "AAA" and "AA" - these tranches got 20% risk based capital weighting. Create a CDO using the private MBS tranches and the percentage of "AAA" and "AA" goes to 95+%. Do a CDO squared and it goes up to around 98%. The growth of CDOs increased dramatically in 2003. For the first time in 2003, more RMBS go into CDO than not. In 2003 the CDO market took up 60% of RMBS up from 30% in 2002. By 2004 CDOs were taking up 80%. The advent of CDOs and CDOs squared finally allowed for real competition with Fannie and Freddie. This was bad news for Fannie and Freddie. With a yield of 95%-98% "AAA" and "AA", Countrywide and Wall Street could finally compete with Fannie and Freddie. Countrywide's sold 61% of its originations to Fannie and Freddie in 2003 (marginally down from 64% in 2002). This drops to 20% in 2004.

[385] The GSEs were limited by charter to the secondary market; therefore they could not undertake their own integrated loan and securitization platforms.

- The attractiveness of the higher yields that "AAA" and "AA" private MBS offered over Fannie and Freddie's MBS;
- A growing amount of world-wide liquidity looking for safe "AAA" (both GSE and private MBS) and "AA" securities (private MBS) to invest in; and
- The GSEs' accounting scandals[386] which left them politically weakened. Protecting the charter franchise took on an even more heightened urgency. A combination of growing affordable housing goals and a shift of goals rich loans to subprime/nonprime forced them to more heavily cross subsidize affordable housing loans and increase their acquisition percentages of these loans.

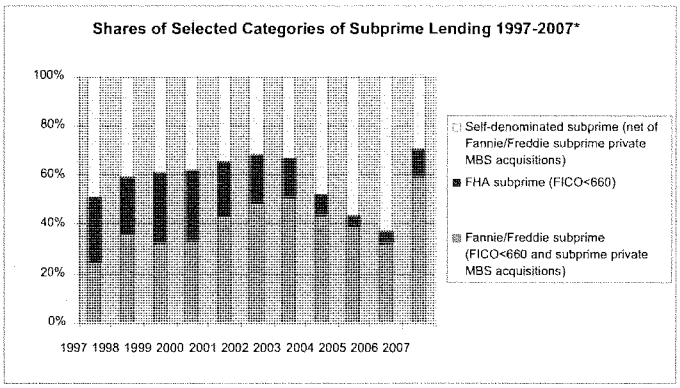
HUD had noted in its 2000 rulemaking (see **2000-E** above) that:

> "As the GSEs become more comfortable with subprime lending, the line between what today is considered a subprime loan versus a prime loan will likely deteriorate, making expansion by the GSEs look more like an increase in the prime market."

Chart 51 (same as Chart 28) takes this effect into account by displaying three categories of subprime: (1) self-denominated subprime (excluding the GSEs' acquisitions of subprime private MBS), (2) FHA loans with a FICO below 660 and (3) GSE acquisitions considered as prime but with a FICO of <660 along with their acquisitions of subprime private MBS. In 1997 self-denominated subprime had about 50% of the market. Self-denominated subprime share shrank to about 40% by 2000 as the GSEs' share grew and FHA maintained its share and shrank to about 33% by 2003 with the GSEs taking share from both self-denominated subprime and FHA. The GSEs were growing their share in response to the much higher goals imposed by HUD for 2001-2003. By 2003 FHA was well on its way to being marginalized by the GSEs. For the reasons noted above, starting in late 2003 and continuing through 2004-2006 the self-denominated subprime sector is able, for the first time, to compete aggressively against the GSEs and expand share dramatically. After the private MBS market collapses in early 2007, the GSEs more than regain their lost share.

[386] Freddie's and Fannie's scandals broke in 2003 and 2004 respectively.

Chart 51 (same as Chart 28):



* Selected categories include loans originated as subprime (self-denominated subprime), FHA insured loans with a FICO of <660, and Fannie and Freddie loans with a FICO<660. Compiled by Edward Pinto

B. The Perfect Storm is magnified by many existing and new pro-cyclical policies and a lack of counter-cyclical policies:

FDIC Chair Sheila Bair noted:

> "For 25 years federal policy has been primarily focused on promoting homeownership and promoting the availability of credit to home buyers." FDIC Chair Sheila Bair, June 7, 2010:[387]

All lending, including home lending, is by definition leveraged, naturally pro-cyclical, and prone to alternating periods of boom and bust. The current real estate bust is the worst in over 75 years because leading up to the mortgage meltdown, numerous pro-cyclical policy elements were added to the many pro-cyclical elements already in place, all in an effort to promote housing finance. From 1992 on, federal policies, in the name of promoting very low, low, and moderate-income homeownership, promoted ever greater levels of leverage. These flexible and innovative underwriting standards spread throughout much of the entire housing finance industry. Compounding matters was the fact that the revenue of most market participants was percentage based and thus grew as home prices boomed. Fannie and Freddie's revenues, loan limits, and, ironically, affordable housing mission urgency were all fed by higher home prices. At the same time, no counter-cyclical elements were added. When former Fed chairman William McChesney Martin, Jr. (1951-1970) famously observed that the Fed's job is to "take away the punch bowl

[387] Sheila C. Bair to the Housing Association of Non-Profit Developers Annual Meeting, June 7, 2010, http://www.loansafe.org/sheila-c-bair-to-the-housing-association-of-non-profit-developers-annual-meeting

just as the party gets going"[388] he had not anticipated that federal housing policy would be to spike the punch with a flood of zero down loans. While the housing finance industry was susceptible to bouts of lending excesses – for at most a few years at a time,[389] government policies would create an unprecedented period of policy enforced excess, lasting some 15 years.

Lending used to rely on real or earned equity either from a down payment or paying the loan off through scheduled amortization. Government pressure made down payments largely passé. Affordability was enhanced with interest only and negatively amortizing loans, with scheduled amortization the casualty. Add waves of cash out refinances that treated homes as ATMs. This set up a cycle whereby each boost in home prices induced both speculative buying and enabled equity removal spurred by a home's new higher value. By the end of 2003, 58% of all outstanding single family mortgages were less than a year old and each had an appraisal justifying the loan amount based on the latest boom-driven market value.

To the extent appraisals have been considered at all, their contribution to the financial crisis has focused on fraud. The facts are much more nuanced and significant, with the major shortcoming being that the U.S. appraisal process was simply not up to the challenges of a housing boom fed by ever increasing leverage. The Collateral Risk Network, representing many of the largest financial institutions in the United States,[390] pointed out in a white paper entitled "Reengineering the Appraisal Process":[391]

> "[Appraisers] did help create fictitious equity and were complicit in facilitating trillions of dollars of loans that never should have been made. There are varying degrees of valuation inflation performed by appraisers. On the lighter side, there was just the gray area where appraisers hit the highest possible value as opposed to the most probable value. On the dark side, there was blatant fraud. **And then, somewhere in the mix, was the failure to recognize an overheated market and report trends and risk to their clients....If we had credibly valued the underlying collateral, I would submit that there would be an active MBS market.**" [Emphasis added]

Over a period of many years, appraisal methods changed from ones based on multiple valuation techniques and inputs to one with only a sales price-sensitive input, the latest house prices. This single input was being driven upward by the demand created by loosened lending standards.

See Appendix D for a detailed description on how appraisal methods developed over the last 20 years by Fannie, Freddie, and regulators became less rigorous and resulted in property appraisers failing to recognize an overheated market and report trends and risks to their clients.

By the end of 2003 the home ownership rate, inflation adjusted home price increases, the gross rent to home price ratio, the total replacement cost to total home market value ratio, and national

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[388] Wikipedia, http://en.wikipedia.org/wiki/William_McChesney_Martin,_Jr.
[389] Examples: The mid-1970s, early-1980's, and late-1980s.
[390] Members include collateral valuation experts from such institutions as The Appraisal Foundation, Morgan Stanley, Freddie Mac, Fannie Mae, the Appraisal Institute, US Bank, Wachovia, FHFA, and BofA.
[391] Joan N. Trice, Collateral Risk Network, "Reengineering the Appraisal Process", 2009 http://www.columbiainstitute.org/Reengineering%20the%20Appraisal%20Process.pdf

median home price to median income ratio, and other trends were already well outside of normal trends. This was before the volume of private subprime and Alt-A MBS surged in 2004.

The following is a list of pro-cyclical/pro-leverage elements that helped drive the boom in home prices and housing finance. Virtually all were the result of government policy and the list is certainly not exhaustive. There were no counter-cyclical policies introduced over the same period:

a. Interest deductions under the income tax code were effectively limited to interest incurred on loans relating to primary and secondary residences (1986). This promoted the use of higher LTV loans as these became more generally available and the purchase of larger homes by homeowners itemizing deductions, along with encouraging tax-advantaged equity extraction.
b. Continued growth of the GSEs' market share (ongoing) – spreads continued to narrow and the GSEs' competitors were crowded out. All efforts to rein in the GSEs during the boom period failed. Since only Congress could change the GSEs' charter advantages, this growth was essentially on auto-pilot.
c. GSEs' affordable housing mandates implemented by HUD pursuant to the GSE Act of 1992. HUD periodically increased the goals from 1993-2008. Percentages were set in 2004 for 2005-2008, effectively leaving mandates on auto-pilot through this key period.[392]
d. Capital requirements for the GSEs were effectively hard wired into the GSE Act of 1992. Capital levels were set at 222:1 for off-balance sheet and 40:1 for on-balance sheet assets. This allowed the GSEs to operate at much higher leverage levels as compared to their competitors.
e. The GSEs had the implicit guarantee of the federal government. This along with high leverage helped fuel their growth. As the GSEs grew, private competition was crowded out.[393] Crowding out drove their competitors to develop ways to increase their leverage levels, such as CDOs and CDOs squared.
f. Risk-based-capital requirements heavily favored home mortgages, the GSEs' MBS and agency debt, and "AAA" and "AA" private MBS.
g. CRA was amended in 1995 to provide for outcome based performance reviews. A large bank desiring an "outstanding" rating needed to quantitatively demonstrate that it had outperformed its competitors. Since virtually all large banks desired an outstanding rating in order to facilitate merger approvals, a game of leapfrog ensued. With no real market-based governor in place, CRA lending, like the GSEs, was effectively placed on auto-pilot. Both CRA and the GSEs' affordable housing goals allocated credit in a manner that largely operated independently of market conditions. They artificially created demand by increasing leverage.
h. Affordable housing and CRA mandates led to both the subsidization and mispricing of higher risk loans.
i. Loan loss reserving process was based on actual delinquencies. Low defaults during a boom period leads to an accumulation of low levels of reserves at the point when the boom ends and defaults accelerate. This leads to incorrect capital determinations and

