THE U.S. HOUSING FINANCE SYSTEM IN THE GLOBAL CONTEXT: STRUCTURE, CAPITAL SOURCES, AND HOUSING DYNAMICS

HEARING

BEFORE THE

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CONTENTS

THE U.S. HOUSING FINANCE SYSTEM IN THE GLOBAL CONTEXT: STRUCTURE, CAPITAL SOURCES, AND HOUSING DYNAMICS

Thursday, October 13, 2011

U.S. HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON INTERNATIONAL MONETARY
POLICY AND TRADE,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:04 a.m., in room 2128, Rayburn House Office Building, Hon. Gary G. Miller [chairman of the subcommittee] presiding.

Members present: Representatives Miller of California, Dold, Huizenga; McCarthy of New York, Scott, and Perlmutter.

Also present: Representatives Garrett, Green, and Watt.

Chairman MILLER OF CALIFORNIA. This hearing will come to order. Without objection, all members' opening statements will be made a part of the record. The hearing today is entitled, "The U.S. Housing Finance System in the Global Context: Structure, Capital Sources, and Housing Dynamics.

I ask unanimous consent that Mr. Garrett and Mr. Green, both of whom are members of the Financial Services Committee, be permitted to sit with members of the Subcommittee on International Monetary Policy and Trade for purposes of delivering an opening statement, hearing testimony, and questioning witnesses.

We have limited the opening statements to 10 minutes for each side. With the ranking member in agreement, I recognize myself for the first 5 minutes.

Today, the subcommittee meets to discuss the U.S. housing finance system in the global context: structure, capital sources, and housing dynamics. As Congress grapples with how to change the current U.S. housing finance system, it is important to understand the domestic and global economic implications of such changes.

In addition, as we contemplate changes to our system, it is useful to consider differences between the U.S. mortgage structure and housing finance systems in other countries. Our goal today is to shed light on these important considerations. There is no question that instability in the housing market is harming our U.S. economic recovery. Housing has historically led economic recovery in this country, and if you look back at every recession, it has always been there. This time it is not.

According to the Federal Reserve, the slowdown in the aggregate demand is centered on the household sector. People are not consuming because of the wealth lost in the housing sector. We must stabilize the housing market.

The importance of the U.S. mortgage market to the global economy is substantiated by the average amount of agency mortgage-backed securities traded each day. In the second quarter of 2011, it was $302 billion. Only the U.S. Treasury had a higher trading volume, of over $600 billion.

Given this significance, changes to the U.S. housing finance system have the potential to impact the national housing markets, financial markets, and the domestic and global economy. Banks, pension funds, insurance companies, and foreign investors are the most significant non-U.S. Government investors in agency mortgage-backed securities, MBS—meaning Fannie Mae, Freddie Mac, and Ginnie Mae securities.

Foreign sources of capital include investment companies, foreign wealth funds, and other government entities. Foreign investors hold approximately 14 percent of agency MBS. Risk-averse investors, both foreign and domestic, prefer agency mortgage-backed securities because of their safety and liquidity.

The U.S. securitization process facilitated private investment capital from investors around the world that has flowed to U.S. home mortgages. Change to the safe investment options of agency MBS could impact investment decisions for these investors and, as a result, limit the flow of capital to the mortgage market.

Such a result could cause a reduction in the availability of, and increase in, the cost of mortgage credit. This would impact lenders, investors, consumers, and ultimately the domestic and global economy.

The ideological approach in the discussion about what changes need to be made to the U.S. mortgage finance system has resulted in a stalemate on reform. This is not what working Americans need. It is leading to confusion and a lack of consumer confidence. People need to be confident that their home price will not continue to fall.

It does not help consumer confidence in the housing market when proposals are being considered in Congress to eliminate Freddie and Fannie, with no viable replacement and no concern for the health of the housing sector.

The American people deserve better. We need to put ideological absolutes and politics aside and have a thoughtful, honest, and constructive discussion about a U.S. housing finance system that is based in fact. We must be mindful how critical the housing market is to the economy, and not contribute to uncertainty in the housing marketplace with conversations about unrealistic policy approaches.

Today's hearing is about getting the conversation about U.S. mortgage finance back on track. It can be instructive to compare the structure of the U.S. market with other countries. The size of the U.S. mortgage market is greater than any other country in the world. It exceeds the entire European mortgage market combined. While there is not a housing system in another country that is directly comparable to the United States, characteristics of the U.S. market are found in other housing systems.

At today's hearing, we will focus on the following: the relation between the health of the U.S. housing finance system and global financial stability; how the U.S. mortgage market structure compares to other countries, including with respect to the U.S. securitization system and a mortgage product offering; the unique features of the U.S. finance housing system and the benefits and weaknesses of the characteristics; and foreign involvement in the U.S. housing finance system, including the motivations for foreign investors to purchase residential mortgage-backed securities.

I look forward to hearing from the distinguished panel today. I strongly believe that housing is a critical and stabilizing force in the economy. The housing market requires action now. There is no question that private capital must be the dominant source of mortgage credit in the future, but we have to get to the point that we can attract private capital back to the market. A viable secondary marketplace is key.

I introduced a bill with my colleague, Ranking Member McCarthy, to refocus the debate on real solutions now. Our bill presents a way forward for the mortgage finance system. We provide comprehensive reform of the housing finance system to other countries in desperate need. While this is not a legislative hearing on that specific legislation, I do think our witnesses will help us begin the process of refocusing the conversation to ensure that this confidence and liquidity in the U.S. market is achieved.

We have to do something in Congress other than just talk. Talking and offering different confusing directions, without moving in any given direction, is creating so much instability in the marketplace that it is hampering the recovery. We need to do something to focus the debate on what is good for the American people, how do we return mortgage value to the housing, and how do we get the market stabilized.

And I yield to the ranking member for 5 minutes.

Mrs. MCCARTHY OF NEW YORK. Thank you, Mr. Chairman. And I thank you for holding this important hearing. I also will say that I stand by your words.

Restoring our housing market is a vital component to our economic recovery. The Financial Stability Oversight Council recommended comprehensive reform of our housing financial system, which the Treasury Secretary reaffirmed when he testified before the full committee last week.

As we contemplate how to reform our housing system, it is important to understand its role in facilitating the flow of private capital and liquidity to our mortgage market. Through our securitization system, private capital provides the liquidity necessary to fund mortgage lending. Because of the integration of housing finance into marketplaces, the United States has formed a strong link to global capital markets.

Traditional housing finance that was limited and funded through savings deposits has increased through the transition to market-based systems. Although there is not a housing system in another country that exactly mirrors the U.S. model, we must find characteristics of other housing systems that are similar to our own.

I look forward to hearing from the witnesses today, and learning more about how other countries have structured their housing systems, as well as the successes and failures of those systems.

Most importantly, we must keep in mind that any reforms instituted in our housing finance system have the potential to impact the Nation's housing market, the financial markets, and the domestic and global economy. That should serve as a stark reminder that we must proceed with reforms that bring confidence, stability and certainty back into our housing market. Without a stable housing system, we cannot achieve a full economy recovery.

With that, I yield back the balance of my time.

Chairman MILLER OF CALIFORNIA. Thank you.

Mr. Dold is recognized for 2½ minutes.

Mr. DOLD. Thank you, Mr. Chairman. And I certainly want to thank you and the witnesses for your time here today. The 30-year fixed-rate mortgage has been the primary American mortgage financing instrument for many decades. But from a lender's perspective, it is a very difficult loan product, assuming a reasonably low 30-year fixed-rate.

Carrying a particular individual borrower's credit risk for 34 years is a particularly difficult proposition, and a 30-year fixed-rate loan subjects the lender to 30 full years of interest-rate risk and 30 full years of inflation risk.

Even if the borrower fully performs, inflation over 30 years can effectively reduce or eliminate the lender's real inflation-adjusted returns. Meanwhile, both increasing and decreasing interest rates over 30 years can negatively impact the lender, as many of you know.

Increasing interest rates leaves the lender with capital tied up in long-term assets that produce lower returns than those available at the higher subsequent market rates. Decreasing interest rates leads many borrowers to refinance and return to lender's capital when the lender's capital redeployment will likely result in lower returns than those that had existed under the original loan.

To help deal with these and other problems, the Federal Government and the American housing finance system developed the GSEs and securitization. Lenders could now always transfer mortgages directly or indirectly to the GSEs or to private investors while also having access to GSE credit default guarantees.

So lenders could offer mortgages with reasonably low 30-year fixed-rate interest rates, while diminishing or eliminating long-term credit risk, inflation risk, and interest rate risk. The system worked reasonably well for many years. However, beginning in the early 1990s, the Federal Government went much further in promoting homeownership by pressuring the GSEs and private sector lenders to substantially reduce traditional underwriting standards and by turning the GSEs into the always-available market outlet for lower-quality loans.

Over time, more and more lower-quality loans entered the system. Inevitable increasing default rates led us to the financial crisis, as the mortgage-backed asset values decreased suddenly and dramatically.

Mark-to-market accounting immediately degraded the bank capital ratios, and the credit market fear and uncertainty quickly imperiled liquidity and solvency. Housing prices declined severely, and the Federal Government made the American taxpayer liable for hundreds of billions of dollars in GSE losses.

And now, those same troubled GSEs that exposed taxpayers to so much liability are essentially the only remaining market participant in the mortgage industry as private sector lenders and investors have abandoned the field. So we need to somehow create the conditions for more private sector entities to reenter the mortgage market, diminish the taxpayer liability risk, and stabilize the housing market.

I look forward to hearing your testimony today, and I appreciate your time.

Mr. Chairman, my time is up, and I yield back.

Chairman MILLER OF CALIFORNIA. Thank you.

Mr. Scott, you are recognized for 3 minutes.

Mr. SCOTT. Thank you, Chairman Miller and Ranking Member McCarthy, for holding this very important hearing. The Dodd-Frank financial reform legislation addresses a number of weaknesses in the financial regulatory system—in particular, Title 14.

It responded to pervasive concerns about lending practices in the mortgage lending market that produce loans that had great uncertainty of being repaid. This practice thus adversely impacted the loan holders as well as the borrowers, who often did not have a complete understanding of the agreement or did not have the means to repay the loan.

Title 14 was enacted to correct such abuses, including new duties on the part of the mortgage originators to act in consumers' best interests, ensuring that they will have the ability to repay such loans. Clearly, the crisis in our housing finance has contributed to the domestic economic climate we all face now.

Many Americans continue to struggle to stay in their homes, especially in my congressional district in Georgia—I represent the suburbs of Georgia—where the problem is very, very serious. Most recent data shows that in my district, 12 percent of mortgages are over 90 days delinquent, and nearly 4 percent of homes are in foreclosure.

And this is why, each year, I bring the banks, I bring the lenders, I bring Treasury together and hold a major, major home foreclosure prevention event in my district, which has been one of the most successful ventures that we have done to correct this problem.

In some cases, my constituents purchased homes obtaining mortgages that many of them originally thought they could repay. However, with unemployment passing 10 percent in my home State—in many communities, it is over 20 percent—many Georgians are finding it very difficult to do just that.

I know that the reforms enacted by the financial reform legislation will prevent Americans from falling into similar situations when seeking to purchase a home. But despite the progress in the United States, I am concerned about the implications that a financial crisis in other nations could have on the economy in our own country.

I am interested to know if the lending practices that contributed to the United States' financial crisis are still in use in other countries. This is important for us to find out, and how this might affect our own economy.

Also, I am curious to know if there has been similar legislation enacted to prevent such abuses. So I want to thank the witnesses for coming and I particularly want to say hello to Dr. Susan Wachter of the Wharton School of the University of Pennsylvania. I received my MBA from the Wharton School of Finance. So when you go back, please give my regards to Dietrich Hall.

I yield back, Mr. Chairman.

Chairman MILLER OF CALIFORNIA. Thank you.

Mr. Garrett, you are recognized for 1½ minutes.

Mr. GARRETT. I thank the chairman for holding this hearing. And because the focus of the hearing is to look at the U.S. housing market and policy in a global context, I went back and reviewed an analysis by the International Monetary Fund back in April on housing finance issues.

And in it, it says, "Compared to other developed countries, only a couple even come close." According to the economist and one of the authors, John Kip, "Everything you could possibly name for supporting homeownership for everybody, regardless of whether they can afford it or not, it's all in the United States."

The IMF report states, "Since the 1930s, the U.S. authorities have provided a wide range of support to facilities to access mortgage credit. And while this has provided access to stable and affordable long-term mortgage financing, there is very little evidence that it has actually boosted homeownership, made the system more efficient, or provided buffers against economic stress."

"Meanwhile," it said, "it may have exacerbated the boom-and-bust cycle." The report went on to note, "During the pre-crisis boom period, government participation in housing finance tended to amplify the relationship between housing prices and mortgage credit growth, particularly in advanced economies."

"Also, countries with more government participation experienced," note, "a deeper house price decline in this recent crisis. These findings suggest that the government participation exacerbates house price swings for advanced economies over a long period of time."

Further, it said, "The results might reflect both the lower cost of pre-crisis due to government subsidization, and a relaxation in lending standards by the private sector due to increased competition between the private sector and the government." That is all in the report.

And so, it is clear that with the extraordinary and unprecedented levels of subsidy the United States provides this mortgage market directly, it benefits mortgage market participants before us today.

There is much less evidence that all these subsidies actually provide much benefit to the borrower. In fact, based upon the objective look of the IMF and the terrible impact on our country's housing finance policies we have had, I believe a strong case can be made that at least some of these policies, at the end of the day, do more harm than good.

And with that, I yield back.

Chairman MILLER OF CALIFORNIA. I would like to welcome our distinguished panel today.

Mr. Michael A.J. Farrell is the chairman, CEO, and president of Annaly Capital Management, Inc., the largest residential mortgage REIT in the country.

Prior to founding Annaly, Mr. Farrell was the managing director of Wertheim, Schroder & Company, Inc. in the fixed income department. He had previously served on the executive committee of the Public Securities Association, Primary Dealer Division. And as chairman of the Primary Dealer Operating Committee and its mortgage-backed securities division, Mr. Farrell served on the executive board of the National Association of Real Estate Investment Trusts. Welcome.

Dr. Richard Dorfman is managing director and head of the securitization group in the Securities Industry and Financial Market Association, SIFMA. Prior to joining SIFMA, Mr. Dorfman was the president and CEO of the Federal Home Loan Bank of Atlanta. Prior to that role, he was managing director and head of the U.S. agencies and mortgage business at ABN AMRO. He also worked for Lehman Brothers mortgage division as the managing director and head of the organization for U.S. Government and agency business. Welcome.

Mr. Moe Veissi is the 2011 president-elect of the National Association of REALTORS®. Mr. Veissi has been a Realtor® for over 40 years. He is a broker-owner of Veissi & Associates in Miami, Florida. Welcome, sir.

Dr. Susan Wachter is the Richard B. Worley professor of financial management and professor of real estate and finance at the Wharton School at the University of Pennsylvania. Dr. Wachter served as Assistant Secretary of Policy Development Research at HUD and was Principal Adviser to the Secretary, responsible for national housing and urban policy.

Dr. Wachter is the author of over 200 publications regarding housing and real estate finance. She served as president to the American Real Estate and Urban Economic Association and co-editor of Real Estate Economics, and currently serves on multiple editorial boards.

It is a distinguished panel. We are glad to have you here.

First of all, I would like to thank you all for your flexibility. We have had this hearing scheduled, as you know, on numerous occasions and had to reschedule it. I want to thank you for being here today. Without objection, your written statements will be made a part of the record and you can summarize your statement in a generous 5 minutes, as you so choose.

And Mr. Farrell, you are recognized first for 5 minutes.

STATEMENT OF MICHAEL A.J. FARRELL, CHAIRMAN, CEO, AND PRESIDENT, ANNALY CAPITAL MANAGEMENT, INC.

Mr. FARRELL. Good morning. My name is Michael Farrell. I am the CEO of Annaly Capital Management, the largest residential mortgage real estate investment trust, or REIT, in the country.

Through Annaly and our subsidiaries and affiliates, we own or manage a wide range of mortgages and other real estate-related assets, including agency and non-agency residential mortgage-backed securities or MBS.

I represent the mortgage REITs and the other secondary mortgage market investors who provide the majority of the capital to finance America's homes. Through our MBS holdings, my company and its affiliates alone are responsible for funding almost 1 million American households.

At this point in history, while our Nation's banks have about $13 trillion in total assets, the amount of mortgage debt outstanding totals about $10.5 trillion. There is not enough capacity in our banking system to hold the outstanding mortgage debt. And as a result, about two-thirds of that total, or $6.8 trillion, is held in securitization, $5.5 trillion in agency mortgage-backed securities, and the balance in private-label mortgage-backed securities.

The American mortgage finance system needs to have an effective long-term holder of mortgage credit outside of the banking system. It is thus axiomatic that without a healthy securitization market for our housing finance system, we would have to undergo a radical transformation. Some have argued that this should not be a problem because other countries have similar homeownership rates and manageable low mortgage costs. These arguments miss some very significant points.

First, the U.S. mortgage market is unique. In the United States, securitization is the largest mortgage funder, with banks a distant second—while Europe is almost exactly the opposite, with about two-thirds of mortgages funded by bank deposits, covered bonds a distant second, and very little securitization.

So the European model is largely dependent on the deposits and individual credit ratings of European banks. As proof, consider that in the United States, bank assets total about 80 percent of GDP, while in Canada, Denmark, France, Germany, and Spain, bank assets are anywhere from 2 to 4 times their GDP.

Moreover, most mortgages in other countries are recoursed to the borrower, shorter term, pre-payable only with a penalty and a variable rate, which makes it a much more different product than the typical American mortgage with much different risks for the borrower and the lender.

Second, our current housing finance system is the most efficient credit delivery system in the world. Securitization allows borrowers of similar creditworthiness using similar products to receive the benefits of scale and pricing. In addition, the government guarantee to make timely payments of interest and principal of a large portion of these mortgages scales the process even further.

The TBA, or To Be Announced, market is the window through which much of this scale occurs. It maintains a consistent underwriting standard, levels the playing field for smaller loan originators and community banks, and enables lenders to offer longer-term rate locks to borrowers. It is an important tool for making possible the availability of the very popular 30-year fixed-rate prepayable mortgage with a manageable downpayment for a wide swath of creditworthy borrowers.

Third, unlike the smaller domestically-financed housing markets of other countries, our system attracts a much broader investor base for residential mortgages, including institutional investors here and around the world.

These investors include U.S. and foreign banks, central banks and sovereign wealth funds, mutual funds, State and local governments, and the GSEs themselves. According to Freddie Mac, foreign investors constitute the third largest single holder of agency MBS. What attracts these investors to fund U.S. residential mortgages? It is the size, scale, and flexibility of the agency MBS market, its homogeneity, liquidity, ease of pricing and, importantly, their capital risk weightings.

Finally, I want to get to the heart of the matter of the current debate. Can the private label MBS market come back and fill the credit gap that is currently filled by the GSEs? The short answer is, not at the same level of mortgage rates, and certainly not in the same size. Many, if not most, investors and agency MBS will not invest in private label MBS at any price or in any reduced amounts because of their need for liquidity or the restrictions of their investment guidelines.

Some of these are so-called rates investors, and they could cross over. And investors in other asset classes might be attracted to a deeper private label MBS market, but we cannot say for sure how many or at what price or in what timeframe.

Analysts at Credit Suisse have estimated that the U.S. housing market could lose $3 trillion or $4 trillion in funding from domestic and foreign investors if agency MBS were replaced by credit-sensitive products. The impact of this loss could have adverse consequences for the housing market and the economy for years to come.

In conclusion, the American mortgage market and the sources of funding for Americans' mortgages are unique. The domestic and global investors who provide so much capital to buy American homes will adapt to whatever Congress decides to do with housing finance policy, but they may adapt by not investing at all.

I believe that a housing finance system that does not include the homogeneity of liquidity made possible by government involvement will be smaller, more expensive, and potentially have negative consequences for home prices and homeowner flexibility.

I welcome any questions that you may have.

[The prepared statement of Mr. Farrell can be found on page 67 of the appendix.]

Chairman MILLER OF CALIFORNIA. Thank you very much.

Mr. Dorfman, you are recognized for 5 minutes.

STATEMENT OF RICHARD A. DORFMAN, MANAGING DIRECTOR AND HEAD OF SECURITIZATION GROUP, THE SECURITIES INDUSTRY AND FINANCIAL MARKETS ASSOCIATION (SIFMA)

Mr. DORFMAN. Good morning, Chairman Miller.

Chairman MILLER OF CALIFORNIA. I think you need to turn your microphone on. We will start your time over. Thank you, sir.

Mr. DORFMAN. There we go. Good morning, Chairman Miller, Ranking Member McCarthy, and distinguished members of the subcommittee. I am Richard Dorfman, managing director and head of securitization for the Securities Industry and Financial Markets Association, known in the trade as SIFMA.

We appreciate the opportunity to discuss key issues affecting housing and housing finance from the perspective of international products, policies, and practices. I am personally pleased to have played a central role in the development of international markets. And certainly, I am honored to be here today.

We estimate that non-U.S. investors currently hold 15 percent of all mortgage-backed securities or privately issued non-agency MBS and government-guaranteed agency MBS. The markets for both agency and non-agency MBS have become truly global markets.

Further, concerning unsecured longer-term debt, the GSEs—Fannie, Freddie and the Federal Home Loan Banks—have historically seen about 20 percent of their debt investors come from the global markets. At that market's high point in 2008, approximately $3.2 trillion was outstanding. And that figure is today approximately $2.3 trillion, with about 20 percent still held abroad.

However, in terms of late news, we are concerned, according to press reports, that a growing number of central banks are reporting not feeling comfortable with the U.S. Government guarantee of MBS and implied guarantee of debt products, and so may be progressively withdrawing from that market, with some concern.

Foreign holdings of both agency and non-agency MBS create a strong correlation between the health of the U.S. housing finance system and global financial stability. I note that only a few years ago, I observed that The Economist news weekly carried a cover story about the U.S. housing market being the dominant driver of the U.S. economy, and perhaps even of the world economy. Over the last 20 years, the housing sector has represented approximately 15 percent of U.S. GDP.

U.S. MBS structures are generally based on traditional 30-year, fully-amortizing, fixed-coupon and fixed-payment-structure home loans, although there are MBS based on adjustable-rate mortgages and other more complex secured loans. Other countries prefer to seek a different balance of these risks, through adjustable rate or renewable loans. In these instances, the interest rate risk portion of the loan dominantly remains with the borrower.

We caution, however, about direct comparisons to other nations. Although instructive, they are not determinative. The size of the U.S. mortgage market enormously exceeds other mortgage markets. Additionally, it differs in that the funding of the U.S. mortgage market is largely through securitization, whereas in many countries securitization is less prominent and mortgage lending is more of a bank balance sheet activity.

Foreign investors, especially central banks, hold vast sums of U.S. dollars. Therefore, foreign investors hold vast sums of very liquid, low-risk agency MBS and debt, especially Ginnie Mae MBS. Some foreign investors became significant players in the markets for non-agency MBS until those markets froze in 2008. Foreign agency MBS far exceeded non-agency investment because many foreign investors simply will not invest in products with credit risk.

The critical TBA, or To Be Announced, trading market provides vast liquidity and plays a key role in attracting tremendous global capital. The TBA market also gives the consumer the important ability to obtain long-term rate locks, by allowing lenders the ability to confirm forward MBS sales into a liquid market and, through this mechanism, to recycle investment capital back into the community as rapidly as possible.

The daily trading volume and TBA markets over the past 3 years has, indeed, exceeded $300 billion a day, second only to U.S. Treasuries and fixed-income markets. We discuss this market extensively in our written testimony.

The U.S. housing finance system has features that create both historic benefits and current policy questions that must be addressed in the near term. A few such examples are long-term fixed-rate loan structures and their relation to the distribution of interest-rate risk. And secondly, U.S. home mortgage loans have more recently featured downpayments below the traditional 20 percent, implying lower credit standards, but greater homeownership accessibility.

It is critical for our country that we restore, modernize, and rationalize the housing business model in order to restore housing markets, including those for housing finance and securitization, to their maximum sustainable potential.

Without this important engine of housing driving the U.S. economy, we will continue to see weak growth in jobs, income, and the overall economy. The global financial markets have been a critical component sustaining the financing of housing in America, and we must ensure that this continues in the future.

I thank you very much for this opportunity and, of course, I will be pleased to take your questions.

[The prepared statement of Mr. Dorfman can be found on page 47 of the appendix.]

Chairman MILLER OF CALIFORNIA. Thank you, sir.

Mr. Veissi, you are recognized for 5 minutes.

STATEMENT OF MOE VEISSI, 2011 PRESIDENT-ELECT, NATIONAL ASSOCIATION OF REALTORS®

Mr. VEISSI. Chairman Miller, Ranking Member McCarthy, and members of the subcommittee, thank you for holding this important hearing to examine the United States housing finance system.

My name is Moe Veissi, and I am the 2011 president-elect of the National Association of REALTORS®, which represents 1.1 million members. They all practice some area of residential or commercial real estate. When my father purchased his first home for my mother in the late 1960s, it was more than just an act of love or even an investment. For a first-generation European, it was a symbol of a place to celebrate family, friends, and to help knit a broader base for the community that he and my mother lived in. It was both of their American dreams realized.

So in addition to our members, it is my honor to give voice to the 75 million Americans who own a home, of which 50 million have mortgages, as well as the 310 million Americans who require shelter and want to own a piece of the American dream. I would like to share NAR's review on why the U.S. housing finance system and its key product, the fixed-rate mortgage, remain the key element in the system for the American consumer.

Realtors® believe that the U.S. housing finance system, which utilizes securitization to recapitalize mortgage lenders, works best for a nation like ours, the size of ours, and with the population who have a deep desire for homeownership. This does not mean, however, that Realtors® are opposed to reforming the current system.

To the contrary, Realtors® have indicated time and again the need for repairs to the U.S. housing finance system.

It is our strong belief that from its creation in the 1930s until very recently, the underlying system worked well to provide well-qualified American families the ability to purchase a home. Realtors® are some of the most fervent believers in free markets. However, our members are also practical and understand that in extreme economic conditions, private capital will retreat from the housing market.

They understand that a well-functioning housing market, indeed a well-functioning economy, requires mortgage financing available to qualified buyers in all markets, regardless of economic conditions.

And finally, Realtors® agree that taxpayers should be protected. Private capital must return to the housing market, and the size of government participation in the housing sector should decrease if the market is to function properly. Where we continue to disagree with some is how these aspirations would be accomplished.

Congress has chartered Fannie Mae and Freddie Mac to support homeownership and provide a solid foundation for our Nation's housing finance system. The Government-Sponsored Entities' housing mission and the benefits that are derived from it, such as long-term fixed-rate mortgages, have played a vital role in the success of our Nation's housing system and its overall economic growth.

As the market turmoil reached its peak in late 2008, it became apparent that the role of the GSEs, even in conservatorship, was critical, as private mortgage capital effectively fled our marketplace. If no government-backed conventional mortgage market entity existed as private mortgage capital fled to the sidelines, the housing market would have receded even more significantly and thrown our Nation into an even deeper recession and maybe even a depression.

Currently, consumers are moving toward the 30-year fixed-rate mortgage more than ever before. It is the financial product of choice because of its easily-understood terms and predictability in its payment schedule. In these uncertain times, predictability becomes even more important to consumers.

For this reason, the 30-year fixed-rate mortgage has been, and continues to be, the bedrock of the U.S. housing finance system. If there is a full privatization of the secondary mortgage market, we run the real risk of elimination of long-term fixed-rate mortgage products and an increase in the cost of mortgages to consumers.

In fact, based on early data from a survey that NAR is conducting on the impact of new lower FHA and GSE loan limits, we are already seeing that consumers looking for mortgages above the conventional conforming loan limit are experiencing significantly higher interest rates and are being required to come up with substantially larger downpayments. Making matters more difficult, according to this data, this experience is leading to a loss of interest in real estate sales.

Lose a healthy real estate market and you jeopardize any chance of economic recovery. I encourage you to resist this course of action. Realtors® firmly believe that comprehensive reform of the secondary mortgage market is in the best interests of the consumer and the long-term viability of America's housing finance market.

Toward that end, the National Association of REALTORS® supports H.R. 2413, the Secondary Market Facility for Residential Mortgages Act of 2011. The legislation, introduced by Chairman Miller and Ranking Member McCarthy, will serve homeowners today and generations into the future, as well as support a strong housing market and economic recovery.

It offers a comprehensive strategy for reforming the secondary mortgage market. It gives the Federal Government a continued role to ensure a consistent flow of mortgage credit in all markets, all economic conditions, and it protects the taxpayers and ensures safety and soundness through appropriate regulation and underwriting standards.

Moreover, the bill supports and emphasizes the use of long-term fixed-rate mortgage products in a manner that is consistent with qualified residential mortgages, exemptions to the Dodd-Frank Act as it was crafted by Senators Isakson, Landrieu, and Hagan. This is important. The bill's comprehensive reforms will open the door to lenders of all sizes, without favoring large lenders over small or mid-size institutions.

In conclusion, I thank you for the opportunity to present our thoughts on the U.S. housing finance system, which we believe is unique and serves a unique group of people who strongly desire to own a piece of America and participate in our country's community fabric.

As always, the National Association of REALTORS® is at the call of Congress as we continue to work toward the best solutions for consumers, the housing industry, the economy, and our Nation.

Thank you very much.

[The prepared statement of Mr. Veissi can be found on page 70 of the appendix.]

Chairman MILLER OF CALIFORNIA. Thank you, sir.

I ask unanimous consent that Mr. Green, who is a member of the full Financial Services Committee, be allowed to participate in the subcommittee. Without objection, it is so ordered.

Ms. Wachter, you are recognized for 5 minutes.

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

Ms. WACHTER. Thank you, Chairman Miller, Ranking Member McCarthy, and members of the subcommittee.

The U.S. housing finance system relies on global capital sources for funding. The mortgage-related bond market, as of the second quarter of 2011, amounts to approximately $7 trillion, most of which today is securitized and guaranteed by the U.S. Government.

As the subprime crisis demonstrated, disruptions in the U.S. mortgage system destabilized financial markets across the world. The structural soundness of this sector is important for U.S. home borrowers, the U.S. economy, and for overall global financial stability.

The U.S. housing finance system prior to the crisis was financially sound. The system prevalent in the United States provided

U.S. homebuyers, unlike buyers elsewhere, a choice of fixed and variable rate mortgage products, and provided financial stability for mortgage borrowers and for global capital markets.

The unique features of housing finance in the United States, which undergird the system, include access to stable, long-term, fixed-rate mortgages and the financing of these mortgages by a sound securitization system. The long-term, fixed-rate mortgage prevalent in the United States, what Richard Green and I term the "American mortgage," in research that I request be entered into the record, is unique to the United States.

In most developed countries, with few exceptions, the adjustable rate mortgage prevails. The fixed-rate pre-payable mortgage, with the ability to lock in financing at the point of home selection, is found solely in the United States. While adjustable rate mortgages are a good and safe alternative to fixed-rate mortgages in periods of stable or declining interest rates, the weakness of such mortgages is that they threaten borrowers with payment shock when interest rates rise.

Shocks to household balance sheets due to rising interest rates or limited availability of finance threaten the financial system as a whole in a system of variable rate mortgages. Indeed, versions of this scenario played out in the subprime crisis and in the Great Depression.

The U.S. mortgage system also differs from most of our developed country peers in the use of securitization, as opposed to the holding of mortgages on bank balance sheets. In research with coauthor Adam Levitin, which I also request be entered into the record, we show why the fixed-rate mortgage requires securitization.

Securitization first arose out of the need to replace short-term, variable rate mortgages with so-called "bullet payments" implicated in the high foreclosure rates of the Great Depression. While the fixed-rate, long-term, self-amortizing mortgage developed in the aftermath of the Great Depression protects borrowers against interest rate spikes, as shown by the savings and loan crisis, short-term demand deposits cannot be relied upon to fund these long-term mortgages.

Securitization is a necessary replacement for demand deposit bank portfolios, and can appropriately deal with interest rate risk. The system of fixed-rate mortgages financed through stable securitization provided for a period of remarkable stability in the U.S. economy, coinciding with what economists termed, "the Great Moderation," a period of economic growth, sustainable homeownership, uniform and intrinsically safe underwriting practices, and, importantly for the committee, the ability to access global capital markets.

This system underwent major shifts beginning in the late 1990s. The changes over the subsequent decade caused the system to fail, undermining global financial stability with outcomes that still threaten the U.S. economy. In the period from 2000 to 2006, nontraditional mortgages, previously niche products—such as adjustable rate teasers, subprime, interest-only with bullet payments—grew to represent, in 2006, almost half of mortgage originations.

The origin of the mortgage system failure was credit expansion through private-label securitization accompanied by the undermining of lending standards, despite the Triple-A credit rating granted for much of the MBS debt. Global capital funded this expansion, in part relying on credit ratings. Foreign investors purchased residential mortgage-backed securities guaranteed by Fannie Mae and Freddie Mac, and they did so because these instruments are perceived to have essentially no credit risk.

Private-label securities, which were also purchased by foreign investors, were understood to have little credit risk, in part due to high credit ratings, and in part because the U.S. mortgage and housing market was perceived to be impervious to decline. The expansion of credit that this perception allowed, and the deterioration in lending standards, fueled the price bubble and bust when the limits to lending expansion were reached, accompanied by the epidemic of foreclosures and value destruction that we currently face.

Failure in the U.S. mortgage system directly caused the 2009 recession. We were not alone in this. The United Kingdom, Spain, and Ireland suffered recessions, accompanied by mortgage market crises and sharp housing price declines. Nonetheless, the size of the U.S. market means that it relies on global finance, and the failure of the U.S. financing system put the global finance system at risk.