[392] This shortcoming was acknowledged in FHFA's new affordable housing regulations (2010).
[393] This shortcoming was acknowledged in the Housing and Economic Recovery Act of 2008.

helps explain why virtually every bank taken over by the FDIC had positive capital immediately prior to takeover, yet resulted in a loss of 10%-30%. Fannie presents an excellent example. At 12.31.03 Fannie had $797 million in its allowance for losses representing a miniscule .036% of on- and off- balance sheet credit liabilities of $2.2 trillion. This was down from 0.066% at 12.31.99 and 0.13% at 12.31.92. The perverse manner in which loss provisioning worked over the 12 year period 1992-2003 is demonstrated by the fact that at 12.31.92 its allowance for loan losses was $780 million, about the same dollar total as at 12.31.03, yet the dollars at risk were 3.5 times higher. As home price increases accelerated, both charge-offs and the allowance for loan losses as a percentage of exposure shrank. At 12.31.03 53% of Fannie's single-family credit exposure had been seasoned 1 year or less.[394]

j. In 1995 FDIC, due to the low level of bank failures then occurring, reduced the variable portion of deposit premiums to zero for "well-capitalized banks", leaving only a flat charge of $2000 per year for such banks.[395]
k. FHA continued its long-standing practice of reducing down payments.
l. For the first time the GSEs and the private sector offer loans with 3% down (1994) and zero down (2000). The volume of these loans expands rapidly.
m. Substantial increases in other high leverage lending features such as higher debt ratios, interest only and negative amortization, new definitions of income, lending to impaired borrowers, reduced upfront costs, and low doc/no doc lending.
n. An increased appetite for risk (accompanied with underestimation of risks) causes credit to grow at a faster rate. This is aided by the home interest tax deduction. Home mortgage debt as a percentage of GDP increased from 39% in 1986 to 50% in 1999 to 75% in 2007.
o. Mortgage interest rates continue their declines from the highs of the early 1980s. Rates decline from 10% in 1991 to about 5.5% in 2003-4.[396]
p. Property valuations are based solely on a single input - comparable sales. The GSEs were the effective standard setters for appraisals.
q. Federal efforts to reduce downpayments and otherwise loosen lending standards spur both demand and price increases.
r. Notwithstanding the lowest interest rates in over a generation, an affordability gap develops, as the house prices continued their unprecedented rise upward. This reinforces calls for loosened lending standards to eliminate or reduce the gap and effectively puts CRA, affordable housing and other loosened lending initiatives on steroids.
s. Loosened underwriting on investor loans on 1-4 unit property (spurred in part by 1-4 unit rental affordable housing requirements).
t. An income tax law change in 1997 made speculating in homes a vocation for many homeowners. A married couple could live in a home for 2 years and pay zero tax on the first $500,000 of capital gain.[397]
u. Loosened underwriting on cash out refinances. Higher prices led to wealth effect (and reduced savings). Easy access to equity fueled the private spending boom – in downturn, the opposite happens. Relying on comparable based appraisals during periods

[394] Data from various Fannie 10-Ks and annual reports.
[395] http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=3606
[396] http://mortgage-x.com/general/historical_rates.asp
[397] http://www.nytimes.com/2008/12/19/business/19tax.html

of rapid price increases allows a large percentage of outstanding loans to "revalue" based on current values. At the end of 2003 55% of mortgages had been outstanding less than a year and equity extraction during the year totaled $400 billion, with even higher amounts extracted in 2004-2006.

v. Nationalization of lending/underwriting/appraisal standards by the GSEs. In a market where the three most important things are location, location, location, the GSEs and their automated underwriting systems applied national standards regardless of local conditions.

w. The GSEs gave the best pricing and greatest flexibilities to large lenders. The top 10 lenders went from a market share of 25.8% in 1995 to 71.8% in 2007.[398] These national lenders largely relied on the originate-to-distribute rather than the originate-to-hold model.

x. Virtually all participants in the mortgage process get paid more if home prices/mortgage amounts increase.

y. The increased use of loan modifications reinforced the suppression of delinquency rates caused by rising home prices. This masked the need for higher charge-offs and the building up of loss reserves, which are based on delinquencies.

FDIC Chair Sheila Bair addressed the impact of a number of these pro-cyclical elements as follows:[399]

> "For 25 years federal policy has been primarily focused on promoting homeownership and promoting the availability of credit to home buyers. While tax deductions for interest on most forms of consumer debt have been curtailed, the home mortgage interest deduction lives on. Local property taxes are also deductible, as are capital gains up to $250,000....
>
> In the end, these public and private efforts [also referring to Fannie and Freddie] helped to briefly push the homeownership rate as high as 69 percent. That's a level that ultimately proved unsustainable, and that may not be reached again for many years, if ever....
>
> It is estimated that when you add up the mortgage interest deduction, local property tax deductions, and exclusions on capital gains realized on the sale of owner-occupied housing ... the taxpayer subsidies for homeowners are about three times the size of all rental subsidies and tax incentives combined.
>
> In fact, you can argue that this huge subsidy for homeowners has helped push up housing prices over time, making affordability that much more of a problem for the very groups you're trying to serve."

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[398] Inside Mortgage Finance ,

[399] Sheila C. Bair to the Housing Association of Non-Profit Developers Annual Meeting, June 7, 2010, http://www.loansafe.org/sheila-c-bair-to-the-housing-association-of-non-profit-developers-annual-meeting

If all of the elements surrounding housing finance are pro-cyclical, they will tend to induce an increase in demand, an expansion of lending, an increase in leverage, and increasing asset price inflation (home prices). This will tend to occur regardless of market fundamentals. Once the boom ends, many of these same policies serve to reinforce the down-cycle.

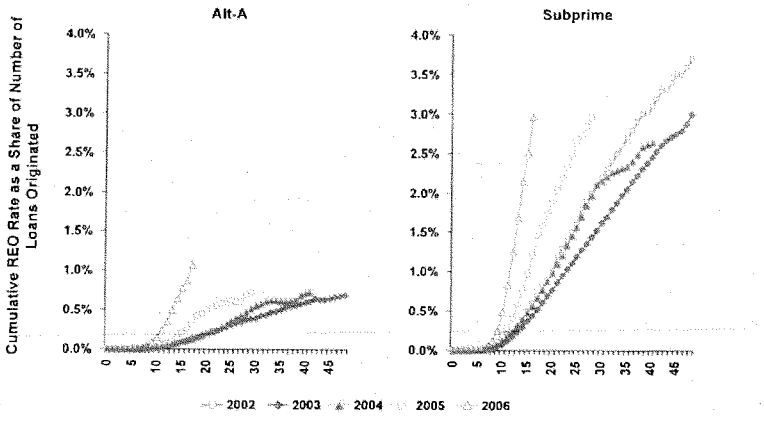
IV. The Collapse of the private MBS and CDO market

By late-2006, developing delinquency trends were roiling the private MBS market:

> "'Delinquency trends and home prices' show a weakening real estate market, said Scott Eichel, head of credit trading for New York-based Bear Stearns & Co., the biggest underwriter of bonds backed by mortgages. 'A lot of investors that have concerns about the housing market' are using the ABX index to speculate on a continued drop, he said." "Housing in U.S. Poised to Worsen, Derivatives Show" Bloomberg.com October 23, 2006[400]

Chart 52:*

Figure 4C: Cumulative Incidence of REO Among *Non*-Prime First-Lien Mortgage Loans by Origination Year



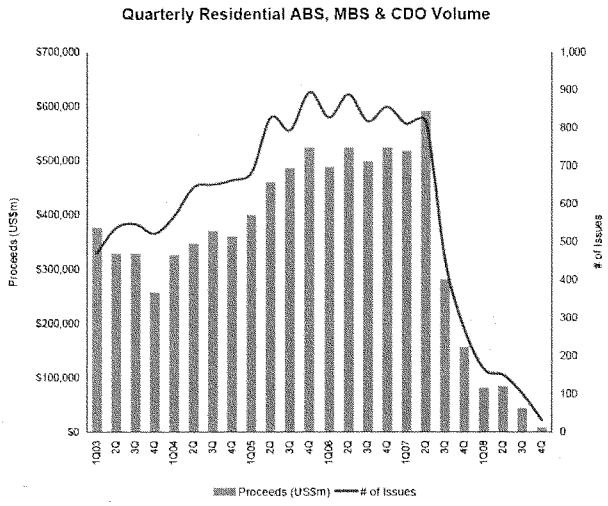
Source: Author's estimations based on First American LoanPerformance ABS Securities Database. Shaded area represents the estimated range of REO rates for Prime Loans based on REO transition rates from 60-day Delinquencies in Cutts and Green (2005) and the 60-day delinquency rates in Figure 4A.

*REO means real estate owned (repossessed properties).