The response in the United States—bailouts of failing financial institutions and the conservatorship of Fannie and Freddie—is ongoing. Private securitization has not come back and we are reliant on a Federalized system.

The key in moving forward is rebuilding confidence in the U.S. mortgage system. This is necessary for potential homebuyers to come back to the market, and is also key for global investors on whom this market depends to provide capital for what, once again, must be perceived to be, and must be, a system that is structurally sound and safe for home purchasers, investors, and the overall economy.

I thank you.

[The prepared statement of Dr. Wachter can be found on page 78 of the appendix.]

Chairman MILLER OF CALIFORNIA. I want to thank the witnesses very much. I will now recognize myself for 5 minutes.

There is little doubt that the GSEs went beyond the intent of their original mission, and reform is necessary. But if the United States were to end all government guarantees for housing products, how would that affect the overall economy? And what are the consequences of actually delaying GSE reform?

Anybody who would like to answer? Yes, Mr. Farrell?

Mr. FARRELL. We operate three public companies, Annaly, Chimera, and Crexus. Chimera does non-agency securities in a residential side. The securitization market in that part of the credit curve is extremely difficult to price at the current interest rate levels.

We estimate from our research that in order to get securitizations operating in the private sector for all of the re-pooling of these assets would probably be 200 to 300 basis points higher in terms of cost to the consumer. You can see that in the falloff of private securitizations over the past couple of years especially. So it would be a very painful experience to move to that kind of rate structure.

The GSE balances have changed in terms of what those origination fees are. And, in fact, we have found that investors still continue to embrace that. We have grown dramatically over the past few years especially, and navigated through 2008 with a company that was totally exposed to agency debt.

So globally, we still think that there is a market for this which is well-structured and financed, but it is important to understand that there are two sides to the market: the assets; and the liabilities.

The assets themselves, that we have all described here today, are part of an important infrastructure within the United States to provide credit. The liability side, much of this secures bank balances and credit balances from investments throughout the world that are all dollar-denominated that would need to be filled by some other entity that would be similar in credit structure. If not, they will have a higher price.

Chairman MILLER OF CALIFORNIA. Mr. Dorfman, you had a—

Mr. DORFMAN. Thank you, Mr. Chairman. It was very appropriate that Mr. Farrell speak first because, really, it must be understood that as we engage in reengineering the mortgage financing system in the United States, the final judge, the court of appeals so to speak, will always be the institutional investor.

Will the institutional investor invest? Will they come to the bid? And what will they bid at what spread, at what price? What will it cost the consumer in order to participate in a given structure?

So it is important to note that the institutional investor, in the end, is the final determinant, and must be convinced by traditional, respected, analytical methods and models that any substitute idea which may evolve for the U.S. Government guarantee is creditworthy and worthy of the institutional investor's attention and bid at a level that works for the consumer.

It is also very important to recognize that no matter what anyone may wish or believe in terms of whether the government guarantee is good or not good, we must take the market just as we must take the golf ball, if I may say, where it is and play it from where it is.

And where it is today is that the government guarantee provides the degree of security to the vast world of non-credit risk investors who will not buy that product without the guarantee or whose participation will be diminished or at a far higher price.

Thank you for recognizing me.

Chairman MILLER OF CALIFORNIA. On that, could it be structured in a way where the taxpayers' exposure is minimized and the long-term benefits are basically capitalized on, expended? Because the goal right now is making sure we protect taxpayers.

Mr. FARRELL. I would say, my perspective as a risk taker who has to go around the world and raise this capital to provide the return for investors, it essentially negotiates a compromise between borrowers and lenders in our structure.

There are two elements that I think really need to be understood. And the perspective that I want to bring to it is that when you look at the guarantee fee and what went off of the wheels in the

1990s—from the perspective of a private company operator providing private capital—if we did not have Fannie Mae and Freddie Mac's balance sheets at the size that they were in the late 1990s, trillion-dollar companies who essentially were serving two separate masters—they were serving Congress and they were serving the private markets simultaneously as listed companies. And were, as we viewed them, friendly competitors in the market.

Once those balance sheets went over a trillion dollars each, that created a competitive edge in the markets for others to go in and dilute the credit. If we were not still unwinding those legacy portfolios, I would suggest to Congress that the total balance and issues that we have been faced with would be similar to what we faced in the RTC on a inflation-adjusted basis. We would already be past this and moving on.

So the structure that you suggest in your legislation I think is very important because it discusses a well-priced insurance "G" fee, no portfolio intervention by the government at any level—I do not think there is any appetite for that any longer—and let the private market everyday do what we do, which is price that against its benchmarks off of either treasuries or corporate rates.

That, to me, is the way it would work and it would minimize the risk to the taxpayers.

Chairman MILLER OF CALIFORNIA. Hopefully, we can come back. My time has expired.

The ranking member is recognized for 5 minutes.

Mrs. MCCARTHY OF NEW YORK. Thank you.

Dr. Wachter, at what point do we begin to see less investment in the securitization markets due to the uncertainty of the GSE reform as well, as our own long-term economic recovery?

Ms. WACHTER. That is a very difficult, but very important, question. I do not think there is a definitive answer.

I think, as we have heard from Mr. Dorfman, that markets may already be, to some degree, considering risk issues. That is, will there be a replacement to Fannie and Freddie that brings about a safe and sound investment structure?

Mortgage markets are forward-looking. And, indeed, if there is not in place a structurally sound mortgage system, then today's investors in these long-term instruments will begin to appreciate the risk. Exactly when that will happen, exactly how that will unravel, is very difficult to say. But clearly, uncertainty will have a potentially dire impact at some point.

Mrs. MCCARTHY OF NEW YORK. Mr. Veissi, what impact do the legislation proposals aimed at reforming the GSEs have on the 30-year fixed-rate mortgage products?

Mr. VEISSI. Would you repeat that question?

Mrs. MCCARTHY OF NEW YORK. Sure. What impact do the legislative proposals aimed at reforming the GSEs have on the 30-year fixed-rate mortgage products?

Mr. VEISSI. Let me first say that while we concentrate on the secondary market and the investor side of the secondary market, we pay less attention to the consumer invested in the performance of both the purchase and the sale of a real estate home.

They do not have the expertise, nor do they care to become invested in understanding the expertise of the secondary market.

What they do know and what they do understand is that they have been privileged to have the benefit of a marketplace that offers them a fixed-rate mortgage for a long period of time with no uncertainty. They know what their payment is going to be.

The average holding time for that mortgage is about 7 years. Now, that was not the case during the period of time from 2005 to 2007. It was a much smaller period of time, about 2 or 3 years. So on average, the investor is expected to have the mortgage, that 30-year mortgage, satisfied in the average time of about 7 or 8 years, and in good times, was about 2 or 3 years.

When you take away the opportunity for an individual to buy with the kind of securitization that they feel comfortable with, especially the ones that show less than 20 percent down, NAR has found that about 70 percent of every new home or first-time homebuyer uses an instrument that has less than a 10 percent, or a 10 percent down, structure.

So all of those instruments are important to our marketplace and important to the first-time homebuyer and to American homebuyers. To take that away from the home-buying market might further cause a recessionary cycle, and certainly would inhibit both the construction of residential and commercial property and the resale properties which generally help us assume a better economic spiral.

Mr. DORFMAN. Thank you, Mrs. McCarthy.

I wanted to further comment very briefly that in terms of the GSEs going forward, first, SIFMA, on behalf of its members, absolutely applauds each and every bill that comes to the table. That contributes to the dialogue that is so difficult and so necessary to repair the housing finance system. And that is important. Every bill is a contribution.

Now having said that, in terms of GSEs, the market, the institutional investor, again, must come to the view, necessarily, that the GSEs have products that have integrity, are assembled with skill; that the guarantee of the GSE without the government behind them is immensely creditworthy and believable; and that there is integrity throughout the process.

Next, it is essential that GSEs be able to finance themselves as efficiently and as liquidly as they have in the past. High volume and liquidity hold each other's hands. They work together. And we must be very careful that GSEs, whatever they may be in the future, are able to address the market with their individual securities perhaps with a single combined security.

Whatever that form may be must be a huge predictable flow that will serve the liquidity needs of investors worldwide who use those investments from the GSEs just as though they were United States Treasury securities with the same liquidity and the same utility.

If we do not achieve that, it may be all right. But the price to the consumer will be higher, as every cost will be traced back to the homeowner. We want to be protective of that homeowner, and we want to be protective of the housing market in the United States.

Mrs. MCCARTHY OF NEW YORK. Thank you.

My time is up.

Chairman MILLER OF CALIFORNIA. Mr. Huizenga, you are recognized for 5 minutes.

Mr. HUIZENGA. Thank you, Mr. Chairman, and I appreciate that.

I just wanted to maybe continue that conversation, Mr. Dorfman. If I recall, what you were just saying in your closing is you want to protect the homeowner and protect the marketplace. Is that correct?

Mr. DORFMAN. Yes, sir.

Mr. HUIZENGA. Obviously, there have been actions that did not do that. And you have to understand my perspective. I am a former Realtor®. My family has been involved in construction for about 40, 45 years. I have been a developer, primarily single-family housing. I have been extremely concerned about what happened.

And one of my concerns has been, when first getting out of college, doing my first real estate development, the lesson I learned is that you owned the lot. You used that lot as collateral to go get a construction loan. Now, I am not saying that the 50 percent down that my parents used was maybe a good number, but having significant skin in the game.

For me, buying my first home almost 20 years ago and seeing those standards of 20 percent down being the norm and being able to make that up with PMI, private mortgage insurance, was a positive thing. But we saw the 20 percent become 15, become 10, become 5, become 2, become zero, become 120 percent loan-to-value. And that concerns me because we have now put people into homes that they frankly cannot afford.

And I take blame for that as somebody involved in the construction industry. Speaking as a 42-year-old, I will take blame for a generation that demands it now. "What do you mean I cannot have the three-car garage and a walk-in master bathroom suite? We have expectations, and doggone it, they better be met." We have distorted the marketplace here.

And I think the question is, how do we restore that common sense? How do we get back to an equilibrium here, where we have good, solid housing stock that people can afford and they can be in? And, now with the literally hundreds of millions of dollars that people are upside down in their homes across the Nation, that does not add to that.

Mr. Veissi, I think you were just sort of wanting to address that a little bit?

Mr. VEISSI. Yes. Your questions are pointed, and they are fair and accurate. Our problem, especially during the middle part of the 2000s, was maybe that we did not understand the value of real estate and the longevity of real estate.

Real estate has never been a short-term investment. It never has been a turn-and-flip. If you want to do that, you go into equities. Vegas might even be a better place than real estate. But real estate on a long-term investment has always has been a substantial wealth-builder.

The other thing that is really interesting, your comment about skin in the game is important. And my knee-jerk reaction would be yes, the more cash you put in the less likely you are to walk away from that deal.

But I take a look at some of the mortgages that are out there today—especially those that were put forth in 2004, 2005, and 2006—and those underwriting standards were horrible. They were not horrible; they were atrocious. They should never have been placed. The consumer should never have had that responsibility for those underwriting standards because they just did not exist.

Take VA for example, with a zero downpayment. One of the lowest, as a matter of fact the lowest foreclosure rate in the entire country is a veteran loan. And there are two good reasons for that. Number one, education. The veteran is educated on what happens: one, if they should get into trouble; two, what they do immediately upon getting into trouble; and three, how they react when that situation occurs. And, too, their underwriting is absolutely terrific.

Mr. HUIZENGA. Very different standards, yes. And I believe that. When I was first in real estate, it was extremely unusual to have an FHA loan. And now, everybody has FHA loans. What is it, about a third of all transactions, roughly, something like that?

Dr. Wachter?

Ms. WACHTER. Yes. Thank you for recognizing me. The deterioration in underwriting conditions that Mr. Veissi just referred to is absolutely key here. A very large percentage of the homes that are in foreclosure and in default in fact were 10 percent and 20 percent down loans. And part of the reason that they are in foreclosure and default today is that loan values were artificially propped up.

With a 30 percent decline in home values—and in fact, in the United States, home values on average declined 30 percent. Even with 20 percent down, you will have underwater loans, and you will have few options if you lose your job and do not have an income flow but to go through default and foreclosure.

What we must avoid going forward is volatility in housing prices, to which underwriting deterioration contributed.

Mr. HUIZENGA. I think my time is up. But ultimately, this is about making sure people have jobs. We have to create an atmosphere here that is going to allow people to have a good, solid job. I just want to make sure when that is happening—as someone who lost a significant amount of his value on a home, all in those areas of those years—we have to make sure then that we have some sort of reasonable level of skin in the game, from my perspective.

And I do not think that there is anything magical about 2 percent or 20 percent. But somewhere in there, we have to make sure that consumers know what they are getting into and that there is significant responsibility with that.

My time is up. Thank you, Mr. Chairman. I appreciate that.

Chairman MILLER OF CALIFORNIA. Mr. Scott is recognized for 5 minutes.

Mr. SCOTT. Yes. Thank you very much.

Let me just start off with a general question that each of you might answer very quickly for me. You have great expertise. I would be interested to know, how much longer do you think that we have before we can dig our way out of this hole and get back to normalcy, or do you we think ever will? Is it too deep?

Mr. VEISSI. Let me give you really quick numbers that might help you out. I am from Miami, Florida. During the period of time when you could fog up a mirror and get a mortgage, about 2006, we were consuming, or absorbing, about 1,000 brand new condo units a year. That is not used product. That is just brand-new condo units.

We had on the books—permitted, ready to come out of the ground or coming out of the ground—at that same time, 67,000 units: almost 70 years' worth of inventory.

Mr. SCOTT. Right.

Mr. VEISSI. Now, about a third of those never got built. Folks walked away from their deposits. About a third of those are holes in the ground in Miami. But about 20,000 to 25,000 got built. The reality is that most people looked at that and said, "How are you going to absorb 20 years to 25 years worth of brand-new condo inventory?"

Mr. SCOTT. I know, Mr. Veissi.

Mr. VEISSI. It is almost gone.

Mr. SCOTT. Right. Is there anybody here willing to say 5 years, 10 years? To give us some hope about how long you think it is going to take for us to—

Mr. VEISSI. Some of the statistics that we see, we think places that were overbuilt like Miami—portions of California, Arizona, Nevada, but especially Miami—may see double-digit appreciation even in 2012, predicated upon the absorption of existing oversupply.

Mr. SCOTT. Five years from now, do you see us being in this same mess?

Mr. VEISSI. No, absolutely not.

Mr. SCOTT. Right. Anybody? Three, four years? What is our—

Mr. FARRELL. I would say that, from our view, the underwriting standards tightened up in 2007. So we are in the fourth year of the recovery of underwriting standards that were diluted.

And just to weave this into the previous testimony in question, with a 45-year history in the family of building properties, this window of dilution, and this reach for homeownership up into the 70 percent range, is a very small sample, but a very powerful deterrent to what has happened in underwriting and dilution of underwriting to get there.

So for the past 4 years, we have been underwriting loans and accepting loans in our secondary market companies with much better underwriting standards and, as a result, much better performance.

Mr. SCOTT. I only have 2 minutes left, and I have another question. I want to get to Dr. Wachter here. You all are hopeful that, let us say within the next 5 years, we will be above water on the situation of housing?

Mr. DORFMAN. I think that is fair.

Mr. SCOTT. All right.

Mr. DORFMAN. But it must be added that whatever set of reforms we come to institute through the U.S. Congress must be right the first time.

Mr. SCOTT. Okay.

Mr. DORFMAN. Therefore, we must not take this cake out of the oven before it is baked.

Mr. SCOTT. Very good. All right. Thank you.

Dr. Wachter, let me ask you this: My concern is what happened overseas and some of the abuses. Were the abuses experienced in the United States mortgage market present in other countries?

Ms. WACHTER. Yes, sir.

Mr. SCOTT. And how have these other countries responded?

Ms. WACHTER. They are also undergoing a period of tightening of underwriting standards similar to that in the United States and are also considering long-term reforms. I must say, a country which did not experience our turmoil, Canada, is considering reforms at this point.

Mr. SCOTT. Would you say, then, that we do not have anything to fear from these other countries having a negative impact on our own economy?

Ms. WACHTER. No, by no means. I do think we have a tremendous amount to fear from these other countries coming through sovereign debt failure. For example, Spain has a banking crisis which is very much related to its housing and mortgage market.

Mr. SCOTT. And they have GSE structures in these other countries, as well. Are there any differences—

Ms. WACHTER. I am sorry. I missed that point.

Mr. SCOTT. The GSEs? They have GSEs?

Ms. WACHTER. No, they did not have GSEs in Spain. They had a similar problem, but without the GSEs. It is a bank-led crisis with underwriting. And it was essentially with the cajas, which are similar to savings and loans.

Mr. SCOTT. With these other GSEs that are overseas, what are the differences in the structure between the GSEs that are in foreign countries and our GSEs?

Ms. WACHTER. Most other countries do not have GSEs. What they have is a banking system which has implicit and explicit government backing. The governments come to the rescue of failed banks, for example, Northern Rock in the U.K.

So these large banks, four or five large banks, in some sense, operate as though they are GSEs, with implied, and in some cases explicit, government backing.

Mr. SCOTT. And is there any reason why some countries have put together GSEs and others have not?

Ms. WACHTER. Absolutely. Countries with fixed-rate mortgages have securitization systems. We have a few examples other than the United States. There is Denmark, and to some degree Germany as well.

Germany did not have a crisis. It maintained lending standards. That is a fixed-rate system, and they maintain lending standards. No crisis. Denmark did have a crisis. There was a bubble and a bust, and the bust was associated with a sudden shift to adjustable-rate mortgages.

Mr. SCOTT. Thank you. My time has been expired. Thank you for giving me a few extra seconds there, Mr. Chairman. I appreciate it.

Chairman MILLER OF CALIFORNIA. Vice Chairman Dold, you are recognized for 5 minutes.

Mr. DOLD. Thank you so much, Mr. Chairman. I appreciate it.

Mr. Dorfman, if I can start with you, in your testimony you talked about the housing industry in the United States representing roughly 20 percent of the GDP. That has fallen to about 15 percent of GDP. What share of the GDP does the housing market represent in other developed nations?

Mr. DORFMAN. In other developed nations, as a general statement, it is significantly less.

Mr. DOLD. Ballpark? Five percent, eight percent, roughly? It depends, obviously, on the nation. But can you give me a ballpark figure?

Mr. DORFMAN. Can be. It is a big world. Those numbers are fair to work with.

Mr. DOLD. Okay.

Dr. Wachter, if I can just jump to you for a second. Government guarantees obviously are, I think, one of the reasons why we are in part of the mess that we are in. We have the guarantee, and yet we still have the private sector upside with the GSEs.

Why has the government guarantee been so important in the United States, when many other countries around the world do not provide that government guarantee?

Ms. WACHTER. If I may, Congressman, other countries do provide government guarantees to the banking system and make loans through the banking system. In our country, we have made loans, to some degree, through the banking system.

And again, we have implied guarantees, or explicit through demand deposit, and also securitization—and up until the conservatorship, there was an implied guarantee. So I would say that most countries do have implied guarantees.

Mr. DOLD. Okay. I appreciate it. Then just building on that, not only for you, Dr. Wachter, but for the rest of the panel as well. When we look at that guarantee, certainly we know that an overhaul of Fannie and Freddie, I think, is certainly something that we are talking about over here.

What should we be doing? What should this panel take away and bring back to our colleagues in terms of saying, what do we need to do to make it better, more efficient, for the housing sector and for our economy in general?

Ms. WACHTER. I think the legislation that has been already presented is a very good starting point. And I would say that in whatever legislation that you go forward with, the key is transparency.

The problem in the 2000–2006 deterioration was that the deterioration in underwriting standards was not known except anecdotally. So we need to have transparency in the mortgages that are being underwritten and in the structure of the securitizations themselves so regulators can track and investors can also can bring market discipline to bear.

Mr. DOLD. By all means, Mr. Farrell, please chime in.

Mr. FARRELL. Thank you. I would like to introduce the thought that if we did not have the GSEs today, we would be trying to create them, because of the support that they have created over the past few years. And, in fact, when Congress created the GSEs, they were dealing with the same sorts of issues of private mortgage capital, along with public capital and GSE fees dealing with it.

I think it is extremely important to understand the structure of the United States for jobs when you talk about the government guarantee. And that is the perspective that I think we need to really think about how we re-craft the government guarantee, if it is to be done.

The 30-year mortgage, and the GSE fees nationally, allow American consumers the flexibility to move to where the jobs are. And if you look at the 1930s, you were not able to do that nationally because you could not sell your house with the certainty of pricing in one State and moving to another State to move to jobs.

If you are moving from New York to Texas, or you are moving from New Jersey to California, one of the things that the GSE market allows you to do is have capital formation for 120 days, as a family, to make that move. And to have the certainty that that mortgage is going to be available for you when you buy your house under the same standards.

That is much different than any of these other countries, and it is very unique to the United States and it is unique to the structure of the United States. And I think that needs to be respected in the way that we think about the legislation and the way we think about what we want to provide our homeowner population with.

I am not saying that we should be 70 percent. I am saying that we should find a balance between whatever the right insurance amount is at the GSE form, and allow that flexibility for consumers to continue to move between States to where the jobs are.

Ultimately it led to job creation, for most of my life. Unfortunately, for a 10-year period in there, it has now led to a bubble that is broken and being cleaned up. That will be dealt with. But the purity of the mobility in the United States and job creation off of that I think is an important feature to understand.

Mr. DOLD. Mr. Dorfman?

Mr. DORFMAN. Very briefly, I would just like to cite a historical example. We, as Dr. Wachter said, look to Canada today as an excellent example of a banking system and a housing finance system that has been relatively unaffected by this crisis. And they have done many things right.

I had the privilege of helping to create the first mortgage-backed security in Canada, and that security was issued and remains under the guarantee, and remains guaranteed directly by the Crown, as they call it. Treasury directly guarantees Canadian securities.

So when you go outside the banking balance sheet into the global capital markets, some anchor of credit must be there to give confidence to all of those who are rapidly making choices about whether to invest or not, and at what price.

Mr. DOLD. Can you give us a better understanding in terms of the underwriting principles that they are putting in place?

Mr. DORFMAN. I am sorry, I missed—

Mr. DOLD. Underwriting principles? Obviously, that would be one of the problems I would argue that the GSEs—yes.

Mr. DORFMAN. Underwriting principles, or the larger rubric—which I like, regrettably, to call the failure of discipline across the industry—are absolutely essential to have integrity in their creation and integrity in their audit and review and enforcement. All levels, private and public, who are looking at mortgages must be acutely conscious of quality.

Mr. DOLD. Thank you, Mr. Chairman.

Chairman MILLER OF CALIFORNIA. Mr. Perlmutter, you are recognized for 5 minutes.

Mr. PERLMUTTER. Thanks, Mr. Chairman.

That last question by Mr. Dold prompts a question for me. I would like to break this down into two timeframes, if we could: all time; and then that period from 2004 to 2007. Because having sat on this committee now for several years, there were some abuses in the period of 2004 to 2007.

Mr. Dorfman, you mentioned the fact that there was a big accumulation of foreign holdings of our Fannie Mae and Freddie Mac types of debt. There was a whole foreign policy aspect to this to repatriate money from other countries that then may have let us get into some poor underwriting standards.

So let us go back to the underwriting standards question Mr. Dold just asked. In that period, we had loose underwriting standards. Would you agree, Mr. Dorfman?

Mr. DORFMAN. Progressively?

Mr. PERLMUTTER. Looser. Answer it however you want.

Mr. DORFMAN. Yes. Ever more loose until we had a crash.

Mr. PERLMUTTER. And now the pendulum has swung to the other side, which is very restrictive. Pretty loose, pretty restrictive, and we need to get back in balance so that we can sell some houses out there, in my opinion. But how, in these two different periods, did our Federal Home Loan Banks, which are other GSEs that we have, compare to Fannie Mae and Freddie Mac?

Mr. DORFMAN. Federal Home Loan Banks as a group outperformed, meaning they did not suffer anything close to the economic financial demise of Fannie Mae and Freddie Mac. And the essential reason for that, despite the fact that Federal Home Loan Banks are as large as Fannie Mae, is that the Federal Home Loan Banks own virtually no mortgages for their own accounts on their balance sheet.

The hundreds of billions of dollars held by Federal Home Loan Banks are held as collateral against obligations of member banks, not as directly-owned assets of the Home Loan Banks themselves.

Mr. PERLMUTTER. Okay.

Mr. Farrell, you talked about the RTC for a moment. Is there a way, as we go through this process—because I believe a lot of this had to do with the underwriting standards in that period of time of 2004 to 2007, which may have been appropriate for other reasons, but ultimately were not so good for the housing market.

Is there a way to do a good-bank/bad-bank kind of a system, where maybe we do not throw Fannie Mae and Freddie Mac out with the bathwater, but we separate what appears to be a period of time where we had some lousy loans and put that over here. Just deal with it, pay it. If we owe China, if we owe Saudi Arabia, if they are the investors in that, we continue to pay it—that is a foreign policy decision we are making—and then just move forward with Fannie Mae and Freddie Mac?

Can we do that? And I will just add one more thing—in this public-private setting that exists for those two entities?

Mr. FARRELL. I would say two things. If I may, one of the things that we need to understand as a nation is that there are only two companies in the entire world that can do what Fannie Mae and Freddie Mac do. And that is Fannie Mae and Freddie Mac.

And I would argue—and I have discussed this in our earnings calls with investors and discussions with investors globally—that they are, for many of the elements of what they provide, a national asset that needs to be protected.

And I am not sure that we are protecting them right now. What I mean by that is, if you look at them as an integral part of the banking system, they hold insurance deposits, municipal escrow receipts. They take cash flow monthly from investors and borrowers throughout the world, and flow it through into the banking system.

And we are certainly not creating jobs there, where 20-somethings are coming in and going to build their career. Those systems are extremely unique. I have watched them my entire career. They are a valuable asset to the government. And I urge you all to consider that they need to be protected in some way, shape or form.

And, in fact, I agree with the precepts of this legislation that Congressman Miller has put in, about merging those two companies to get the best, strongest asset that we can, nationally, to do that. That servicing aspect is an extremely important piece of the way that our Nation's mortgage market works. And a bad step for us would be that anything happen to that. A disgruntled East German hacker breaking into that system? You want to break into a bank? They are over there.

So I would say, yes, the RTC concept is doable. There is the ability to have a bad-bank/good-bank scenario. We need to allow clearance of prices, which means the unfortunate pieces of having some parts of the system fall to distressed prices that would occur faster than they would have occurred if we had not tried to manage the spiral down the way we have.

But I would be the first one to get on the road and go get the money to do that. The RTC was a pretty good example of bipartisan work in putting that together to cleanse the system, do it quickly, provide risk capital standards and risk-takers the window to come in and provide tax receipts ultimately back to the government.

Mr. PERLMUTTER. Thank you.

Thanks, Mr. Chairman.

Chairman MILLER OF CALIFORNIA. Mr. Garrett, you are recognized for 5 minutes.

Mr. GARRETT. And I thank the Chair.

I thank Dr. Wachter for her comments, early on, with regard to the problems here with this housing market in this country causing the ripple effect, if you will, over in Europe as well as on the results that came from it. And also to the point as to what this all caused, which was one of the seminal questions of the chairman.

And, Mr. Dorfman, I think you answered this and said what is the overall cost. And other members of the panel, too, answered that question as far as what is the cost if we did not have the GSEs and what is the cost of, basically, in essence, answering that in terms of we are going to see higher basis points of 100, 200, 300 basis points.

I guess that is one way of putting what the price is, what the cost is to the system as if you did not have the GSEs there as the backstop, if you did not have the taxpayers there as a backstop to the system, that you would see higher basis points.

I guess I look at it, though, in a different way. I look at the fact that we did have the GSEs, and what was the fact that they basically drove the market off the cliff and what that cost has been overall to the economy. That cost has been without a price. The fact that people have lost their homes is a cost. The fact that people have lost their livelihoods has been an insurmountable cost.

The fact that we have an economic situation in this country of 9 percent sustaining unemployment and people cannot ever again get jobs in the later part of their lives now, that is a cost that we cannot put a price on. That is a significant cost because of the fact that we have relied upon these two entities for so long.

There is a cost also to the taxpayers. There is a cost right now of around $150 billion. There is a cost over the next 10 years up to $400 billion. Now, how does that relate to what we do in some other things?

This past week, I have had people meeting with me in my office saying, "What is Congress going to do in the area of more dollars for breast cancer research? What is Congress going to do in the area of more money and more investment in the area of Alzheimer's research? What is Congress going to do in the area of benefits for senior citizens and their needs?"

And we have to say, "We are in deficit now." And they say, "Where is all the money going that we pay in taxes?" And one of the quick answers I can say is, "To bail out the GSEs to the tune of $150 billion, to the tune of over $400 billion, and who knows how much more than that." But it is going to all the myriad of other programs, good and bad, that Congress has put in place since that time to try to help sustain some of the neighborhoods.

Maxine Waters is not here. But she can speak most eloquently as to what is happening in neighborhoods because of the effects of the GSEs, and the fact that they have created bubbles in the marketplace, and neighborhoods are now devastated. And now, we have put in place other programs to try to stabilize those neighborhoods.

That is a cost that I think goes beyond when we make somewhat of a trite answer, and say, "It is going to be a little bit more expensive in the future if we do not have the backstop of the GSEs there."

I know we are talking about a global message, a global look at this. I looked at it from a U.S. perspective and sort of a back-of-the-envelope sort of analysis. What do we have here so far to try to make sure that we have a housing market of whatever range—5, 10, 15 percent of the marketplace? This is what we have.

The range for institutional backstop, if you will: the FHA as a government mortgage insurer; Ginnie Mae as a government MBS guarantor; Fannie and Freddie as GSE guarantors—we have had those—Fannie and Freddie as a GSE portfolio investor; we have had that. Federal Home Loan Banks as GSE lenders through their advanced program; we have had that. Federal Home Loan Banks as the GSE portfolio investors through their housing programs, we have had that.

What else do we have? We have the promotion of affordable housing generally. FHA, Fannie, and Freddie affordable housing goals, HUD's National Homeownership Strategy, Community Reinvestment Act, HUD's best practices initiative, Federal Home Loan Banks Affordable Housing Program.

On top of that, what do we have? Promotion of additional borrowed leverage and increased reliance on debt. You have FHA's leadership and loan downpayment lending, HUD's regulations of the GSE affordable housing, Fannie and Freddie's leverage in preferred stocks, risk-based capital rules, stable rules for secondary mortgage lending, tax deductibility of interest, overreliance on the Fed of lower interest rates.

On top of that, you have limited use of prepayment penalties, de jour and de facto limits on recourse and deficiency judgments, liberal capital gains exceptions, procyclical loans. We have all that here.

Can anyone on the panel compare this to any other country in the world that has anything close to this, any other country in the world that has anything close to this that manages theirs in an effective, perfect implementation of these?

And if so, how is it that these other countries without this myriad—and I did not go into all of them; this is just what we came up with—are able to sustain their mortgage rates and not have the crisis that we have had in this country in housing?

Mr. DORFMAN. Your examples, your exhaustive examples, are compelling and accurate, and I would add the postscript that before Fannie Mae and Freddie Mac and others throughout the housing and finance system lost all discipline and success went to their heads, and then some—

Mr. GARRETT. By the way, Dr. Wachter said that was in the 2000s. That really goes back to 1992 or so, is that not, when it began—

Mr. DORFMAN. Oh yes, but there certainly was a time when they were, Fannie and Freddie, great net Federal taxpayers and far more simple than they were in the days of demise. So may I argue on behalf of SIFMA? It is not necessarily true that the fundamental architectures of Fannie and Freddie are useless and decrepit, but how did something good become so bad?

Chairman MILLER OF CALIFORNIA. Your time has expired.

Mr. GARRETT. I think, Mr. Farrell, you want to—

Mr. FARRELL. If I may add to that, I think when I listened to that litany of programs and elements of government support, many of those programs were Band-Aids for problems that were bleeding out of different cuts in the housing system.

I would question today, and I am sure this is part of your thought too, how valuable those are and how active are they? If we look at some of these other programs that have been implemented only in the past few years with the genuine goal of trying to keep people in homes, very few people qualify for those programs. And, in fact, they are very hard to put through the system.

And I would say, as a mortgage investor, that, ultimately, mortgage investors are going to judge the cash flow of American mortgages against the cash flows of any other asset class on the debt side, including Greek debt. And one of the things we need to decide as a nation, is do we support our neighbors or do we support Greek debt and other asset allocations like that?

So I would be in favor of a complete review of a lot of these programs, and trying to figure out exactly how effective they have been and how much support do they cost and why we are doing them.

Mr. GARRETT. It is pretty hard to get rid of a program, I will tell you that.

Ms. WACHTER. If I may quickly just say that many other countries have much deeper involvement in the housing market than the United States. Canada is an example of a country with government guarantees, both implicitly and explicitly, whose system works quite well.

I also just quickly wanted to address that it is not simply a matter of 200 to 300 basis points if we withdraw Fannie and Freddie. It is probably a matter of a second double-dip, a recession, for the United States.

Chairman MILLER OF CALIFORNIA. Thank you.

Mr. Green is recognized for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman. I thank you and the ranking member for allowing me to participate in the hearing.

It seems that invariably when we have these hearings, we get into a discussion of what actually caused the crisis, and we relate that to Fannie and Freddie. Before I go on, I would like to say to Mr. Farrell, I just want to thank you and other members for some of your comments, your comments about Fannie and Freddie, that if we did not have it, we would probably try to create it. That is a pretty strong comment, and it is not a comment that you hear too often. Thank you for taking a position with reference to an institution, or institutions, that were of benefit to us.