[400] http://www.bloomberg.com/apps/news?pid=20601103&sid=adbsVAhN68TM&refer=us

As shown in Chart 53[401] below, the volume of private MBS declined dramatically during -the 3d quarter of 2007, and eventually the asset-backed market collapsed entirely as investors lost confidence in AAA ratings that were clearly based on invalid data. The collapse of this market was unprecedented, and caused enormous losses to financial intermediaries that could no longer carry their MBS at the previously assumed value. This raised doubts about the financial condition of many of the world's major financial institutions, initiated an investor panic and caused the rescue of Bear Stearns and the bankruptcy of Lehman Brothers. The world-widc freeze-up in lending between financial institutions that followed the failure of Lehman Brothers in September 2008 is what is generally referred to as the financial crisis.

Chart 53:



[401] Source: Thompson Reuters *Debt Capital Markets Review,* Fourth Quarter 2008, available at http://thomsonreuters.com/products_services/financial/league_tables/debt_equity/ (accessed July 30, 2009).

V. Conclusion:

There have been a number of studies which cite the role relaxed lending standards played in the financial crisis.

A recent Cleveland Fed study concluded that their "Canada and U.S. housing market comparison suggests that relaxed lending standards played a crucial role in the U.S. housing bust."[402]

HUD, without a hint of irony, stated in its 2010 "Report to Congress on the Root Causes of the Foreclosure Crisis":

> "...the sharp rise in mortgage delinquencies and foreclosures is fundamentally the result of rapid growth in loans with a high risk of default—due both to the terms of these loans and to loosening underwriting controls and standards. **Mortgage industry participants appear to have been drawn to encourage borrowers to take on these riskier loans due to the high profits associated with originating these loans and packaging them for sale to investors (Emphasis added).** While systematic information on borrowers' motivations in obtaining these loans is not available, existing evidence suggests that some borrowers did not understand the true costs and risks of these loans while others were willing to take on these risks to tap accumulated home equity or to obtain larger homes."[403]

FDIC Chair Sheila Bair in a speech given on June 18, 2010 stated:

> **"Underwriting: Back to Basics"**
>
> "First, we must recognize that the financial crisis was triggered by a reckless departure from tried and true, common-sense loan underwriting practices."
>
> "Traditional mortgage lending worked so well in the past because lenders required sizeable down payments, solid borrower credit histories, proper income documentation, and sufficient income to make regular payments at the fully-indexed rate of the loan. Not only were these bedrock principles relaxed in the run-up to the crisis, but they were frequently relaxed all at once in the same loans in a practice regulators refer to as "risk layering."
>
> "As all of you know, the long-term credit performance of a portfolio of mortgage loans can only be as sound as the underwriting practices used to originate those loans."[404] [405]

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[402] Id.

[403] Report to Congress on the Root Causes of the Foreclosure Crisis , January 2010, pp. vii-viii, http://www.huduser.org/portal/publications/hsgfin/foreclosure_09.html

[404] Remarks by FDIC Chairman Sheila C. Bair to the Wharton School, University of Pennsylvania International Housing Finance Program; Philadelphia, Pa.
June 18, 2010, http://www.fdic.gov/news/news/speeches/chairman/spjun1810.html

HUD Secretary Donovan at an April 14, 2010 hearing of the U. S. House Financial Services Committee testified:

> "Seeing their market share decline as a result of this change of demand, the GSEs made the decision to widen their focus from safer prime loans and begin chasing the non-prime market, loosening long-standing underwriting and risk management standards along the way. This would be a fateful decision that not only proved disastrous for the companies themselves - but ultimately also for the American taxpayer."

Before home prices crashed, HUD was much less reticent about acknowledging its and regulators' roles in liberalizing underwriting standards. In 2005 a HUD commissioned report noted:

> "More liberal mortgage financing has contributed to the increase in demand for housing. During the 1990s, lenders have been encouraged by HUD and banking regulators to increase lending to low-income and minority households. The Community Reinvestment Act (CRA), Home Mortgage Disclosure Act (HMDA), government-sponsored enterprises (GSE) housing goals and fair lending laws have strongly encouraged mortgage brokers and lenders to market to low-income and minority borrowers. Sometimes these borrowers are higher risk, with blemished credit histories and high debt or simply little savings for a down payment. Lenders have responded with low down payment loan products and automated underwriting, which has allowed them to more carefully determine the risk of the loan. Other factors that have facilitated liberal financing include low and falling interest rates, low default rates, rising house prices, competition from subprime lenders and strong investor demand for mortgage-backed securities (MBS). The net effect has been a booming mortgage market that has generated strong demand for housing, which, in turn, has boosted house prices."[406]

Or in 2004 when HUD announced increased affordable housing goals applicable for 2005-2008:

> "Over the past ten years, there has been a 'revolution in affordable lending' that has extended homeownership opportunities to historically underserved households. Fannie Mae and Freddie Mac have been a substantial part of this 'revolution in affordable lending'. During the mid-to-late 1990s, they added flexibility to their underwriting guidelines, introduced new low-downpayment products, and worked to expand the use of

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[405] Sheila Bair's advice was not followed in the recently enacted Financial Reform Bill. In Section 941, Congress charges regulators with defining the characteristics of a "qualifying residential mortgage". Such a mortgage should have "underwriting and product features that historical loan performance data indicate result in a lower risk of default." Conspicuous in their absence from the list are LTV and borrower credit history. This is a repeat of the identical error made by Congress when it passed then GSE Act of 1992 and pushed the GSEs into reduced downpayment and other loosened lending standards (see **1992-B**). p. 529, http://banking.senate.gov/public/_files/Rept111517DoddFrankWallStreetReformandConsumerProtectionAct.pdf

[406] HUD PDR, May 2005, HUD Contract C-OPC-21895, Task Order CHI-T0007, "Recent House Price Trends and Homeownership Affordability", p. 85,

> automated underwriting in evaluating the creditworthiness of loan applicants. HMDA data suggest that the industry and GSE initiatives are increasing the flow of credit to underserved borrowers. Between 1993 and 2003, conventional loans to low income and minority families increased at much faster rates than loans to upper-income and non-minority families."[407]

Or in 2000 when HUD announced that it was "significantly increasing [the GSEs' housing goals] for the years 2001-03:[408]

> "Lower-income and minority families have made major gains in access to the mortgage market in the 1990s. A variety of reasons have accounted for these gains, including improved housing affordability, enhanced enforcement of the Community Reinvestment Act, more flexible mortgage underwriting, and stepped-up enforcement of the Fair Housing Act. But most industry observers believe that one factor behind these gains has been the improved performance of Fannie Mae and Freddie Mac under HUD's affordable lending goals. HUD's recent increases in the goals for 2001-03 will encourage the GSEs to further step up their support for affordable lending."[409]

Or in 1995 when HUD announced its National Homeownership Strategy and acknowledged:

> "While members of the partnership have already made significant strides in reducing [low downpayments as a] barrier to home purchase, more must be done. In 1989 only 7 percent of home mortgages were made with less than 10 percent downpayment. By August 1994, low downpayment mortgage loans had increased to 29 percent."[410]

HUD went on to add in the National Homeownership Strategy:

- "[m]any low-income families do not have access to sufficient funds for a downpayment"[411],
- "many prospective homebuyers still cannot qualify for a conventional mortgage"[412],
- "Nevertheless, great strides have been made by the lending community in recent years to reduce downpayment requirements, particularly for low- and moderate-income homebuyers. This trend is encouraging and should be continued with support from the partnership"[413], and

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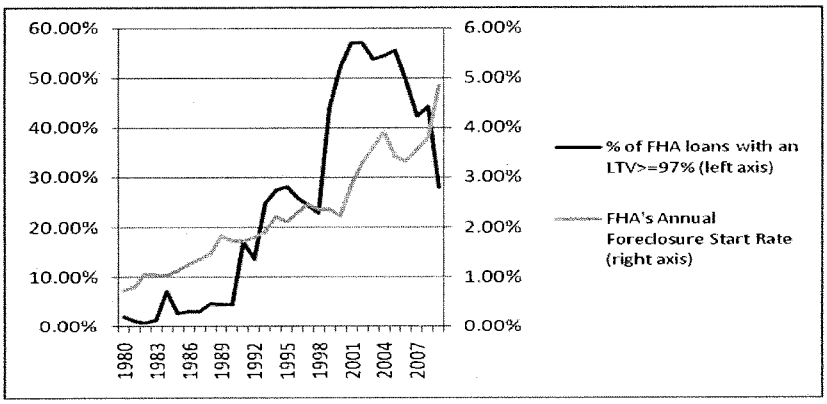
[407] Final Rule, p. 63645, http://fdsys.gpo.gov/fdsys/pkg/FR-2004-11-02/pdf/04-24101.pdf
[408] Supra., HUD's Affordable Lending Goals for Fannie Mae and Freddie Mac, p. 1
[409] Id., p. 5
[410] HUD's "National Homeownership Strategy – Partners in the American Dream", http://web.archive.org/web/20010106203500/www.huduser.org/publications/affhsg/homeown/chap1.html
[411] Id.
[412] Id.
[413] Id.

- "Lending institutions, secondary market investors, mortgage insurers, and other members of the partnership should work collaboratively to reduce homebuyer downpayment requirements."[414]

The GSEs' losses were largely due to high risk loans acquired to meet AH goals (loans that were outside of the GSEs' guidelines in 1991), losses associated with goals rich subprime and Alt-A private MBS securities acquired the GSEs, and losses on low income tax credits acquired to meet AH goals.

The results of the government's efforts to force loosened underwriting standards are graphically show in Charts 54, 55 and 56. These set out the growth in FHA lending and home purchase lending with an LTV or combined LTV (CLTV) >=97% since 1980:[415] The growth in home purchase loans with downpayments of <=3% coincides with the passage of the GSE Act of 1992. Charts 54 and 55 also show how the FHA and the all loan foreclosure start rates respectively have risen over the same period.

Chart 54: Percentage of FHA Volume with an LTV >=97% and FHA Foreclosure Start Rate



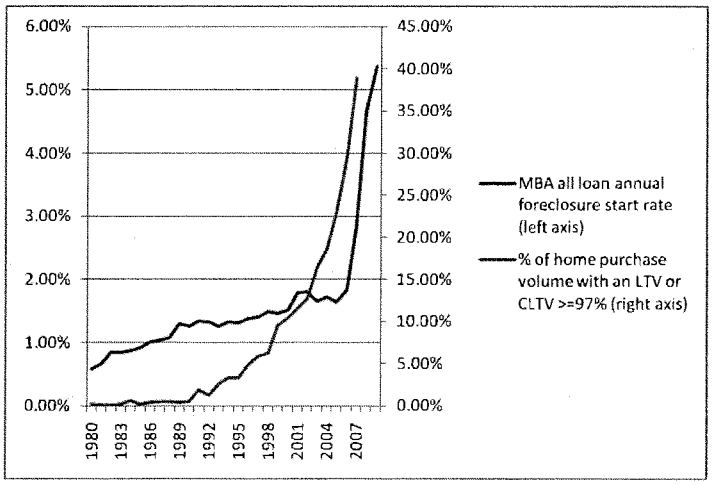
Sources: MBA National Delinquency Survey and FHA 2009 Actuarial Study and compiled by Edward Pinto

[414] Id.

[415] Sources: FHA 2009 Actuarial Study, HUD reports on the GSEs' affordable housing goals, Fannie and Freddie 10-Qs, and the Federal Housing Finance Board. As LTV data is not available for VA loans, these are excluded from the totals. VA was a relatively minor contributor...

Chart 55 demonstrates the growth in the incidence of home purchase loans with a down payment of <=3% (an LTV or CLTV>=97%) from about 1 in 400 home purchases in 1980 to 1 in 7 in 2003 and 1 in 3 in 2007. Foreclosure start rates rose as down payments dropped.

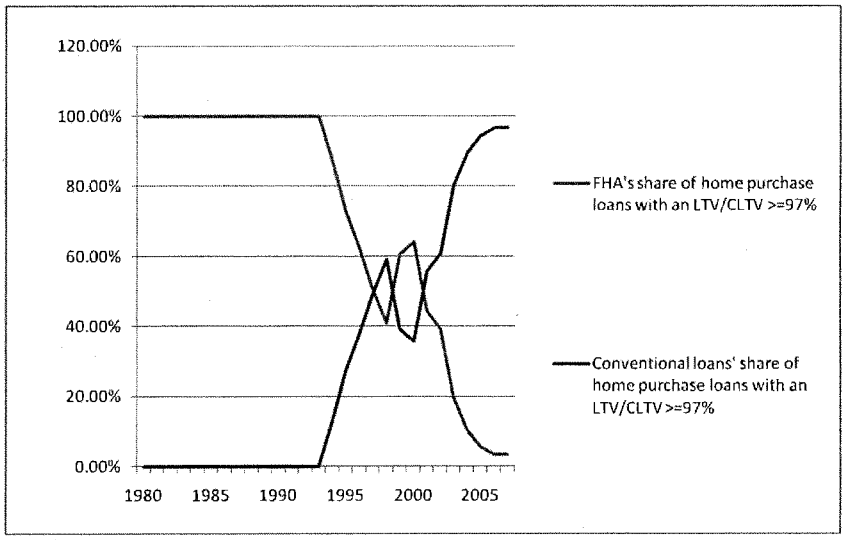
Chart 55: Estimated Percentage of Home Purchase Volume with an LTV or CLTV >=97% (Includes FHA and Conventional Loans*) and Combined Foreclosure Start Rate for Conventional and Government Loans:



Sources: MBA National Delinquency Survey, FHA 2009 Actuarial Study, and HUD"s Office of Policy Development and Research - Profiles of GSE Mortgage Purchases in 1999 and 2000, in 2001-2004, and in 2005-2007, SMR's "Piggyback Mortgage Lending," and Fannie's 2007 10-K. Compiled by Edward Pinto

*Fannie's percentage of home purchase loans with an LTV or CLTV >-97% used as the proxy for conventional loans.

Chart 56: Estimated FHA and Conventional (estimated for all Conventional Loans, not just the GSEs*) Loans Share of Home Purchase Loans with an LTV or CLTV>97%:



Sources: FHA 2009 Actuarial Study, and HUD"s Office of Policy Development and Research - Profiles of GSE Mortgage Purchases in 1999 and 2000, in 2001-2004, and in 2005-2007. Compiled by Edward Pinto

*Fannie's percentage of home purchase loans with an LTV or CLTV >-97% used as the proxy for conventional loans.

The trends shown by Charts 55 and 56 are indicative of the magnitude of the changes that took place with respect to all of the Three Cs of Mortgage Credit.

The above chronology demonstrates that:

1. *The impetus for passage of the GSE Act of 1992 and the affordable housing goals was a desire to invigorate the long dormant CRA.*
2. *To this end community groups convinced Congress and HUD to mandate loosened underwriting standards throughout virtually the entire conventional (non-FHA and VA) home finance market in an effort to have the GSEs and private market become the leading source for low- and moderate-income home financing.*
3. *At the behest of Congress, HUD and the GSEs played the central role in weakening lending standards and increasing leverage. The community groups responsible for drafting the affordable housing portion if the GSE Act of 1992 knew that unless and until the GSEs were forced to loosen their underwriting standards, the primary market would*

maintain their conservative standards. The GSEs started loosening their underwriting standards early in the 1990s. By the late 1990s their automated underwriting systems had become the industry standard, effectively replacing many proprietary ones. By the early 2000s much of the industry was using the GSEs' automated systems regardless of whether the loan was destined for purchase by the GSEs. Each time the GSEs loosened their guidelines, originating lenders both knew what new flexibilities were now "acceptable" to the GSEs and what flexibilities they would need to implement in order to maintain or grow their market share of loans sold away from the GSEs.

4. *The pressure exerted by the affordable housing goals (particularly the Special Affordable housing goal) on the GSEs (and the rest of the market) to loosen underwriting standards was immense and continually growing. While the moderate-income only portion of the goals increased from a baseline of 23% pre-GSE Act of 1992[416] to 29% in 2008[417], the Special Affordable goal increased from the 7% baseline pre-GSE Act to 27% in 2008. From 1992 to 2008 the GSEs were mandated to quadruple their acquisitions of loans to low- and very-low income borrowers. HUD used the goals setting process to force the GSEs to serve an ever larger percentage of low- and very low-income borrowers. As the GSEs were required to go deeper and deeper into this income segment, they had to offer higher and higher LTVs, numerous other underwriting flexibilities, and cross-subsidies provided by the GSEs' lower risk business.*

In 1995 HUD had asked:

> **"Lending institutions, secondary market investors, mortgage insurers, and other members of the partnership [to] work collaboratively to reduce homebuyer downpayment requirements."[418]**

It had reiterated this goal on numerous occasions.

By 2006 an estimated 30% of home buyers put no money down. Many more put as little as 1-3% down. HUD had accomplished its goal but at a terrible cost

*In 1994 Fannie's chief credit officer warned against Fannie's introduction of a 97% LTV mortgage based in part on the disastrous experience in Texas in the early1980s (1 in 4 loans with an LTV of 95% failed).[419] (See **1994-B**) In 1995 Fannie set a cumulative failure rate limit on any single community lending product line at 12 percent."[420] **(See 1995-B)** Texas' early 1980s cumulative default experience would be matched **nationwide***

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[416] The 30% low- and moderate-baseline pre-GSE Act minus the 7% low- and very-low baseline pre-GSE Act.
[417] The 56% low- and moderate-baseline pre-GSE Act minus the 27% low- and very-low baseline pre-GSE Act.
[418] Supra. HUD's "National Homeownership Strategy – Partners in the American Dream".
[419] WSJ, "Why Calls Are Escalating to Clip Fannie Mae's, Freddie Mac's Wings", July 14, 2000, http://online.wsj.com/article/SB963527598420670221-search.html?KEYWORDS=Freddie+Mac&COLLECTION=wsjie/6month
[420] Supra. Fannie Mae Credit Policy memo, "Community Lending Review"

by FHA for its 2007 book year of loans and ***nationwide*** *by Fannie for its 2007 book year of loans with LTVs>=95% and/or a FICO<659.* [421]

5. *The growing levels of CRA and special affordable housing acquisitions mainly targeted, at borrowers with an income <80% of median created more stimulation than this market segment could reasonably absorb. The 1996 Fed study (see* ***1996-D****) demonstrated that the pool of low and moderate income borrowers had a much higher percentage of low FICO scores and the use of low down payment loans and other loosened credit standards with this group (regardless of FICO) would lead to disastrous default results.*
6. *The goal of greatly reducing the gap in homeownership rates based on income was promulgated and implemented without regard to the types and dollar volumes of loosened underwriting that would be needed to accomplish this goal or the impact on the housing market. There was no recognition of the boom/bust nature of real estate, a trait greatly magnified by the leverage extremes advanced by government policy. Each additional push down the demand curve increased the risks being introduced into the housing finance system. Policy makers generally and HUD in particular would accept no amount of progress as sufficient until the gap was eliminated in its entirety. In the resulting clash between an unproven theory that policies mandating loosened underwriting would lead to a beneficial increase in the homeownership rate and the practicalities of a real estate market prone to boom and bust cycles, the bust cycle won.*
7. *HUD played a central regulatory role in orchestrating a multi-faceted weakening of underwriting standards over many years.* ***It does not appear that any other country had ceded the role of underwriting standard setter to a non-prudential regulator.***
8. *If the GSEs' prudent lending standards of 1991 had largely remained in place, underwriting standards throughout the housing finance industry would have been much stronger. As a result the boom would have been lessened and the real estate correction that follows a boom would have been much less severe and would not have engulfed much of the housing market.*
9. *After 15 years of unrelenting efforts by government agencies and enterprises to replace traditional underwriting standards with ones that were flexible and innovative, the housing finance system (with the notable exception of FHA) has once again largely returned to traditional standards, thereby confirming the validity of these standards. This is further evidence that the government's efforts served to promote unsafe, unsound and unsustainable lending was a misguided policy and harmed the individuals it was intended to help along with large swaths of the homeowner population and did great harm to the economy generally. As noted earlier, the recently enacted Financial Reform Bill does not include size of downpayment or a borrower's credit history in the list of*