Now back to where I was. When we talk about Fannie and Freddie and what caused what we will call, for my purposes, the demise of Fannie and Freddie, we do not always remember that the products they received became the problem. And they received faulty products because of changes in the law in 1980 and 1982.

In 1980, we did away with the usury rates. We made it possible for loans to become predatory, in a sense, by not having those usury rates. Then in 1982, we passed the Alternative Mortgage Transaction Parity Act. And that one allowed for a lot of what we call the exotic products, because it allowed for us to go to the adjustable rates.

For a long time, we had the 30-year fixed-rate mortgages. And then when we got into adjustable-rate mortgages, we had prepayment penalties that coincided with teaser rates. We decided that we would have 3/27s and 2/28s and they became almost commonplace. So a lot of the products created the problems that we ultimately had to, and still are, dealing with.

So I just want to get that side of the record out there, that Fannie and Freddie continued to do what they were designed to do. But the products, when you have originators who no longer concerned themselves with the quality of the mortgage—just the quantity they can originate—that has an impact, and it had an impact.

They were originating these products and pushing them into other markets, and not concerning themselves with whether the person who qualified for the teaser rate would qualify for the adjusted rate. And we are still having some of that to contend with currently.

So the products became a real problem for us. And I cite two laws, the Alternative Mortgage Transactions Parity Act of 1982 and the Depository Institutions Deregulation and Monetary Control Act of 1980 as part of the problem.

Having said that, I want to now ask—let us start with Ms. Wachter, is that correct? You said a very strong statement. You said only the United States has a fixed-rate long-term product. Did I correctly state your position?

Ms. WACHTER. There are other countries with fixed-rate products. A 30-year product is unusual. But more to the point, a prepayable with lock-in capacity is unusual. In fact, all of those features together are characteristics solely of the United States.

Mr. GREEN. All right. Now, what I would like to ask each of you is this. Give me the one difference between the GSE's as currently structured, or perhaps the system as constructed before FHA-FHFA took over the GSEs. The difference between that structure and the structure being proposed that is important? A significant difference.

And if you could each just give me one quickly, I would greatly appreciate it. If my time expires, I will accept that it is expires.

Mr. FARRELL. I would say it is most important that the government does not run portfolios, and that capital is brought in by the private sector. Where I think the wheels went off the bus was in trillion-dollar balance sheets at the Fannie Mae and Freddie Mac level, which essentially forced the banking system into a lot of dilutive activities.

Mr. GREEN. Thank you.

Mr. Dorfman?

Mr. DORFMAN. I want to agree with Mr. Farrell entirely. It was as I mentioned before, the portfolios as the mark of difference between Fannie Mae and Freddie Mac and the Federal Home Loan Banks, for example. Or between the U.S. GSE's and Canada. There is no need for those Enterprises to be investment companies.

Mr. GREEN. And this new system would prevent that?

Mr. DORFMAN. As I read it.

Mr. GREEN. As you read it.

Okay. Mr. Veissi?

Mr. VEISSI. I would say the explicit government guarantee that backs those is enormously important, plus one thing we have not said. We have talked about underwriting standards. We have talked about the impractical investment standards in the 2006–2007 era. We never talked about educating the public about the instrument itself. And you are right.

Mr. GREEN. Ms. Wachter?

Ms. WACHTER. I think the portfolios are a key difference.

Mr. GREEN. Okay.

Thank you, Mr. Chairman. I apologize for going over.

Chairman MILLER OF CALIFORNIA. We are going to go a second round of questioning. I think this is a very informative panel. If we are in agreement with that, does the panel agree to a second round of questioning?

There has been a lot of discussion in Congress about Freddie and Fannie and the marketplace. And a lot of it is justified. Freddie and Fannie made some big mistakes. The problem with much of the debate is Freddie and Fannie are outperforming the rest of the marketplace.

So, are they the largest? They are. Is their default rate less than the private sector? It absolutely is. Have they made mistakes? Without a doubt, they have made mistakes.

A lot of the problems that we have seen out there were caused by underwriting standards. They did not have them. If you could sign your name on the line, people made a loan, and that was a problem. And the bill the ranking member and I introduced deals specifically with that. You have to be an approved lender. If you do not comply with underwriting standards, you buy the loan back. Very simple.

This should have been the case with Freddie and Fannie. I think the biggest problem that went wrong with Freddie and Fannie was they went public. All of a sudden, they were looking for market share, rather than looking to be a conduit for secondary money into the market, as they were intended to be.

And as they fought for a market share they lowered their standards, closed their eyes. And many things Congress did enabled them to do that, and encouraged them to do that. Some say that there is a secondary market out there without government involvement. If you are talking about Countrywide, that has to be the greatest example of what went wrong in the marketplace.

They were trying to emulate the GSE's in coming up with a mortgage-backed security that looked like a GSE. But the problem is, it was not. They were junk bonds. I know in 2000, I started introducing language in this committee that said we should define predatory versus subprime, got it to the Senate 5 times, but could never get the Senate to act on it.

Had we done that, we could have defined what a good subprime loan was versus predatory, which is what they were making, in the last few years, that basically were bad. The best loans the GSE's are making today are in the high-cost areas. They have written underwriting standards that are very good, solid. And these loans are performing very well.

The problem I have with putting our head in a hole like we have done, and allowing GSE's to continue as they do today, is we are continuing to lose money and the taxpayers are going to pay for it. You have reviewed my bill. If you took and put all the assets of GSE's into that bill, allowed them to take the foreclosures, hold them for up to 5 years, lease them out, they would recoup all of their money invested. And they would not continue to lose money in the future.

So the problem is, by doing nothing, they are putting the taxpayers more at risk. Would you agree or disagree with that today? Anybody on the panel?

Mr. DORFMAN. Certainly, doing nothing allows the clock to tick and the calendar to turn. American taxpayers and American homeowners are suffering every day. And SIFMA members are acutely aware of this.

On the other hand, as I said before, we cannot take this cake out of the oven before it is baked. As we have seen by all these intelligent questions this morning, this is an enormously complex issue that resists easy resolution. But the debate has to occur. The debate absolutely, sir, yes, has to occur. And I applaud this committee for pushing it on, and SIFMA is prepared to study exhaustively each and every proposal coming out of Congress and to render a view.

Chairman MILLER OF CALIFORNIA. One question I will let each of you answer if you would like to, the housing bubble was, in part, the result of increased access to credit in the form of mortgages. Without correct balance of risk assessment analysis and financial controls, how can that balance be corrected?

Mr. FARRELL. I think that the market has corrected. Darwinism has taken place.

Chairman MILLER OF CALIFORNIA. I agree. I wanted to hear you say that.

Mr. FARRELL. We cannot fund—and everyone who is in the mortgage market, including us, we just celebrated our 14th year as a public company—navigated that differently. And some of us navigated it better than others. One of the most interesting aspects, I think, of the past 3 years' experience for me, is that for the first time in my career, I am not competing with Fannie Mae and Freddie Mac for issuance in the market for their portfolio.

And in fact, mortgage REITs have absorbed almost the entire net supply being created out of the 95 percent market share that the GSE's create today. Private capital is available. It is mostly domestic. It comes to us in the form of REITs and REIT-share offerings. So we have a domestic solution for a domestic problem.

This is clearly, in our business model, investors nationally and internationally and of all sizes supporting their neighbors. And we have these solutions in place. The underwriting standards that occurred were unfortunate, but recognizable by significant players. And I always go with the one-man statement. If one man could recognize it, whether he is running a hedge fund or a public company, and he can identify that risk, then those information points were open to everybody and all could have avoided it.

But the markets run on two aspects, greed and fear. And as Warren Buffet would say, it is best to be greedy when everyone else is fearful, and it is best to be fearful when everyone else is greedy. And I think that Darwinism has already occurred in these markets, and that a lot of the instruments that existed will not exist because the history now is out there.

Chairman MILLER OF CALIFORNIA. I agree with you. I think whatever facility is created to replace the GSE's, these will actually act as a conduit. As the private sector is willing to step up, the GSE or facility should step down in percentage. They should not fight for 60 or 70 percent of the marketplace or even 50 percent. If they are only needed for 30 percent, that is adequate if the private sector is putting the funds in there.

But when they start to recede, and the private sector is not available, that is when the facility needs to step back up to keep liquidity in the marketplace and the balance in the marketplace. But the big mistake, like I said, I believe is when they went public they started fighting for market share. They should never be put in a position to fight for market share. They should strictly be a conduit.

I yield to the ranking member.

Ms. WACHTER. I have a partial disagreement with Mr. Farrell, although I agree with almost everything he has said. However, regarding the statement that what was known to a few was therefore known to everybody, or knowable to everybody, it certainly was known to insiders that credit conditions were deteriorating and how they were deteriorating

However, it was not systematically known. It was anecdotally known to regulators, and even to the Federal Reserve Board. In 2006, according to the public record, the Federal Reserve Board did know that housing prices were probably in a bubble of about 20 percent. But they did not have systematic information on the nature of the underwriting conditions.

It would have been very difficult to actually take note of all of the possible ways that underwriting was being undermined. Also, the validity of the data, of the reporting of the underwriting data, is clearly in question. Now going backwards and attempting to verify the underwriting is difficult.

Chairman MILLER OF CALIFORNIA. The ranking member will be recognized for 5 minutes.

Mrs. MCCARTHY OF NEW YORK. Thank you.

This has been actually very educational. One of the things that I have been doing, not only on this committee, but also on the Education Committee, is financial literacy. You brought that up as far as people do not really understand what their debt ratio is or anything like that.

In the housing market, we have found that those who went for counseling to buy housing—it is not just a mortgage, it is the insurance, it is your taxes, it is utilities—these are all things that add up. So people who were buying homes and were not educated about what they were doing obviously got into trouble.

And some the instruments that were being used, in my opinion, were way out of line. Someone who is earning $40,000 a year should have never been allowed to buy a $700,000 house. That is common sense. And yet it was happening, and we saw it.

There are two questions that I basically want to ask, one to Ms. Walker?

Ms. WACHTER. Ms. Wachter. Thank you.

Mrs. MCCARTHY OF NEW YORK. Wachter, sorry.

One of the things, basically for this hearing was talking about what other countries are doing on how they do their mortgages. So how do mortgage products offered in other developed countries shape views on homeownership?

We have been pushing homeownership. That is the great American dream. And yet I know that over in Europe, homeownership is there, but it is not as prevalent as here, or they do not seem to be pushing it as much.

The second part, for Mr. Farrell, and I am not sure whether anybody can answer this, when we look at the private mortgages and the mortgage market, it is another part of the economy. Our pension funds that have invested. And they can only invest in something if it is backed, basically, by the Federal Government.

So if we could have those two answers?

Ms. WACHTER. Yes. It is very difficult to make homeownership comparisons that are fair across countries. Many countries do not have a vibrant rental market. In fact, the expansion of REITs is now ongoing in other countries to establish financing for a rental market.

There may be rent controls or social housing for rentals. However, because of this, many countries do not have the option for renting. Homeownership is very high in these countries.

Other countries do have a vibrant rental market, and some of them, with mortgage markets similar to ours have lower homeownership rates. In particular, Germany has a homeownership rate which is significantly lower—in the 50 percent range.

Mrs. MCCARTHY OF NEW YORK. Mr. Dorfman? I saw you shaking your head "yes."

Or Mr. Farrell?

Mr. DORFMAN. I was only agreeing with Dr. Wachter.

Mrs. MCCARTHY OF NEW YORK. Oh, okay. I am sorry.

Mr. DORFMAN. Thank you very much.

Mrs. MCCARTHY OF NEW YORK. I thought I saw you shaking your head when I was talking about the securities market.

Mr. FARRELL. I would like to, if I may, answer the second part of your question about the private mortgages. First off, there is a very good report, with a summary of comparisons, that I would like to make available for everyone on the committee—that was sponsored by the Research Institute for Housing American Mortgage Bankers Association—called, "The International Comparison of Mortgage Products Underwriting" by Dr. Michael Lee, which gives you a full picture of the different products and the different kinds of policy measures being taken in different countries.

But to your question to me about investment, one of the characteristics of mortgages is their cash flow. And that is a characteristic that is endemic to every investment, whether it is an equity or a debt instrument. And big investors and small investors alike—but for the most part people who are making significant amounts of capital injections into the market everyday, whether they are rolling over debt or they are purchasing new debt for a liability that they have, a pension fund, retirement fund, etc.—essentially are analyzing those cash flows.

And they will price on top of that what they think that guarantee is. I would submit that most sophisticated mortgage investors never valued private mortgage insurance as added into cash flow, because mortgager products in general, that guarantee, is extremely difficult to put back through the system and get claims on. It is not an efficient thing.

So you need to compare the post-bubble market and the pre-bubble market the same way, as though mortgage insurance would not pay off. In the case of Fannie Mae, Freddie Mac, and Ginnie Mae, that mortgage insurance has proven to be reliable. It may be mispriced, it should have a higher guarantee fee against it, which should be beneficial for the communities and beneficial for the taxpayers. It should provide some sort of revenue income.

But there is a risk in unwinding that guarantee too quickly. Because many investment entities across the globe are invested on the precept that guarantee is sacrosanct. And because of that, they trade it and they give it a benchmark status in terms of risk status, risk-adjusted status, on their balance sheets. And that includes our own pension funds here, our own banks, and other investment companies throughout the world that we speak to.

I would say that one of the most interesting outcomes in the past 50 years for me personally has been that you would have thought that the safest mortgage market in the world was the Irish mortgage market. It was almost 100 percent variable rate, so it would have adjusted with anything that happened in interest rates and, in fact, had a homeownership rate around 50 to 60 percent. When in fact, Ireland has suffered the most, and they had no government guarantee behind it. It was all linked into the banking system.

So this was almost inescapable. It is unfortunate that it has leaked into the government's coffers the way it has, but this is global problem. We can be the first out. And we have a huge opportunity in front of us if we get this answer correct.

Mrs. MCCARTHY OF NEW YORK. Thank you. My time is up.

Chairman MILLER OF CALIFORNIA. Thank you.

Vice Chairman Dold is recognized for 5 minutes.

Mr. DOLD. Thank you, Mr. Chairman. And I certainly want to thank you again for your time. It has been informative.

One of the things that I think we have not really discussed as much in the hearing is foreign investment in the U.S. market, and certainly with our mortgage-backed securities. What I would like to do if I can is just talk about the structure that we have right now.

Do foreign investors still consider the United States a good place to invest in terms of our mortgage-backed securities? Are they an attractive investment?

Mr. FARRELL. I would say there are questions about the ongoing commitment because of the noise and the actions that have happened over the past 2 years. But I would say domestically that gap is being filled by investment companies within the United States. Certainly, as I said earlier in my testimony, we have absorbed in the mortgage REIT industry almost all of the supply that has been created over the past 3 years, primarily through domestic investments.

Some of that is linked to the dollar, the weakness in the dollar and the currency transactions against it. That is one of the judgment calls. We have investment pools throughout the globe. It is easier to do it in the United States today than it is to do it offshore.

Ms. WACHTER. Absolutely key to the stability in the housing market and recovery of the overall economy is the willingness of foreign investors to hold Fannie and Freddie mortgage-backed securities. In fact, the ability of the Fed to assist the overall economy in keeping interest rates low, at historic rates—and that is the one major plus for the U.S. economy today is low mortgage rates—is, hand-in-hand, requiring also confidence by foreign investors and domestic investors. But in mortgage-backed securities, and the guarantee by the Federal Government at this time.

Mr. DORFMAN. There are certainly a significant number of foreign investors who simply will not buy an un-guaranteed mortgage-backed security. However, there are also a significant number, especially those who are heaviest in investable funds, who recognize that behind the guarantee there ought to lie, there must lie, and at an earlier time, did lie an underwriting checks-and-balances system that was intended to ensure that the guarantee would never have to come to be exercised.

Unfortunately, that came out rather differently. But it is very critical to stress, as many of you have, that the quality of the product going into the process is the very first step to ensure that it is going to go out the back end to an institutional investor, whether domestic or international, on terms that are eagerly bid for and on spreads that are ultimately affordable in financing costs to the U.S. worker and taxpayer.

Mr. DOLD. Thank you, Mr. Dorfman.

There is no question, when we talk about underwriting standards of old and how we got into this mess, that we are longing to try to make sure we are holding more people accountable, which I think, Dr. Wachter, goes into your transparency argument.

If we can, obviously, I am of the belief that the GSEs hold far too much of the mortgage market right now. I think that is not really healthy, from my perspective. But can you, Mr. Farrell, talk to me—or anybody else on the panel—with regard to, if we were to go in more of a privatized route.

You were talking about the REITs taking up and soaking up a larger portion, or putting additional capital at play. How would that affect foreign investment? How does that affect foreign investment, especially if we are going to see additional—

Mr. FARRELL. The REITs are internationally accepted. In fact, many countries are trying to replicate the U.S. REIT laws in order to create the same kinds of liquidity that we have in this Nation. In fact, REITs, whether they are property REITs or mortgage REITs, have indeed absorbed much of the supply from the deleveraging that is going on globally across the world.