[421] Source: FHA 2009 Actuarial Study, p. F-3 and author's estimate for Fannie's 2007 national book of loans with LTVs >=95% and/or FICOs <660. This estimate is based on Fannie's Q.1.10 Credit Supplement, pp. 6-8, http://www.fanniemae.com/ir/pdf/sec/2010/q1credit_summary.pdf;jsessionid=N4QBC0GJYCHBJJ2FQSISFGI

"underwriting and product features that historical loan performance data indicate result in a lower risk of default."[422]

10. *The increases in leverage and the hollowing out of lending standards that took place over a 15 year period was the direct result of policies established by Congress and administrative agencies, in particular the GSE Act, CRA, and the National Housing Strategy.*
11. *Government policies mandating the loosening of underwriting standards were pro-cyclical. These policies were reinforced by both new and existing pro-cyclical policies also supportive of housing.*
12. *HUD's "revolution in affordable lending" had created a dangerously synchronized mortgage market with an unprecedented number of overleveraged loans made to an unprecedented number of overleveraged borrowers. HUD had fashioned a housing finance market ill-equipped to absorb the shock of declining prices.*
13. *The similarity between the role played by HUD's promotion low and no downpayment lending Fannie and Freddie's encouragement of cash out refinances in the financial crisis and the role margin lending played in the stock market run-up and crash in the late 1920s is striking. Homebuyers were encouraged to purchase homes with little or no down payment (akin to buying stock on margin) and encouraged to extraction the equity created by booming house prices (akin to borrowing against one's stock margin account to buy more stock.*[423]
14. *It was HUD's "revolution in affordable lending" with its attendant weakening of lending standards and increasing leverage that triggered the mortgage meltdown and ensuing financial crisis. The long period of unprecedented credit loosening accounts for the length and exceptional nature of the 12 trends noted at the beginning of this paper and explains why the United States suffered a mortgage meltdown worse than any other country.*

By 2004 the Urban Institute's findings presented to HUD in 1997[424] that "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" was no longer true. From 2000-2007 trillions of dollars of mortgages were acquired by the GSEs and others that were made to borrowers with low incomes or poor credit histories or who made no downpayments.

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[422] Section 941, p. 529, http://banking.senate.gov/public/_files/Rept111517DoddFrankWallStreetReformandConsumerProtectionAct.pdf

[423] Howard Bierman, Jr., Cornell University, Economic History Association, "My conclusion is that the margin buying was a likely factor in causing stock prices to go up, but there is no reason to conclude that margin buying triggered the October crash. Once the selling rush began, however, the calling of margin loans probably exacerbated the price declines. (A calling of margin loans requires the stock buyer to contribute more cash to the broker or the broker sells the stock to get the cash.)" http://eh.net/encyclopedia/article/Bierman.Crash

[424] http://www.urban.org/publications/1000205.html

V. Appendices:

See Appendix A for links to three memoranda that provide additional quantitative detail

See Appendix B for additional detail on the interrelated nature of CRA, the GSE Act of 1992, and HUD's Best Practices Initiative.

See Appendix C for additional detail on the performance of FHA loans.

See Appendix D for detail on the role of appraisals in the financial crisis.

See Appendix E for detail on Alt-A loans' contribution to affordable housing goals.

Appendix A:

Below are links to three memoranda that document the accumulation of subprime and Alt-A loans in the U.S. first mortgage market:

1. "Sizing Total Exposure to Subprime and Alt-A Loans in U.S. First Mortgage Market as of 6.30.08": http://www.aei.org/docLib/Pinto-Sizing-Total-Exposure.pdf

2. "Sizing Total Federal Government and Federal Agency Contributions to Subprime and Alt-A Loans in U.S. First Mortgage Market as of 6.30.08": http://www.aei.org/docLib/Pinto-Sizing-Total-Federal-Contributions.pdf

3. "High LTV, Subprime and Alt-A Originations Over the Period 1992-2007 and Fannie, Freddie, FHA and VA's Role": http://www.aei.org/docLib/Pinto-High-LTV-Subprime-Alt-A.pdf

Appendix B: Further detail on CRA's role in the mortgage meltdown and the interrelated nature of CRA, the GSE Act of 1992, and HUD's Best Practices Initiative

Supporters of CRA ask how a statue passed in 1977 could play such a central role in the financial crisis: The answer is that government policy initiatives taken in 1992-1995 invigorated CRA and placed it at the center of the effort to force the housing finance industry to institute flexible and innovative underwriting standards. Affordable housing initiatives represented by CRA, the GSE Act of 1992, and HUD's Best Practices Initiative were intertwined in numerous ways. This is best exemplified by Countrywide. One of the main arguments made to support the position that CRA was not a significant contributor to the mortgage crisis is that large originators like Countrywide were not subject to the Act. This argument fails for a number of reasons. First and foremost, Countrywide originated $789 billion in loans over 2001-2007 to fulfill its $1 trillion HUD "Best Practices" commitment.[425] Countrywide's "Best Practices" originations comprised 31% of its total volume in dollars over the period 2001-2007[426] (the percentage based on units would be higher since "Best Practices" loans tended to be smaller in dollar size). Thus Countrywide played a leading role in originating low-income loans to fulfill what would ultimately become a $1 Trillion commitment under HUD's Best Practices Initiative.[427] Many of these loans were sold to Fannie and Freddie to help them meet their affordable housing goals. Finally, much of the remainder was assembled into whole-loan packages and securities of CRA-eligible loans for sale to banks to help meet their CRA goals.

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[425] In a question and answer statement released by Countrywide in late-2007 it noted $789 billion in loan originations towards its $1 trillion goal. http://www.realtown.com/articles/view/questions-and-answers-from-countrywide-about-lending

[426] Inside Mortgage Finance

[427] "Countrywide Is First Mortgage Lender to Voluntarily Agree to Fair Lending Goals with HUD" PASADENA, Calif., Sept. 14, 1994, PRNewswire: "The nation's largest mortgage lender and servicer, Countrywide Funding Corp., signed a voluntary Declaration of Fair Lending Principles and Practices ("Declaration") with the U.S. Department of Housing and Urban Development (HUD) -- the first such document -- underscoring Countrywide's commitment to increase the number of home loans made to minority and low-income borrowers....Countrywide implemented its House America program in October 1992.... Countrywide has made a $5 billion commitment with Fannie Mae and Freddie Mac to make such loans in 1994/1995 under its House America program." Additional Countrywide commitments:

- In 2000 $80 billion in community development lending included as a provision in Countrywide's reaffirmation of its 1994 HUD agreement (noted in *Mortgage Banking*, May 1, 2000);
- In 2001 an expanded $100 billion in community development lending through 2005. This goal was exceeded by early 2003 (Countrywide press release dated May 14, 2001); and
- In 2003 an expanded $600 billion goal, extended to 2010 (noted in *Mortgage Banking*, Feb. 2005).
- In a question and answer statement released by Countrywide in late-2007 it noted $789 billion in loan originations towards its [recent] $1 trillion goal. (http://www.realtown.com/articles/view/questions-and-answers-from-countrywide-about-lending).

There are additional reasons why CRA is intertwined with mortgage bankers such as Countrywide:

1. Countrywide was indirectly subject to the affordable housing goals of Fannie and Freddie, an initiative designed to spur CRA and CRA-like lending. Throughout the 13-year period 1995-2007, Countrywide was Fannie and Freddie's (on a combined basis) largest or second largest customer. In 2007 Countrywide accounted for 29% of Fannie's and 16% of Freddie's business.[428] Given Fannie and Freddie's escalating AH goals, much of Countrywide's "Best Practices" originations would have gone towards fulfilling these goals. Being in a preferred position as one of Fannie and Freddie's most significant customers had many perks, including highly advantageous pricing and underwriting flexibilities. Countrywide needed to originate growing amounts of "Best Practices" loans in order to maintain its #1 position and attendant perks;

2. Countrywide was able to package up and sell many of its remaining "Best Practices"/CRA-type loans to banks to meet their CRA requirements. Countrywide is reported to have had the following on its website: "The result of these efforts is an enormous pipeline of mortgages to low- and moderate-income buyers. With this pipeline, Countrywide Securities Corporation (CSC) can potentially help you meet your Community Reinvestment Act (CRA) goals by offering both whole loan and mortgage-backed securities that are eligible for CRA credit."[429] Just like with affordable housing loans, the qualifying requirements for CRA were easily determined, making targeted marketing to prospective banks relatively easy. Given the demand that CRA created for these loans combined with Countrywide's volume and geographic reach, these originations sold at a premium and became a substantial profit center; and

3. Fannie and Freddie had special CRA-Targeted MBS programs that helped institutions seeking to purchase a CRA-qualified investment. Up to 100 percent of the loans backing this geographically-customized MBS was to borrowers with incomes below 80 percent of the area median income. It is entirely possible that CRA-eligible loans sold by Countrywide to Fannie or Freddie were repackaged into CRA-Targeted MBS and sold to banks to meet their CRA requirements.[430]

Given that these programs overlapped and constituted mandated credit allocation, qualifying loans tended to be worth more than similar loans that did not meet one or more goals. This gave rise to a lively after-market where these loans could be sold at premium prices.

Supporters of CRA state that CRA loans perform well: Detailed performance data for single-family CRA lending is rarely published. A search of the top 25 banks by single family mortgage

[428] Inside Mortgage Finance
[429] http://www.businessinsider.com/three-ways-the-cra-pushed-countrywide-to-lower-lending-standards-2009-6#ixzz0qM528sIc
[430] For example see https://www.efanniemae.com/sf/ip/cra/mbs.jsp

holdings yields only two lenders providing performance data on its CRA loans--Third Federal Savings and Loan of Ohio and Bank of America (BofA). A third view is provided by data on The Shorebank (Chicago), the nation's first community development bank, which specializes in CRA lending. These three banks hold in portfolio a total of over $15 billion in CRA loans (BofA accounts for $14.8 billion of this total). BofA originated a much larger amount of community lending than what remains on its balance sheet. From 2001-2007 it originated $213 billion in single-family community lending loans. Most of this volume was presumably sold to Fannie or Freddie to help meet the GSEs' affordable housing goals:

1. Third Federal reports its "Home Today" affordable housing program, targeted to benefit low- and moderate-income home buyers, constituted just 3.1% or $286 million of its owned first mortgage loan portfolio totaling $6 billion, yet Home Today loans represented 31.9% of its 90+ delinquencies. At March 31.2010 its Home Today total of 90+ days delinquent and non-accrual loans was 33% vs. 2.0% on its non-Home Today first mortgage portfolio. It is worth noting that both portions of Third Fed's portfolio consist almost entirely of properties in Ohio and Florida; two of the states hardest hit by the mortgage meltdown. Yet Third Fed's traditionally underwritten loans are performing well.[431] [432]

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[431] Third Fed's Q.2:10 10-Q, pp. 24 and 28, http://www.snl.com/irweblinkx/docs.aspx?iid=4041914

[432] Third Fed's involvement with CRA presents a case study as to how CRA was used to weaken credit standards. Third Fed started its "Home Today" program in 2000 and used it to make loans as those "customers who, generally because of poor credit scores, would not otherwise qualify for our loan products." In 2002-2003 Third Fed was targeted by the East Side Organizing Project (ESOP) "for ignoring Cleveland's low-income and minority neighborhoods." ESOP's president, Inez Killingsworth, noted that Third Federal's "2001 Home Mortgage Disclosure Act (HMDA) numbers show that while Third Federal is 'Ohio's leading mortgage lender,' they are redlining a whole section of Cleveland's east side neighborhoods.". ESOP leader Emma Adams went on to add: 'We tried to negotiate in good faith....' Killingsworth added: 'We are calling on y'all to take action. We will bring Third Federal to the table and show them how to become a CRA partner, reinvesting in our communities.'" (found at: http://www.disclosure-us.org/disc-feb2003/esopsummit.html)

Third Fed got the message as its Home Today program started growing rapidly, more than doubling to $195 million by September 2004 and reaching $299 million by March 2009. In 2007 Third Fed received fulsome praise from Killingsworth when she testified before a House subcommittee:

> "(w)e also have a very good relationship with Third Federal Savings & Loan...." (found at: http://oversight.house.gov/documents/20070322180426-24212.pdf)

What Killingworth neglected to mention was that Third Fed's Home Today program had a delinquency rate at about the time of her testimony (September 2006) of 24%. By June 2009, it had risen to 35% and remains at this level as of March 31, 2010. (Found at: http://www.snl.com/irweblinkx/doc.aspx?IID=4041914&DID=11149534) This is on par with the self-denominated subprime delinquency levels.

This result is consistent with a 2009 analysis published by the Federal Reserve Bank of Minneapolis which "indicates that subprime loans in ZIP Codes that are the focus of the CRA (those just below the [income] threshold) have performed virtually the same as loans in the areas right above the threshold." (found at: http://www.minneapolisfed.org/publications_papers/pub_display.cfm?id=4136)

2. BofA reports at March 31, 2010, its CRA portfolio comprised seven percent of the residential mortgage loan balances but accounted for 18 percent of nonperforming residential mortgage loans (defined as loans designated as non-accrual). The CRA portfolio also comprised 26 percent of residential mortgage net charge-offs during the three months ended March 31, 2010.[433] An analysis of BofA's 10-Q allows one to calculate that its nonperforming loan rate was 22% on its $15 billion CRA loans. This is almost triple the nonperforming loan rate of 8.4% on BofA's entire 1st mortgage portfolio. An unknown percentage of BofA's CRA loans were 90+ days delinquent but not designated as nonperforming.

3. Shorebank, the nation's first community development bank, reports at March 31, 2010 its single-family first mortgage loan portfolio had a total of 90+ days delinquent and non-accrual loan rate of 22%. It also had total of 90+ days delinquent and non-accrual loan rates of 31% on its multi-family lending, 11% on its commercial real estate, 12% on its commercial and industrial lending, and 53% on its construction and development lending. These loan categories account for 98% of its total lending portfolio.[434] Shorebank has recently been attempting to negotiate a bailout. As of June 22, 2010, it was reported that "[P]eople with knowledge of the analysis say the Fed believes in order to remain solvent, ShoreBank would need much more money — at least $300 million and probably more because of the toxic nature of ShoreBank's balance sheet."[435]

On a more general note, a recent Fed study of CRA loans, as reported by then Fed Governor Kroszner[436], identified CRA loans as a type of subprime loan and noted that "CRA-related subprime loans performed in a comparable manner to other subprime loans."

Unfortunately, there is not a centralized database that tracks CRA loan performance. CRA loan data get mixed into the delinquency data reported for FHA, bank holdings, private mortgage backed securities, and the GSEs. Yet CRA loan performance must be known by these institutions. However there are two large loan groupings that allow us to get a further glimpse at the unsustainable nature of CRA loans:

Based on Special Affordable goals and a Fannie press release from 2003,[437] it is estimated that the GSEs purchased about 50% of CRA-qualified originations since 2003. CRA loans had a high percentage of low and ultra-low down payments (LTV>90%) and FICOs below 660. In 2007, 72% and 74% respectively of Fannie and Freddie's home purchase loans with an LTV>90% met one or more of their AH goals.[438] A somewhat smaller but still substantial percentage would have met CRA's <80% of median area income standards. Both GSEs report loan performance for loans that had either low down payments (LTV>90%) or FICOs below 660. Loans with these

[433] Sources: http://investor.bankofamerica.com/phoenix.zhtml?c=71595&p=irol-sec, p. 134 and http://www.bankregdata.com/main.asp (BofA listing)
[434] http://www.bankregdata.com/main.asp (ShoreBank listing)
[435] http://www.foxbusiness.com/story/markets/wall-street-officials-bailout-shorebank-looks-doubtful/
[436] http://www.federalreserve.gov/newsevents/speech/kroszner20081203a.htm
[437] "Fannie Mae Passes Halfway Point in $2 Trillion American Dream Commitment; Leads Market in Bringing Housing Boom to Underserved Families, Communities" http://findarticles.com/p/articles/mi_m0EIN/is_2003_March_18/ai_98885990/pg_3/?tag=content;col1
[438] Source: HUD Office of Policy Development and Research

characteristics were affordable housing goals rich. These groups of loans constitute a conservative proxy for the performance for CRA loans

Fannie's serious delinquency rate[439] on its $525 billion in high LTV and/or low FICO loans was about 13% at 3.31.10. This is 5.7 times the 2.38% serious delinquency rate on Fannie's traditionally underwritten loans. In terms of specific categories, Fannie's loans with a:

- Down payment equal to or less than 5% had a 12.93% serious delinquency rate;
- FICO < 620 had 17.86% serious delinquency rate; and
- FICO >= 620 and < 660 had 13.20% serious delinquency rate.[440]

At 3.31.10 Freddie also had about $320 billion in loans in the same high risk categories as Fannie. At 3.31.10 the serious delinquency rate on these loans was about 10.5%.[441]

To sum up what we know quantitatively about the performance of CRA and CRA-like loans:

1. The non accruing loan rate averages 22% (and likely higher if 90+ days delinquent loans were known for BofA) on the $15 billion of known CRA loans held by banks noted earlier;

2. The GSEs' nonperforming loan rate averages 13% on over $1 trillion of loans that are affordable housing goals rich, a substantial percentage of which are similar to CRA loans in terms of both income and credit risk characteristics;

3. FHA expects a 20% claims (foreclosure) rate on loans from approximately $230 billion in insured loans from book years 2005-2008. A substantial portion of these loans are similar to CRA loans in terms of both income and credit risk characteristics; and

4. Virtually all of the above loans[442] had "prime term" characteristics, that is they were fixed rate, owner occupied, fully documented, generally lacked prepayment penalties, and made at normal "prime" rates or in many cases at subsidized rates.[443] [444] Many had homebuyer counseling. The high default rates noted above indicate that the presence of these characteristics does not make the loans sustainable or non-predatory. The assertion that CRA and affordable housing loans could be safely made with low or no downpayments, with high debt ratios, or to borrowers with impaired credit so long as

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[439] The terms "serious delinquency" and "nonperforming loans" are basically synonymous.

[440] Fannie's Credit Supplement, p. 6, http://www.fanniemae.com/ir/pdf/sec/2010/q1credit_summary.pdf;jsessionid=RTX4N3TMQJEBBJ2FQSISFGA

[441] http://www.freddiemac.com/investors/er/pdf/supplement_1q10.pdf, pp. 18 and 19

[442] The $845 billion in Fannie and Freddie loans noted above (FICO below 660 and/or LTV/CLTV >90%) are only a portion of the high risk loans acquired by the GSEs. The GSEs had another $800 billion consisting generally of Alt-A (mostly low doc/no doc), ARMS, and investor loans.

[443] As has been noted banks frequently reduced the interest rate by ¼% or ½ %, waived mortgage insurance, points and some closing costs and the GSEs routinely subsidized high risk lending that helped achieve affordable housing goals)

[444] In many cases the lower interest rate merely allowed the borrower to purchase a larger home.

> they also had so called "prime term" characteristics would perform like traditionally underwritten prime loans was wishful thinking with virtually no evidence to support it.