We have done transactions in the U.K., taking back U.S. assets into the United States. So it is a recognized, internationally recognized, investment vehicle to do that. That capital in the private capital sector is available. It is not available at the same price as it was 2 years ago. We would concur with you that the GSEs hold way too much debt.

We think that overhang needs to be cleared out. It is like an overhang of inventory that needs to be cleared out into the secondary markets. We will be in favor of a more rapid downsizing of those portfolios to establish those clearing prices into the private sector while the environment is in the position it is today to finance that.

Mr. DOLD. Okay. And, obviously, the glut of excess inventory, if you will. How do we get around that? Because that is obviously significant. And I talk to a number of people who are in the financial markets. They are saying we have way too much inventory out there right now.

How do we solve that? How do members of this panel try to deal with that? Is there some suggestions that you have? And I recognize that my time has expired, but that is obviously a critical point that we need to address.

Ms. WACHTER. That is the key question. And that goes back to the previous point that we do need to, at some point deal with the portfolio. But at this point, there is no way that the portfolio can be priced and absorbed by investors without a guarantee behind it.

If it were, it would not be a matter of 200 or 300 basis points. It would be a matter, I believe, of a perception of a much greater risk to the overall economy.

Mr. DOLD. And I know I am stating the obvious, but is not it any investment that is guaranteed always a more attractive investment? Of course—

Ms. WACHTER. And it is a question of the moment of time.

Mr. DORFMAN. Not necessarily. It is always a question of what is the risk versus what is the return. So, clearly your lowest risk, the guaranteed product, is going to get you a return which is commensurately less because it is less risky, and vice versa.

If I may just take an additional second to expand on Mr. Farrell's comment, there is no question that REITs are playing, and growing in their activity to play, a critical role in this market in terms of absorbing flows of product. On the other hand, it also needs to be recognized that in terms of maintaining that critical global sector, a key factor, especially for a foreign central bank, is liquidity.

The ability to trade at or near par at a moment's notice because central banks have certain duties, including defending the national currency when they need cash quickly. The way you get liquidity is through uniformity. And guarantee is an immense help there because it takes away the question is there a credit risk here. We are only dealing with interest rate risk. That is, too, a factor to be borne in mind.

Chairman MILLER OF CALIFORNIA. Mr. Green, you are recognized for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman.

Mr. Chairman, I would like to take just a moment and thank you and the ranking member for this straightforward piece of legislation. I think it deals with the concern raised about the explicit nature of the guarantee, which is something that seems to be of paramount importance in terms of impacting the global markets.

Have we done enough to deal with the underwriting standards? Are there some things that we should do more to help with underwriting standards? Because those standards did have a significant role in the crisis that was created.

So if I may, I will start with the lady and just this time go from my right to left.

Ms. WACHTER. I do not believe we have done enough, Congressman. I think that we need more transparency going forward. If there was more transparency, then we would have more involvement from the private sector at the table. And the private sector itself would be more assured, going forward, of investor discipline.

I believe that the Office of Financial Research, the new office under Dodd-Frank, could have a role to play in the tracking, transparently, of underwriting standards and how they evolve over time. Today's underwriting statements, as has already been noted, have swung the other degree of the pendulum.

That approach will not and should not be maintained going forward. But where will the pendulum swing? Will it swing all the way over to the other side again? I do not think so, not in the short run. But who knows? And that very uncertainty is, I think, troubling and will, going forward, undermine confidence in the housing and mortgage market.

I think we need to take that on. So to address the question that was raised earlier by the Chair regarding predatory subprime lending, we need to be able to track—in this important capital market for homeowners and for the United States—the conditions of the underwriting. We need to do a far better job of that than is currently being done.

And that means that there need to be additional steps. Whether they are on the regulatory side or on the legislative side, they need to be forward.

Mr. GREEN. Mr. Veissi?

Mr. VEISSI. The buyback rate, as you mentioned, from Fannie and Freddie was probably 3 percent or 4 percent during the same period of time as the major banks were at 15 percent and 18 percent of foreclosure base. What was said here is enormously important to understand, especially in the marketplace. And that is that you can go to Fannie and Freddie and their parameters for accepting a loan are fairly adequate.

But the lenders are so conservative today that they have constricted themselves not to be in a position to be forced to buy back any loans at all. So, if you do not have a 800-plus credit score, if you are not lily-white, if you do not have 20 percent down, if you do not register all those things—which you do not have to do to sell that loan back to Fannie or Freddie—but if you do not do that, they will not loan.

So yes, the underwriting standards are enormously important both in the areas of the 2005–2006 area, where it was completely out the window, and today where it swung in the opposite direction.

Mr. GREEN. Thank you.

Mr. Dorfman?

Mr. DORFMAN. Just a few comments. First, the market, largely because of huge losses taken, has self-cleansed. There is no bid for trash. The trash business is finished.

Second, consumer education is absolutely critical. SIFMA is a large supporter of consumer education. Homebuyers, homeowners, must understand, as you illustrated before, that there is a whole lot more than the mortgage coupon involved in owning a house. It is a compendium of expenses.

And third, and very importantly, just as consumers must know what they are doing, institutional disclosure laws and institutional due diligence laws—in other words, explain in high detail what you are selling and understanding in high detail what you are buying and that your price is reasonably arrived at—has been introduced. It is under consideration, and will ultimately be a tremendous additive to the overall health and growth of the market.

Mr. GREEN. Thank you.

Mr. Farrell, I am going to have another question for you. I apologize. I will get your answer, but I have another question. You mentioned the $1 trillion threshold. And are you referencing this number as it relates to the share of the market that Fannie and

Freddie had at that moment in time? Hence it could be a trillion, but if the share of the market is a lot less, then it could be acceptable.

Could you just give me a brief explanation?

Mr. FARRELL. Sure. Thank you for letting me clarify that. I am speaking about their debt-to-equity on their balance sheets as publicly traded companies, which we estimate from our research was around 77-to-1 debt-to-equity when you include derivatives.

So it is not about market share, per se, as it was actually the stretch of those balance sheets and the ability to hedge those balance sheets, and using tools and techniques that really proved unworthy of the size of the dimensions of that balance sheet.

But to answer your other question, I would say that you have gotten a very good summary from my colleagues here. I would agree with all their bullet points. But I would offer also one or two observations.

From an investor's point of view, the consumers actually behave very rationally. When we give them money for nothing, they take it. When we offer them 4 percent money, and they have to bring more money to the table in order to provide that rate because underwriting standards are tight, they are doing that.

For the first time in my career, most of the closings that are going on now involve consumers bringing money to the table that they did not have to bring before in order to keep their loan-to-value ratios in time. So the Fannie-Freddie credit stack, if you will, is getting much stronger as we sit here today because of rational behavior by consumers.

Where we failed was offering them an un-rational rate and an un-rational expectation about what the buyout would lead to in terms of house price depreciation, etc. None of the models could do that. And I think that is—to my colleague's statement—"trash is no longer for sale."

For a long time, as investors we assumed that house prices would always go up 3 percent to 5 percent per year. Every investment model also agreed with that. In fact, when it went flat and it went negative, that is what destroyed these assets.

Mr. GREEN. Thank you, Mr. Chairman.

Chairman MILLER OF CALIFORNIA. Mr. Garrett, you are recognized for 5 minutes.

Mr. GARRETT. Just very quickly, because I was due on the Floor 5 minutes ago.

The entire panel believes that there should be more transparency in underwriting. Yes? So there should be more transparency in the securitization process? And would there also be more transparency as long as we have the GSEs, as far as going to fair-value accounting for the GSEs?

Mr. FARRELL. Yes, I think GAAP accounting is extremely important.

Mr. GARRETT. Okay for that. So basically the GSEs, both their debts and their liabilities, should be corporately represented on the balance sheet?

Mr. DORFMAN. In order to attract private capital, private capital must know what it is buying into.

Mr. GARRETT. Right. And so far, the Administration has opposed all of that. But you would all support that?

Ms. WACHTER. I have not spoken to that.

Mr. GARRETT. Okay. So you disagree?

Ms. WACHTER. I do not have enough information to respond.

Mr. GARRETT. I would like to take a look at that. Because that is something that we will be looking at.

Ms. WACHTER. Absolutely, sir.

Mr. GARRETT. Also, because my time is limited, I would appreciate—in my opening comments, I spoke about the IMF report back in April. And you do not have to give me your opinion now, but I would appreciate—since they seem to be somewhat contrary to some of the opinions here, where they said their study showed, with regard to these, that there is limited evidence that it boosted homeownership, made the system more efficient, and provided buffers against economic stress. So I would appreciate that.

And finally, on the issue of foreign investment, I think Hank Paulson wrote the book, "The Brink." And in it, he talked about the fact that somewhere in the year 2008 when all this was all happening, there were phone conversations between some of our largest foreign investors, which would be Russia and China—the largest investors, holders of the GSE debt—that perhaps they should get together and begin dumping that on the marketplace. You probably heard those stories back then.

If that is true, and I realize, Mr. Dorfman, all of your comments with regard to the importance of foreign investors. Is that really something that we need to be concerned about? That we are looking to those very same type of investors to be holding the debt that potentially could put us in this quagmire again?

Mr. FARRELL. I think international investment is an important piece of any diversification. The large outstanding share of United States GSE debt, I would say more than 78 percent is held domestically.

Mr. GARRETT. And what was the percentage back in the 1990s, ball park?

Mr. FARRELL. That study is actually in this paper here. I think that it is pretty consistent that it would be somewhere in the 75 percent to 80 percent range.

Mr. GARRETT. Yes.

Mr. FARRELL. It is mostly held by the banking system. REITs have grown. We were 1 percent a few years ago, and now we are at 3 percent to 4 percent because we have been filling the gap. So other domestic entities have grown to do that.

But I think you do need diversification of capital across. It becomes a currency issue, if I may introduce that thought. If we are doing trade with China and we are doing trade with Russia, and they are getting dollars back, they are going to look for the highest investment asset that they can put that into.

And in many cases, it is going to wind up being things that are not linked to treasuries. They are not going to buy treasuries.

Mr. GARRETT. So you also agree, from their comments, that they probably have other interests other than economic. They have political issues, as well.

Mr. FARRELL. I would love to have a self-dependent, independent United States.

Mr. GARRETT. Yes. And just a clarification. I think it was Mr. Green, but maybe not—someone made the point with regard to the nature of the defaults that are out there and the fact that we have all the 30-year fix. That is what everybody wants and that sort of thing, and they are sort of better for various reasons.

But generally speaking, the default rates that we are looking at right now, is it not something like 80 percent or 88 percent of the defaults that you are looking at are in the 30-year fixed marketplace?

Mr. FARRELL. That is because the vast amount of our assets are 30-year fixed—

Ms. WACHTER. But the fixed-rate mortgages have lower—

Mr. GARRETT. So then, basically—

Ms. WACHTER. If I may say so, the fixed-rate mortgage rates, all else being equal, have a lower rate of default.

Mr. GARRETT. How can that be? What is the percentage?

Ms. WACHTER. A lower rate of default. But as we just heard from Mr. Farrell, they comprise a very large part of the market.

Mr. GARRETT. Yes.

Mr. DORFMAN. Yes. If I may?

Mr. GARRETT. Sure.

Mr. DORFMAN. Investors everywhere ought to responsibly review their holdings and rebalance, or even enter or exit markets completely as they see fit, in their own self-interest.

Mr. GARRETT. Okay.

Mr. DORFMAN. One. And so in your example, China, Russia, whoever it may be—and we hold no brief for anyone for or against them—whatever they may be, they are very likely not suicidal. And the idea, if that is the idea, of a rapid-fire wholesale dumping-off of a portfolio would be suicidal. Its value would plummet, and that becomes a very problematical scenario.

Mr. GARRETT. Sure.

Mr. DORFMAN. I thank you very much.

Mr. GARRETT. Thank you.

Chairman MILLER OF CALIFORNIA. I want to thank the witnesses. You are very, very wise in what you have said. You are educated. You spoke from your heart. I think we have come away with something I have believed all along, that we have to do something to correct the problem. This economy is not going to start to turn until we correct the housing problem.

If you just could put that sector back to work again, the unemployment rate would be well below an acceptable rate. And the problem that many have and they do not want to accept is that GSEs have done poorly but they are doing better than the private sector as far as default rates. They just happen to be the large elephant in the marketplace. They have the largest holdings.

I agree with you. We need to move forward with something that is very thoughtful. We need to not have a knee-jerk reaction. Whatever we do, we need to do it right, do it the first time. We need to create stability in the marketplace, confidence where people do not assume that their house is going to be worth less next year than this year.

We have to do something to stop these foreclosures being thrown to the marketplace, further driving the value of homes down and creating just unrest out there. I know a lot of builders are having problems because their appraisals are coming back with liquidation values rather than completion values, and it is killing them as far as being able to get loans.

That concludes our hearing. The Chair notes that some members may have additional questions for the panel—and I want to thank you for your time on that again—which they may wish to submit in writing. Without objection, the hearing record will remain open for 30 days for members to submit written questions to these witnesses and to place their responses in the record.

At this point, the hearing is adjourned. Thank you.

[Whereupon, at 12:12 p.m., the hearing was adjourned.]

A P P E N D I X

October 13, 2011

International Monetary Policy and Trade Subcommittee Hearing: "U.S. Housing Finance System in the Global Context: Structure, Capital Sources, and Housing Dynamics"

Chairman Gary Miller's Opening Statement

October 13, 2011

Today, our Subcommittee meets to discuss the "U.S. Housing Finance System in the Global Context: Structure, Capital Sources, and Housing Dynamics." As Congress grapples with how to change the current U.S. housing finance system, it is important to understand the domestic and global economic implications of such changes. In addition, as we contemplate changes to our own system it is useful to consider differences between the U.S. mortgage market structure and housing finance systems in other countries. Our goal today is to shed light on these important considerations.

There is no question that instability in the housing market is harming our economic recovery. Housing has historically led economic recovery in this country. According to the Fed, the slowdown in aggregate demand is centered on the household sector. People aren't consuming because of the wealth lost in the housing sector. We must stabilize the housing market.

The importance of the U.S. mortgage to the global economy is substantiated by the average amount of agency Mortgage Backed Securities that is traded each day. In the second quarter of 2011, it was $302 billion. Only U.S. Treasuries had a higher trading volume, at over $600 billion. Given this significance, changes to the U.S. housing finance system have the potential to impact the nation's housing markets, financial markets, and the domestic and global economy.

Banks, pension funds, insurance companies, and foreign investors are the most significant non-U.S. government investors in Agency Mortgage Backed Securities (MBS) – meaning, Fannie Mae, Freddie Mac, Ginnie Mae securities. Foreign sources of capital include investment companies, sovereign wealth funds, and other government entities. Foreign investors hold approximately 14 percent of Agency MBS. Risk-averse investors, foreign and domestic, prefer Agency Mortgage Backed Securities (MBS) because of their safety and liquidity. The U.S. securitization process has facilitated private investment capital from investors around the world to flow to U.S. home mortgages.

Changes to the safe investment option of Agency MBS could impact investment decisions for these investors and as a result limit the flow of capital to the mortgage market. Such a result would cause a reduction in the availability of and an increase in the cost of mortgage credit. This would impact lenders, investors, consumers, and ultimately the domestic and global economy.

The ideological approach on discussions about what changes need to be made to the U.S. mortgage finance system has resulted in stalemate on reform. This is not working for Americans. It is leading to confusion and a lack of consumer confidence. People need to be confident that their home prices won't continue to fall. It doesn't help consumer confidence in the housing market when proposals are being considered in Congress to eliminate Fannie and Freddie with no viable replacement and no concern for the health of the housing sector. The American people deserve better.

We need to put ideological absolutes and politics aside and have a thoughtful, honest and constructive discussion about our U.S. housing finance system that is based in fact. We must be mindful of how critical the housing market is to the economy and not contribute to uncertainty in the housing marketplace with conversations about unrealistic policy approaches. Today's hearing is about getting the conversation about U.S. mortgage finance reform back on track.

It can be instructive to compare the structure of the U.S. market with other countries. The size of the U.S. mortgage market is far greater than any other country in the world; it exceeds the entire European mortgage market combined. In Europe, 70 percent of residential mortgages are held in raw loan form on bank balance sheets, 20 percent are funded by covered bonds, and 5 percent are funded by securitization. By comparison, 67 percent of U.S. home mortgages are either held in a GSE's portfolio or securitized and just 28 percent are held by banks. While there is not a housing system in another country that is directly comparable to the U.S., characteristics of the U.S. market are found in other housing systems.

At today's hearing we are focused on:

- The relationship between the health of the U.S. housing finance system and global financial stability.

- How the U.S. mortgage market structure compares to other countries, including with respect to the U.S. securitization system and mortgage product offerings.

- The unique features of the U.S. housing finance system and the benefits and weaknesses of these characteristics.

- Foreign involvement in the U.S. housing finance system, including the motivations of foreign investors to purchase residential mortgage-backed securities.

I look forward to hearing from our distinguished panel today. I strongly believe that housing is critical to stabilizing the economy.