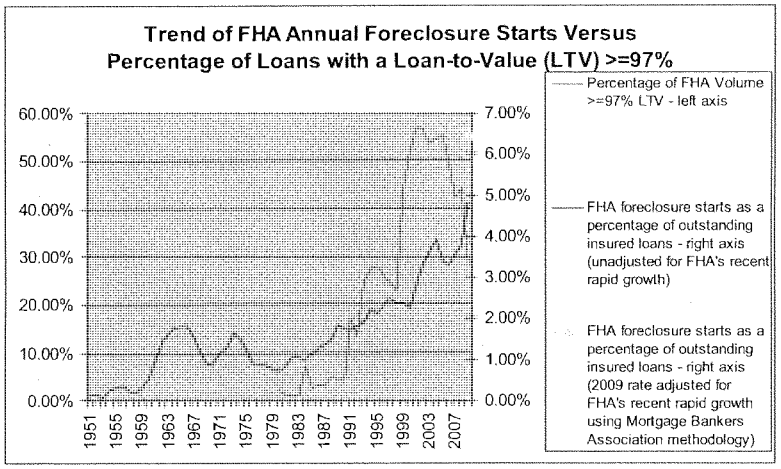
The actual performance of CRA loans was a low priority to regulators. In the Office of Thrift Supervision's "Directors' Guide to Management Reports" 18 warning signs or red-flags are noted regarding CRA and Fair Lending, Not one of the 18 warning signs or red flags mention CRA loan performance, foreclosure rates, delinquency statistics or the reporting of same.[445]

[445] OTS, Directors' Guide to Management Reports, pp. 39-40, http://files.ots.treas.gov/48091.pdf

Appendix C: Additional detail of FHA's loan experience

As FHA's percentage of loans with high LTVs increased, its foreclosure start rate moved up in lock step. More ominously, the foreclosure start rate is increasing throughout the housing boom.

Chart 57 (same as Chart 18):



Sources: FDIC, MBA, FHA, and compiled by Edward Pinto

FHA loans generally experience a high default rate, particularly when they come under stress. This is notwithstanding the fact that they are almost all fixed rate and fully documented. FHA's 2009 actuarial study projects a 20% average Cumulative Claim Rate[446] for its 2005-2008 books of loans, with its 2007 book projected to have 1 in 4 loans go to claim.[447] The same study reports that FHA is currently experiencing a 57% severity rate[448]. At these loss and severity rates one would expect a projected total loss rate of 11.4% (20% x 57%).

[446] FHA insures loans. When an insured loan is foreclosed upon it results in a claim.
[447] FHA's 2009 Actuarial Study
[448] FHA insurance covers 100% of the loss. A 57% severity rate means that it loses 57 cents on every dollar going to claim.

Appendix D: The role of appraisals in the financial crisis

Joan Trice of the Collateral Risk Network pointed out the key role of omission played by appraisers in "Reengineering the Appraisal Process":[449]

> "What role did appraisers play in the housing crisis? Appraisers didn't directly cause values to decline. They weren't the catalyst for homeowners to cease paying their mortgage. But they did help create fictitious equity and were complicit in facilitating trillions of dollars of loans that never should have been made. There are varying degrees of valuation inflation performed by appraisers....And then, somewhere in the mix, was the failure to recognize an overheated market and report trends and risk to their clients....If we had credibly valued the underlying collateral, I would submit that there would be an active MBS market."

Shortcomings of the current valuation process:

The methodologies utilized in valuing single-family residential properties rely almost entirely on comparable sales, to the exclusion of other valuation principles. This was not always the case. When the Federal Housing Administration (FHA) and the Veteran's Administration (VA) led the development of modern appraisal practice back in the 1930s and 1940s, determining a property's value required the reconciliation of four valuation principles:[450]

1. "**The principle of replacement:** The estimated cost of replacement fixes an upper limit of valuation.
2. **The principle of substitution:** the cost of acquiring an equivalent substitute [or comparable] property fixes the upper limit of valuation whether accomplished by (1) constructing identical or equivalent improvements on an equivalent site or (2) purchasing an already completed equivalent property at a price at which an effective supply of equivalent properties is available on terms assumed in the valuation [today this is called comparable value].
3. **The principle of income capitalization:** A properly made capitalization of expected income [rents] fixes an upper limit of valuation.
4. **The principle of suitability or appropriateness:** Unless proposed new building improvements will be appropriate to the site and neighborhood, valuation cannot be as high as replacement cost."

A concluded property value equaled the least amount found by applying such principles. If this resulted in a value lower than the sales price, sellers either had to adjust the sales price downward or buyers had to increase the downpayment. This was consistent with the appraiser's role as set out by FHA in 1947 -- "a price at which a purchaser is warranted in paying for a property, rather than the price at which the property may be sold...."[451] It was the job of the

[449] Supra., Joan N. Trice,
[450] "McMichael's Appraising Manual", p. 148, 4th edition, 1951
[451] ***May, "The Valuation of Residential Real Estate" p. 17, 1953***

appraiser to determine the amount of debt that could be safely lent against a property without impairing the property's ability to earn its way out of the debt.

These steps were necessary because low downpayment lending and lengthy loan terms could raise demand and drive house prices higher. While this potential impact was recognized in appraisal practice over a half century ago, it now seems to have been forgotten:

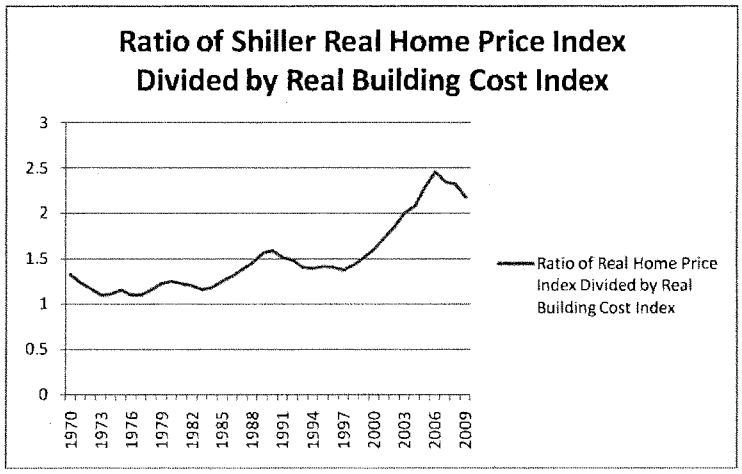
> "Assume that we are dealing with two residential properties in two different cities, which we shall call City *A* and City *B*. Both of these ***cities, we shall assume, have the same population history and trend, the same social and economic background, and the same supply and demand ratio. In each city, we have a residential property to appraise. Each of these properties is similarly environed, of the same size, quality, utilitarian capacity, and cost. The only factor of difference in the problem is the local custom concerning terms of sale, which we may assume are 25 per cent down and 5 years to pay the balance in the case of City A, and 10 per cent down and 15 years to pay the balance in City B. Does it now follow that, because of this difference in the terms of sale, the property located in City A may conceivably be valued at $10,000, and the property in City B at $12,500?, The answer is no; the value is the same in each case, but the price differs because the price as finally fixed in each case stems from the terms agreed upon.***"[452]

1. Over time the principles of replacement and income capitalization came to be relied on less and less until they were made optional and eventually ignored, leaving comparable sales as the sole determinant. At the same time, the use of low or no downpayments and longer loan terms became increasingly widespread. Down payments of three percent or less started becoming more prevalent in the mid-1990s as a result of government policies. By 2006 the National Association of Realtors would report that 46% and 19% of first-time buyers and repeat buyers respectively nationwide put down no money. **As a result, an estimated 30% of home buyers put no money down.** Many more put as little as 1-3% down.

[452] Id. p. 18-19

Without the rigor of the principle of replacement, sales prices became seriously out of line with replacement costs:[453]

Chart 58:

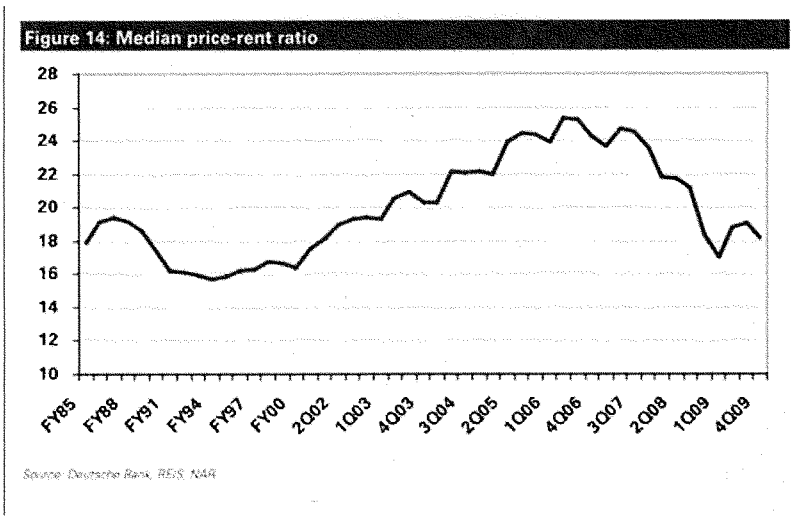


Compiled by Edward Pinto

[453] Robert Shiller, http://www.econ.yale.edu/~shiller/data.htm

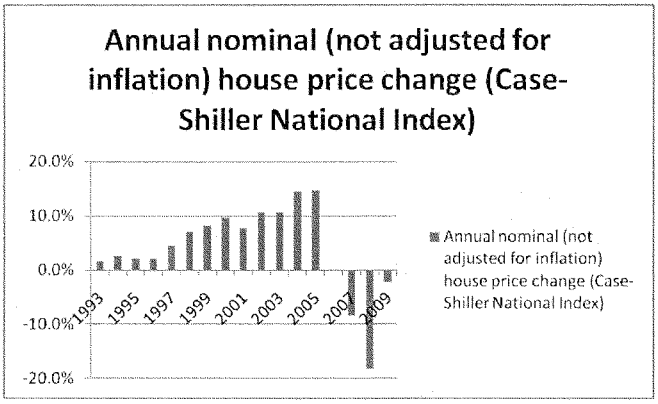
Without the rigor of the principle of income capitalization, sales prices became seriously out of line with rents:

Chart 58:



These shortcomings also help explain the recent wide swings in properties values as noted in Chart 4:

Chart 60:



Compiled by Edward Pinto

The additional demand created by large numbers of highly leveraged buyers serves to increase spot home prices. We are seeing this happen in 2010 in California. In June DataQuick reported:

> "[t]he federal government has kept the spigot wide open [in Southern California] for loans used to buy low- to mid-priced abodes. Government-insured FHA loans, popular among first-time buyers, accounted for 37.1 percent of all mortgages used to purchase homes in May, down from 38.4 percent in April and 40.3 percent in May 2009."