The housing market requires action now. There is no question that private capital must be the dominant source of mortgage credit in the future. But we have to get to the point that we can attract private capital back into this market. A viable secondary mortgage market is key.

I introduced a bill with my colleague, Ranking Member McCarthy, to refocus the debate on real solutions now. Our bill presents a way forward for the mortgage finance system.

We provide for the comprehensive reform of the housing finance system that our country so desperately needs.

While this is not a legislative hearing on that specific legislation, I do think our witnesses will help us begin the process of refocusing the conversation to ensuring there is confidence and liquidity in the U.S. mortgage market.

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Invested in America

Written Statement of:

Richard A. Dorfman
Managing Director
Head of Securitization Group

The Securities Industry Financial Markets Association

Before the House Committee on Financial Services
Subcommittee on International Monetary Policy and Trade

"The U.S. Housing Finance System in a Global Context: Structure, Capital Sources, and Housing Dynamics"

October 13, 2011

Oral Statement

Good morning, Chairman Miller, Ranking Member McCarthy and members of the Subcommittee. I am Richard Dorfman, Managing Director and Head of Securitization at the Securities Industry and Financial Markets Association ("SIFMA").

We appreciate the opportunity to discuss key issues affecting housing and housing finance from the perspective of international products, policies, and practices. The critical role of non-US market participants in funding the residential housing sector in the United States has developed over the past roughly thirty years with greater acceleration the last twenty years. I am pleased to have played a central role in that development, and I am honored to be here today to discuss the relationship between U.S. housing markets, secondary markets such as the critical "to-be-announced" ("TBA") market and global investors. We commend this Subcommittee for recognizing this connection and calling this important hearing today.

Since the creation of Ginnie Mae in 1968 and the issuance of its first mortgage-backed security ("MBS") in 1970, the size and strength of the housing and housing finance markets in the United States has grown dramatically, to the overwhelming benefit of the American people. Securitized mortgages have been distributed into financial markets to an extent that greatly exceeds the mortgage funding capabilities of the U.S. banking system alone. We estimate that non-US investors currently hold approximately 15% of all MBS, both privately issued non-agency MBS and government guaranteed agency MBS. The markets for both agency and non-agency MBS have become truly global markets.

Foreign holdings of both agency and non-agency MBS create a strong correlation between the health of the U.S. housing finance system and global financial stability. The face value of MBS of all kinds totals nearly $7 trillion, and we estimate foreign holdings to be greater than $1 trillion. The market value of much non-agency MBS is well below its face value. Accordingly, realized and unrealized losses on MBS held by foreign institutions, many of them central banks, have been painful, just as they have been to U.S. based institutional investors. I note that only a few years ago the Economist newsweekly carried a cover story about the U.S. housing market being the dominant driver of the U.S. economy and perhaps even the world economy. I note that over the last 20 years, the housing sector has represented approximately 15% of U.S. GDP.

U.S. MBS structures are generally based on traditional thirty-year, fully amortizing, fixed coupon and fixed payment structure home loans, although there are MBS based on adjustable-rate mortgages and other more complex structured loans. But the so-called "thirty year fixed" dominates, as that is the mortgage loan preferred by homebuyers. That structure has historically been closely identified with sound underwriting that results in low levels of credit risk, which is good for lender and borrower, and high levels of interest rate risk borne by the lender, which is good for the borrower but risky for the lender. Other countries, particularly Canada and countries in Western Europe, prefer to seek a different balance of these risks through adjustable-rate or renewable loans. In these instances, the interest rate risk remains with the borrower. In the U.S., securitization has helped banks find the investors who desire to hold this risk. We caution, however, about direct comparisons to other nations. The U.S. mortgage market dwarfs other mortgage markets in terms of size.

Additionally, it differs in terms of funding as the U.S. market is significantly funded by securitization, whereas in many other countries securitization is less prominent and mortgage lending is more of a balance sheet activity.

The motivations of foreign investors are generally similar to those of many domestic investors. Foreign investors, especially central banks, hold significant, in some cases vast, sums of U.S. dollars, which must be invested in a low risk, high liquidity sector. These entities must be able to buy and sell large quantities of securities on short notice. Therefore, foreign investors hold large sums of very liquid, low risk Agency MBS and debt especially Ginnie Mae MBS. Outside of Agency MBS markets, foreign investors became significant players in the markets for non-agency MBS until those markets froze in 2008, as some foreign investors moved out on the credit risk spectrum. We note, however, foreign agency MBS investments dwarf foreign non-agency investments, as many foreign investors simply will not invest in products with credit risk.

The critical TBA trading market provides vast liquidity and plays a key role in attracting tremendous global capital. The TBA market also gives the consumer the important ability to obtain long-term rate locks by allowing the lenders the ability to confirm forward MBS sales into a liquid market. The daily trading volume in TBA markets over the past three years has exceeded $300 billion, second only to U.S. Treasuries in terms of fixed-income markets. However, we believe this market is critically dependant on the issuance of government guaranteed mortgage products, is critically important to the future of housing, and we discuss this market extensively in our written testimony.

The U.S. housing finance system has features that create both historic benefits and current policy questions that must be addressed in the near term. Some examples are:

1. Long-term, fixed-rate loan structures and their relation to the distribution of interest rate risk; and
2. U.S. home mortgage loans have more recently featured down payments below the traditional 20%, implying lower credit standards but greater homeownership accessibility.

The historical facts of U.S. home mortgage market and the place of that huge industry in the world of global finance lead to its overwhelming benefit to U.S. consumers and businesses, and to the U.S. and global economies. This great advantage occurred because of innovation and a disciplined ability to measure risk and return, and to execute responsibly, which attracted capital from around the world. It is critical for our country that we restore, modernize and rationalize the housing business model in order to restore housing markets, including those for housing finance and securitization, to their maximum sustainable potential. Without this important engine of housing driving the U.S. economy, we will continue to see weak growth in jobs, income, and the overall economy. The global financial markets have been a critical component sustaining the financing of housing in America, and we must ensure this continues in the future.

Thank you for this opportunity. I will be pleased to take your questions.

Appendix A

A Closer Look at the U.S. Mortgage Markets, the Important Role of the TBA Market, and Considerations for the Future of Housing Finance

A. Terminology

We will first quickly review basic terminology to set the stage for the rest of our testimony.

- **Mortgage-Backed Security (MBS)** – An MBS is a type of bond collateralized by mortgage loans that represents an undivided fractional interest in that pool of loans. Beneficial ownership of this interest may be transferred in trading markets. Payments to bondholders result from the underlying payments and cash flows on the mortgage loans that serve as collateral. Cash flows to MBS investors are variable, as most mortgage loans are prepayable without penalty.

- **Agency MBS** - Agency MBS are collateralized by loans meeting Fannie Mae (FNMA), Freddie Mac (FHLMC), or Federal Housing Administration (FHA) underwriting guidelines, and are issued and/or guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae (GNMA). Agency MBS are perceived to have little to no credit risk because they carry either an explicit government guarantee (GNMA) or an implicit guarantee (FNMA and FHLMC). Unlike Fannie Mae and Freddie Mae, Ginnie Mae does not issue debt or mortgage-backed securities. It is a guarantor of privately issued securities collateralized by loans insured by the FHA, Veterans Administration, and the Rural Housing Service.

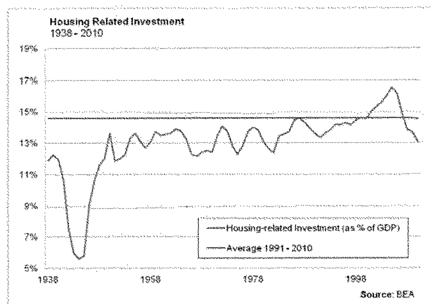
- **Non-Agency MBS** – So-called non-agency MBS are collateralized by a wider variety of loan types than Agency MBS, and are issued by private lenders, and are not guaranteed by Fannie Mae, Freddie Mac, or Ginnie Mae. Non-agency MBS are generally structured into tranches with varying degrees of repayment priority, and therefore introduce varying degrees of credit risk to investors. Credit risk is the risk of losses if borrowers do not repay their loans. Recently, there have been two notable non-agency MBS transactions been backed by extremely high quality, high-balance loans (a.k.a. "Jumbo Prime" loans); prior to 2008, non-agency MBS also included "subprime" and "Alt-A" loans.

- **Common MBS Structures**
  1 *Pass Through* – A pass through security is the simplest form of MBS. Payments on the loans are delivered to investors as they are paid by borrowers (i.e., they are "passed through"). Most Agency MBS are issued in pass through form. MBS eligible for TBA trading are in the form of pass-throughs.
  2 *Collateralized Mortgage Obligations (CMO) and Residential Mortgage-Backed Securities (RMBS)* - CMOs and RMBS structure cash flows to investors by dividing borrower payments in to various "tranches", or slices that are entitled to particular streams of payments. Agency securitizations are generally called CMOs, and Non-Agency securitizations are usually called RMBS.
  3 *Real Estate Mortgage Investment Conduits (REMIC)* - In 1986 amendments to the tax code created favorable treatment for mortgage securitization structures that met certain requirements. These rules are administered by the Internal Revenue Service. Most MBS are issued in compliance with REMIC regulations.

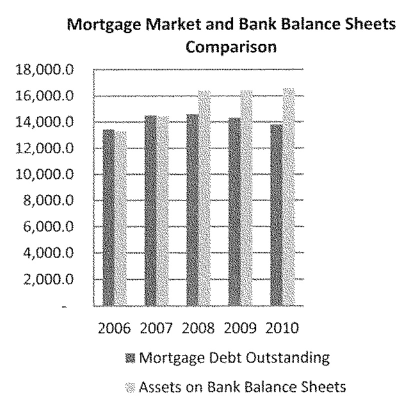
  - **To-Be-Announced (TBA) Trading of MBS** – To-Be-Announced trading is a trading convention whereby homogeneous MBS are traded for forward settlement and the purchasing party does not know the specific identity of the MBS pool to be delivered. Trades are executed based on a limited number of criteria, including issuer, coupon, term of mortgage collateral, and settlement date.

B. Overview of the U.S. Mortgage Market, and the Importance of Securitization

Housing is an enormously important component of the U.S. economy. As shown below, housing related investment has averaged approximately 15% of U.S. GDP over the last 20 years.



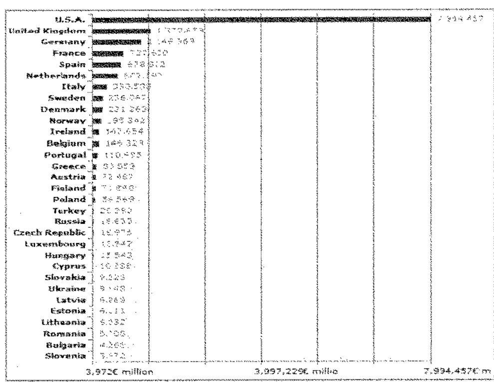
The chart below shows the enormous size of the U.S. mortgage market relative to bank balance sheets. The size of the mortgage market has previously exceeded, and is currently nearly equal to the total size of bank balance sheets. This chart demonstrates that there is not enough capacity in the U.S. bank balance sheets to fund our nation's housing stock alone. Through securitization we are able to recycle capital available for lending and attract vast sums of new capital to the markets.



Source: SIFMA analysis of Federal Reserve Data

To put this in a global context, the U.S. mortgage market is larger than the combined mortgage markets of all of the countries in Europe. For this reason, the U.S. mortgage market is not directly comparable to any single other market in the world.

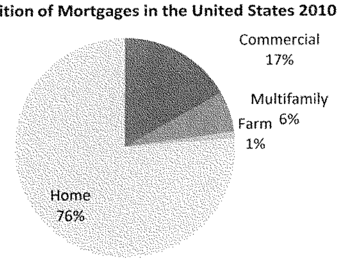
Outstanding Mortgage Debt (In Euros, 2009)



Source: Hypo.org

Three quarters of U.S. mortgage debt is residential mortgage debt, as shown below.

Composition of Mortgages in the United States 2010

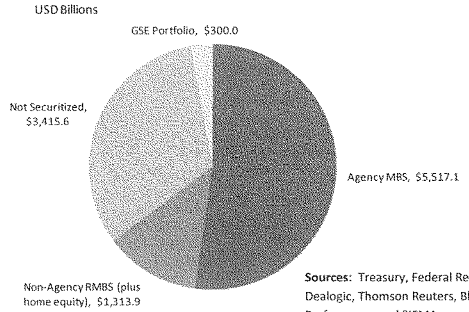


Source: Federal Reserve

Securitization and the MBS markets play a critical role in funding this residential mortgage lending. We have shown above that the mortgage market is enormous, that it is primarily a residential market, and that securitization is necessary to fund this level of credit creation. We will now turn more specifically to the role of securitization and secondary markets in funding these markets, and discuss who ultimately provides this capital.

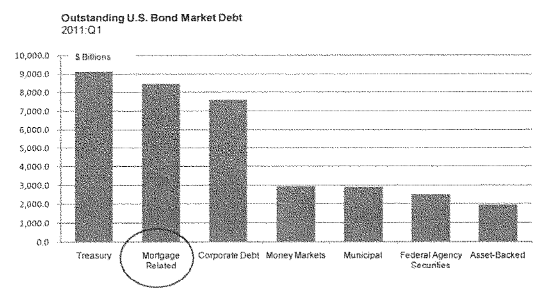
Below is a chart that outlines how mortgages are funded in the United States. 67%, or $7.1 trillion, of home mortgages are held in a GSE portfolio or securitized (agency and non-agency). Secondary markets, therefore, are responsible for funding two thirds of residential mortgage lending. The securitized home mortgage market can be split between agency MBS and non-agency MBS, with 81% of all MBS in the form of an agency pass-through or agency CMO.

Residential Mortgage Debt Funding Sources - $10,546.5 Billion
USD Billions



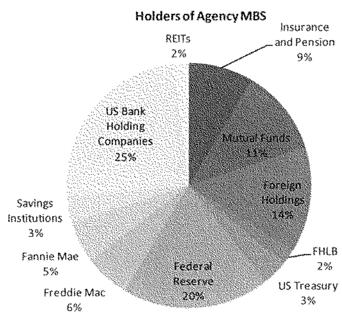
Sources: Treasury, Federal Reserve, Federal agencies, Dealogic, Thomson Reuters, Bloomberg, Loan Performance and SIFMA

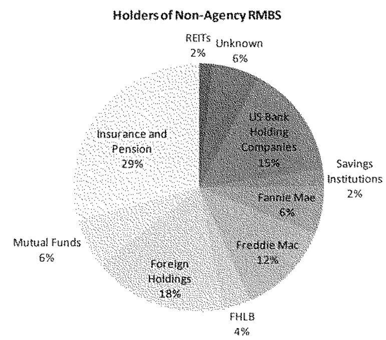
To put the size of the MBS markets in perspective, the chart below places them in the context of the other fixed-income markets. They are larger than all markets but for Treasuries.



Source: Federal Reserve

Another important issue to understand is who holds these securities. Banks, pension funds, mutual funds, and insurance companies are key investors in MBS. Foreign sources of capital, including investment companies, sovereign wealth funds, and other government entities are also critical sources of capital for U.S. mortgage markets. Below are two charts which outline the holders of both agency MBS and non-agency MBS.





Sources: Federal Reserve, Treasury, WSJ, SIFMA

The most critical point of this testimony to this point is this: in any consideration of the future of housing markets, the future of the GSEs, or the future of mortgage lending, it is critical to remember that these markets will not work without the participation of investors. The U.S. mortgage market, as shown above, is huge. It is a key component of the economy and job creation, and is largely funded by many different kinds of investors. Therefore, any housing reform or changes to the current regime must be viewed through the lens of investor needs, and what investors are willing to pay for a given investment opportunity.

C. The Role of the Agencies

A. What they Do

The Agencies have long played a crucial role in the U.S. mortgage finance market. Fannie Mae and Freddie Mac purchase loans, securitize them, and guarantee the timely receipt of principal and interest on their MBS. Ginnie Mae securitizes government-insured FHA, USDA, and other government guaranteed loans, and places a similar guarantee of timely payment of principal and interest on the mortgage-backed securities. For the last 30 years, the Agencies have played a critical role in mortgage finance, utilizing securitization to expand the supply of capital available for mortgage lending.

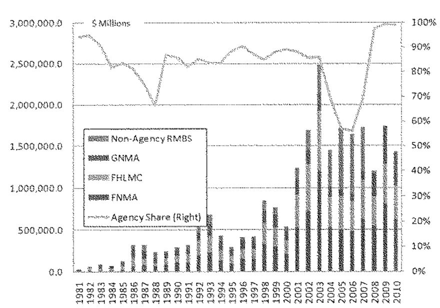
Standardization has been a key benefit of the Agency model. Due to their size and the scale of their operations, the Agencies have driven standardization of mortgage loan documentation, underwriting, servicing, and other items in ways that have created a more efficient origination process. This standardization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

Perhaps more importantly, the activities of the Agencies 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. Banks were able to access a longer-term funding source to match the terms of the mortgages, transfer risk, reduce balance sheet utilization, and reduce demands upon limited capital through 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 "normal" mortgage loan would have a 30 year term. In a world without government guarantees, the 30 year mortgage would likely still exist, but with lesser availability and presumably higher cost, due in part to issues related to risk hedging.