The S&P/Case-Shiller Index reports that home prices in major areas of California are up by 10% or more over the last year.

The problem faced by those bearing the risk on the loans financing these purchases is that new highly leveraged purchases become not only comparables used to value future sales (whether highly leveraged or not), but they also become comparables for the appraisals supporting cash out refinance loans. Can and should this represent the sole determinant of market value for all homeowners and for all valuation uses? An appraisal approach that relies solely on comparable sales is pro-cyclical[454] and denies appraisers the tools necessary to determine value and protect lenders and borrowers. Under current appraisal methodologies as commonly practiced, an

[454] Home prices are pro-cyclical as they tend to increase during times of economic growth and decline or increase more slowly during periods of economic contraction. If the cost and income capitalization approaches are used to identify and moderate supply and demand imbalances reflected by unsustainable market prices, the valuation and lending process can act in a counter-cyclical manner on a growing boom.

appraiser is left with determining "the price at which a property may be sold", not its value or more importantly, its value for lending purposes.

Many parts of Europe are considering following Germany's example and tasking their appraisers with determining a "mortgage lending value":[455]

> "The value of a property as determined by a prudent assessment of future marketability of a property taking into account long term sustainable aspects of a property, the normal and local market conditions, and the current use and alternative appropriate uses of a property. Speculative elements shall not be taken into account in the assessment of the mortgage lending value."

Joan Trice of the Collateral Risk Network[456] noted the use of a mortgage lending or stabilized value in Europe.

> "This approach requires the use of all three approaches and places limits on how large the disparity can be between the approaches, before appraisers are required to report a lower value in frothy markets. Our markets have not recognized, until now, that residential appraisers are not just house appraisers. One by one, mortgages are collectively added to a pool. It is assumed that the risk of a single loan would not infect a pool of loans. It is much worse. The systemic disease of valuation inflation has infected the entire housing market and beyond."

She goes on to add:

> "In this scenario, any value that is above the stabilized three years value is considered unsecured. This would also lead to a different set of underwriting criteria that lenders could use to partition risk."

The concept of stabilized value is not new to the United States. The chief appraiser of The Security First National Bank of Los Angeles advised in the 1951 edition of "McMichael's Appraising Manual":[457]

> "It should be remembered that the mortgage lender's position is such that he is unable to participate in any enhancement of value that may accrue to his security....The lender, therefore, frequently adheres to policy that loans made on a boom market should be for a lesser percentage of current value than the law permits. In such cases, a further decision must be made as to the means of effectuating this policy. Should maximum loan percentages be *progressively reduced* as the market rises, or should the appraisal be *stabilized?"*

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[455] International Valuation Standards Committee, "Exposure Draft of Proposed Revised International Valuation Application 2 – Valuation for Lending Purposes", June 2006
[456] Supra., Joan Trice
[457] Supra., McMichael's Appraising Manual", p. 115

The comparable property selection process is itself flawed and a major point of failure for the appraisal process. The current process starts with the sales price and uses this "answer" to narrow the selection of appropriate comparables – generally ending up with 3 properties. Under the best of circumstances, this process may eliminate some or even many of the most appropriate comparables.[458] In unscrupulous hands, this process results in the selection of clearly inappropriate comparables to support an inflated value.

Joan Trice of the Collateral Risk Network[459] also addressed this issue:

> "The process of three comparable sales on a grid is entirely outmoded.... [A]ppraisal practice needs interactive valuation models for the appraiser to define the appropriate market, be able to review large datasets, remove the outliers, and run regression tools.... An examination of historical sales going back at least 24 months would allow for trending and a more thorough reporting of market conditions."

All lending, including home lending, is by definition leveraged, naturally pro-cyclical, and prone to alternating periods of boom and bust. The current real estate bust is the worst in over 75 years largely due to the substantial elimination of downpayments and other loose lending practices that were in place for many years. A return to real estate valuations based on traditional appraisal principles would help prevent a recurrence. This starts with an acknowledgement that market conditions and loan terms can drive up a property's sales price faster than its fundamental or stabilized value, a value determined by trending comparable sales prices, replacement costs and rental value.

[458] In 1991 I conducted a study of industry appraisal practice relating to whether selected comparable properties were appropriate. In a review of 14 appraisals, a total of 48 comparables were selected and used by the appraisers. We did a thorough database search and developed a list of 65 potential appropriate comparables (there was an overlap of 25 properties between the two groups). Each appraisal was desk and field reviewed to determine the appropriateness of the 48 appraiser selected comparables. Twenty-three of the 48 were found to be clearly inappropriate (if there was any doubt it was rated appropriate). This information was shared with Fannie Mae's credit policy department. They had just conducted a similar review and also found a high degree of inappropriate comparables used.

[459] Supra., Joan Trice

Appendix E: Alt-A loans contribution to affordable housing goals

Quantitative analysis of data relating to non-owner occupied (NOO) single family rental units and Alt-A's NOO units' relationship to affordable housing goals. NOO loans are investor loans.

First, some background. In the early 1980s Fannie incurred substantial losses on NOO single family rental units. Fannie concluded in 1985 that it was ill suited to manage this potentially speculative and high risk loan product and implemented tighter underwriting provisions designed to limit its exposure to this as well as other loan categories which it had found presented unacceptable risks. As a result, loans Fannie (and Freddie) would not buy included investor loans, riskier types of low down payment loans, loans with high debt ratios, higher LTV cash out refinances, combination loans, and riskier types of ARMs. These non-agency eligible products came to comprise much of the "alternate to agency" or Alt-A market that developed during the 1990s. By 1991 Fannie and Freddie also exited the low doc/no doc arena (this product had developed post-1985). The addition of low doc/no doc lending completed the "alternate to agency" or Alt-A product line.

Alt-A volume as a percent of the overall market was quite small (averaging less than 2%) during the 1990s. While anecdotal evidence indicates that Fannie and Freddie's re-involvement in the Alt-A market began in the late 1990s, documented evidence begins in 2002. In 2002 the GSEs were the dominant purchasers of Alt-A loans (acquiring an estimated $84 billion in whole loans and private MBS). As will be demonstrated below, in 2006 about one-third of Fannie's NOO acquisitions came from Alt-A loans.

Relative to the relationship between the housing goals and NOO units:

1. Fannie's 2006 acquisitions are used as a representative year. While 12% of Fannie's total units in 2006 were NOO (377,661 NOO units), these units played a disproportionately large role in meeting goals. 22% of the low-mod, 20% of the underserved areas, and 33% of the special affordable goals were met with NOO units. Put another way, while 42% of single family owner units qualified as low– and moderate-units, 86% of single-family (1-4 unit) rental units so qualified. Additionally, while only 16% of single family owner units qualified as special affordable units, 54% of single-family (1-4 unit) rental units so qualified. [460]

2. A significant factor in the GSEs' purchases of Alt-A loans was due to their being goals rich. They had a very high percentage of non-owner occupied (NOO) 1, 2, 3, and 4 unit properties (16.7% for Fannie's Alt-A acquisitions in 2006).

3. The next step involves estimating the number of NOO loans included in Fannie's Alt-A

[460] Table 4 – 2006, http://www.huduser.org/Datasets/GSE/profiles_05-07.pdf

purchases in 2006. For this purpose a 2, 3 or 4 unit NOO counts only once since the data represents the number of loans, not the number of units. As a result this somewhat understates the NOO unit count derived for Alt-A loans.

4. In 2006 Fannie purchased Alt-A private MBS totaling $12 billion.[461]

In 2006 Fannie purchased Alt-A whole loans totaling $112 billion.[462]

5. To determine how many Alt-A loans this represented, divide $124 billion ($12 billion + $112 billion) by $173,643 (average loans size of Fannie's Alt-A purchases) which yields 714,000 Alt-A loans.[463]

6. To determine how many NOO loans this represented, multiply the 714,000 Alt-A loans by the Alt-A NOO percentage of 16.7% yielding an estimated 119,000 Alt-A NOO loans for 2006.[464] -

7. These 119,000 Alt-A NOO loans appear to represent at least 32% of the 377,661 single-family rental (NOO) units acquired by Fannie in 2006.

8. All but 49,000 of the 377,661 single-family rental (NOO) units counted towards the low-mod goal. Mathematically it appears that at least about 70,000 Alt-A NOO loans would have to have counted towards this goal.

9. While one can't make similar definitive statements about Alt-A's NOO contribution to the underserved area and special affordable goals, it would appear that it would have been substantial. This is because of Alt-A's one-third share of all single-family rental (NOO) units acquired by Fannie.

While this analysis is believed to be accurate, it is subject to the noted data limitations and stated assumptions due to lack of access to all the data.

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[461] Table 1 b, Part 2, http://www.fhfa.gov/webfiles/2331/FHFAReportToCongress2008final.pdf
[462] See p. 5,
http://www.fanniemae.com/media/pdf/newsreleases/2009_10K_credit_summary.pdf;jsessionid=A2BIVWR03124JJ2FECISFGA
[463] See p. 24, http://www.fanniemae.com/media/pdf/newsreleases/2008_Q1_10Q_Investor_Summary.pdf
[464] See p. 30.
http://www.fanniemae.com/media/pdf/newsreleases/2008_Q1_10Q_Investor_Summary.pdf

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