B. Agency Market Share Trends and Performance During the Crisis

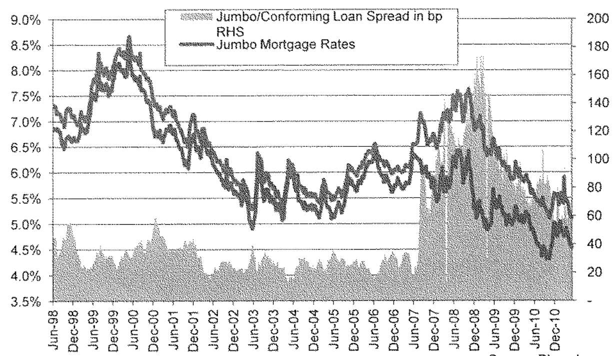
The chart below shows the ratio of agency MBS issuance to non-agency MBS issuance over the last 30 years. This chart clearly shows the reaction of the agency and non-agency markets to the financial crisis. Throughout the 80s and into the 1990s, the Agency share of the MBS markets was in the range of 80%. As the non-agency markets expanded in the mid-2000s, during the housing boom, the Agency share fell to approximately 50%. Therefore, even at the peak of the housing and securitization boom, the Agencies remained a critical participant in the MBS markets. As the non-Agency MBS markets collapsed in 2007 through the present, the Agencies took on a more critical role than ever, in terms of providing funding for mortgage lending to consumers. The Agency market was a stable source of funding throughout the crisis.

Agency Market Share Pre and Post Crisis

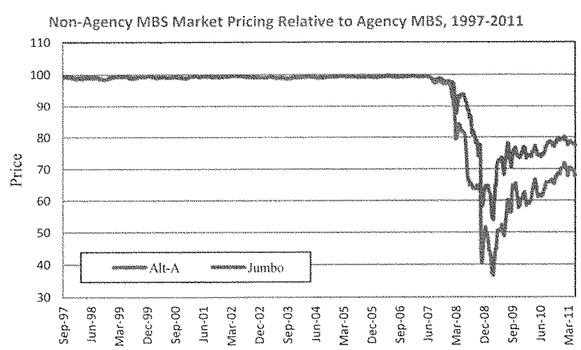


Source: SIFMA, Fannie Mae, Freddie Mac, Ginnie Mae, Federal Reserve

Another issue to review is the cost of a conforming loan (a loan eligible for securitization by an Agency) versus a non-conforming loan. The chart below compares the spread between conforming loan rates and non-conforming loans with balances that exceed the conforming loan limit. During the financial crisis of 2008, the spread between conforming and non-conforming mortgage rates increased to approximately five times its historic level, and pricing on non-Agency MBS relative to Agency dropped precipitously. The spread between these rates spread has yet to return to its historic trend.



Source: Bloomberg



Source: Barclay's Live

From these charts, you can clearly see that we need to reduce the share of lending funded through the Agencies. Over the long run, it is not healthy for the government, in one way or another, to support 95% of mortgage lending. SIFMA therefore agrees that housing finance reform is critical, and supports its careful implementation.

At the same time, we believe that it is important to keep in mind that the Agencies have conferred significant benefits on U.S. mortgage markets. We believe that housing finance can and should be reformed and made more robust without destroying the benefits that the Agencies have conferred. We caution that the drive for reform should not cause collateral damage that would eliminate or make impossible the beneficial impacts and legacy of the old system that developed around the Agencies.

One of the most important benefits of the system developed over the previous decades, if not the most important, was the development of a liquid forward market for mortgage backed securities known as the TBA market. The TBA market allows lenders to hedge risk, attracts massive amounts of private capital, and reduces the cost of mortgage lending. SIFMA believes the TBA market should be a key component of 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 markets described above for Agency MBS are initiated by the TBA mechanism.

D. The TBA Markets

A. History

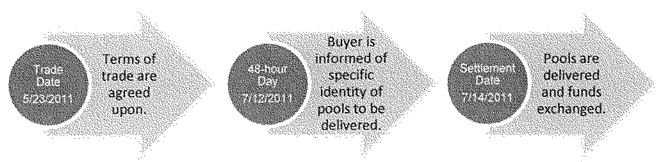
The genesis of the TBA market began in the 1970s, when members of the Government Securities Dealers Association began to discuss standards for the trading and settlement of bonds issued by Ginnie Mae. In 1981, the Public Securities Association[1] published the *"Uniform Practices for the Clearance and Settlement of Mortgage-Backed Securities and Other Related Securities"*, which is a manual that contains numerous of market practices, standards, and generally accepted calculation methodologies developed through consensus discussions of market participants, that are widely accepted and used in the MBS and asset-backed security markets. The GSDA and PSA were predecessors of SIFMA.

Participants in the TBA market generally adhere to market-practice standards commonly referred to as the "Good-Delivery Guidelines", which comprise chapter eight of this manual[2]. These guidelines cover a number of areas surrounding the TBA trading of agency MBS, and are promulgated by and maintained by SIFMA, through consultation with its members. The purpose of the guidelines is to standardize various settlement related issues to enhance and maintain the liquidity of the TBA market. Many of the guidelines are operational in nature, dealing with issues such as the number of bonds that may be delivered per one million dollars of a trade, the allowable variance of the delivery amount from the notional amount of the trade, and other similar details.

[1] The Government Securities Dealers Association and the Public Securities Association are predecessor organizations of SIFMA.
[2] The Good Delivery Guidelines are a part of SIFMA's *Uniform Practices for the Clearance and Settlement of Mortgage-Backed Securities and Other Related Securities*, which is available here: http://www.sifma.org/research/bookstore.aspx

B. Mechanics of a TBA Trade

The majority of trading volume in the agency MBS markets today is in the form of 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 could call up Market Maker A on May 23, and order $10 million FNMA 5.5% coupon 30-year MBS, for settlement on July 14. *The investor does not specify specific bonds or CUSIP numbers.* On July 12, according to market practice, Market Maker A would notify Investor A of the specific identities of the pools that will be delivered on July 14. Most likely, these will be MBS that were just issued at the beginning of July.

On the other side of an investor or market maker often stands a loan originator. Originators 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 to make decisions on when to lock in a rate for a borrower.

C. Key Benefits of the TBA Markets

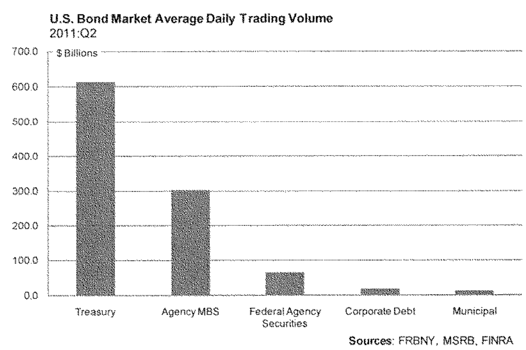
1. Liquidity for U.S. Mortgage Lending

The TBA market is by far the most liquid, and consequently the most important secondary market for mortgage loans. This liquidity is primarily derived from the homogeneity of the MBS collateral, combined with its vast size ($trillions) and the forward nature of the trading. 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. The sources of this homogeneity are primarily threefold:

- The Agencies each prescribe standard underwriting and servicing guidelines (FHA plays this role in concert with Ginnie Mae in those markets)
- Standardized market practices and guidelines (the "Good Delivery Guidelines", discussed more below) ensure that securities eligible for the TBA market are homogeneous, which allows buyers and sellers to transact with confidence that knowing the specific identity of a security they will trade, at the time of trade, is not necessary;
- The explicit or implicit guarantee on the MBS eliminates credit risk from the risk factors investors must deal with. This guarantee also attracts classes of investors who would not otherwise participate in these markets; investors who are statutorily prohibited from, blocked by investment guidelines from, or simply do not desire to take on mortgage credit risk.

Thus, investors can buy securities without knowing their exact identity because they know that (1) the underwriting will be consistent across pools, (2) the servicing will be consistent across pools, (3) the MBS and operational mechanisms around their trading will be consistent across pools, and (4) they do not need to perform a loan-level dive to explore credit risk before they purchase the bonds.

There are currently over $4 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.



This liquidity draws trillions of dollars of investment capital to U.S. mortgage markets, as discussed in detail in the previous section of this testimony. Given the size and liquidity of the market, buyers and sellers are able to trade large blocks of securities in a short period of time without creating distortions.

2. Originator Hedging and Rate Locks

As mentioned, this market allows lenders to sell their loan production on a forward basis, in some cases before MBS pools are formed, and hedge risk inherent in mortgage lending. A benefit of this ability to hedge risk is that the TBA market allows lenders to lock-in rates for borrowers. Lenders can sell forward in the TBA market at the then-current interest rate. Without TBA markets lenders would either have to charge substantially more for (probably shorter-term) rate locks, because hedging in derivatives or options markets is more expensive and less efficient. It is possible that some lenders simply would not offer rate locks at all. The liquidity of the TBA market creates efficiencies and cost savings for lenders that are passed on to borrowers in the form of lower rates and broad availability of mortgage products, and helps to maintain a national mortgage market.

3. Benchmark Status of the TBA Market

For all of the reasons outlined above, the TBA market is a benchmark for all mortgage markets – it is the reference by which other mortgage markets and products are priced. In this manner it is similar to the Treasury market. This is an issue that is often overlooked, but one that we want to highlight. Non-agency mortgage product is priced relative to TBA; TBA provides a sort of risk-free reference point for those markets. Without the TBA market, we believe that non-TBA markets would be somewhat more volatile as pricing would become more challenging. We also note that predictions of the movement of mortgage rates in a world without TBA generally do not take into account this role. While the actual change in rates would be quite dependant on the exact contours of a mortgage finance system without TBAs, we suspect that the change may be greater than many currently believe.

It is difficult to exaggerate the consequences from a loss of confidence or liquidity in this market if a suitable replacement were not found. 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 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.

E. Looking Forward -- Considerations for TBA Markets and the Future of Mortgage Finance

There is no single "right answer" or any easy solution to the question of how to resolve the conservatorships of Fannie Mae and Freddie Mac and/or 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. Ultimately, this essential infrastructure is both a creation of and a reaction to past public policy choices, and as such the future of it will grow out of further determinations of what is the appropriate public policy regarding mortgage finance. While there are many important questions, we believe a special and near-term focus needs to be placed on resolution of the current status of the GSEs and the restoration of the private-label securitization markets for mortgages.

Secondary mortgage markets will continue to function regardless of what policymakers decide. As the saying goes, there is a price for everything. This price, however, is not always desirable to everyone. 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. Among the issues for policymakers to consider are:

- how liquid secondary markets for loans and MBS would 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;
- the cost and affordability of mortgage credit to consumers.

SIFMA believes that the TBA markets are one of the keys to a successful, liquid, affordable, and national mortgage market. TBA markets also ensure that a sufficient level of capital is available to banks to lend. We repeat our previous statement: the historically huge and liquid global markets for Agency MBS are initiated by the TBA mechanism.

1. Can the TBA Market Function without a Government Guarantee?

Ultimately, the answer to this question is unknown. We are not aware of any meaningful, consistent TBA-style trading of any other non-guaranteed mortgage product at this time. To the extent that guarantees were completely removed, we believe that the best case outcome with respect to TBAs is a much smaller, much less liquid market. The worst case outcome would be the dissolution of the markets. But in the end, we do not know at this time.

As we mentioned earlier, the key driver of the TBA market is homogeneity. In the future, one can envision a recreation of "Good Delivery Guidelines" for a non-guaranteed product. However, this is only one piece of the puzzle. The Agencies play a critical role in the TBA markets through their standardization of underwriting and servicing, and their enforcement of that standardization through automated underwriting systems and otherwise. It is unclear to SIFMA how this could be recreated to the degree of detail at which it currently exists, and be done so in a format that was efficient and manageable enough to support liquid TBA markets.

The guarantee on MBS traded in TBA markets eliminates a key risk – credit risk. Investors in TBA markets focus on prepayment risk, that is, the risk that borrowers will repay their loans early, and on interest rate and market risk, or the risk that interest rates or market pricing will move against them. This allows what are called "rates investors" to invest in the Agency MBS markets. Rates investors, put simply, are investors who do not wish to take on credit risk. They include various investment funds, and importantly, many foreign investors.

In the non-Agency markets, investors must also deal with credit risk. This entails an examination of the credit risk factors of the loans that collateralize the MBS. Going forward, we expect that investors will perform this review at a loan level, as disclosure practices and regulations for non-Agency MBS drive to this end. In and of themselves, loan level reviews are not practical for TBA trading (because one cannot review loan level detail on an unknown pool of loans). Therefore, to create a level of comfort that would allow investors and market makers to trade non-agency collateral on a TBA basis, underwriting standards would need to be very strict because they would need to eliminate as much credit risk as possible. As a result, lenders would likely draw such a small circle around eligible mortgage loans that the supply of loans would likely not be sufficient to support large and liquid TBA trading. Additionally, to define the underwriting standards for every bank that would deliver into this market, and on top of that to outline servicing procedures, would entail a massive expansion of market practice guidelines in terms of breadth and length. This would complicate the ability of investors to get comfortable that the loans that underlie the securities they will be delivered next month, or the following month, will comply. Importantly, there would be no clear enforcement mechanism for compliance.

The expansion of the usage of mortgage insurance to provide comfort to MBS has been put forth as one alternative. SIFMA's discussions with its members have evidenced significant doubts that the investing markets would take anything near the current level of comfort from private mortgage insurance solutions. In any case, members generally believe this solution would be inadequate to support liquid TBA trading.

Given all of this, it is not clear what proportion of the current rates investor base would shift into the proposed new non-guaranteed TBA markets. If a significant proportion of the rates investor base did not shift into the new market, the potential liquidity and potential size of the new market would be severely compromised (if it functioned at all). It is also not clear on the supply side whether or not a sufficient quantity of loans would be produced that would comply with the extremely strict underwriting guidelines that would be needed. It is notable that no other mortgage market or funding system via depositories has ever provided sustained liquidity to the extent that the Agency MBS markets have. It is also notable that each secondary mortgage market that was not the beneficiary of a guarantee collapsed in 2008.

SIFMA's Housing Finance Reform Task Force has concluded that some form of explicit government support is needed to attract sufficient investment capital to maintain liquidity and stability in the TBA market at a level comparable to that created over the last 30 years. Members believe that total privatization of mortgage finance will likely result in greater volatility, decrease efficiency, and ultimately make mortgage loans more expensive and less available. There are a number of ways that an explicit guarantee on MBS could be structured. The bottom line for a guarantee is that investors in TBA markets must know that they will receive back at least their invested principal. Without it, certain rates investors would completely drop out of the market and others would have significantly smaller allocations of investment capital available for the asset class, and we expect that at best, the peak volume and liquidity of such a market would be orders of magnitude smaller than the current TBA market.

Furthermore, as discussed above, Agency MBS currently provide a safe, liquid investment product for many risk-averse 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 could also have a negative impact on the performance of those investment vehicles in times of stress.

A related issue in many discussions of housing finance reform regards the appropriate number of number of chartered GSE-like entities, with or without a guarantee. These would be organized by the government or by the private sector as co-ops or otherwise. Regardless of specific structural form, we note that an increase in the number of entities will not necessarily reduce risk, as the performance of each entity will be strongly correlated. They all will make the same bet on U.S. housing, and to the extent we have another national downturn, they all will suffer. Also, because of a lack of diversification, a given entity would be more exposed to regional economic downturns. Organizationally, we also see challenges in recruiting 10, 15, or 20 skilled management, and especially risk management, teams. Furthermore, to the extent a TBA market would be viable (see our discussion above); a larger number of issuers would serve to fracture liquidity into multiple smaller markets. Put simply, a trader can only monitor so many screens at one time, and a large part of the liquidity in a given market is derived from its size. To the extent that a larger number of entities is a desired policy choice, we think it will be critical to (a) have only one security issuer that (b) issues diverse pools collateralized by loans from all of the issuing entities (i.e., similar to Ginnie Mae's multi-issuer pools). This would create a larger, unified securities market to stand behind the more fractured front end of the system. This would minimize any regional differentiation in pricing, maximize liquidity, and maximize the benefit to consumers.

SIFMA believes that the current situation is undesirable and unsustainable and must be changed. We also believe strongly that private capital should stand in front of any backstop or guarantee on MBS. We note that it is a policy choice to decide the appropriate size of the TBA market. Our concern lies with the end result, and that the end result is liquid and beneficial to lenders, investors, and consumers.

2. The Importance of a Smooth Transition to the Future Housing Finance System, and the Recovery of Non-Agency MBS Markets

The future of mortgage finance in the U.S. is a critical policy decision facing members of Congress. The impact of this decision will reverberate across the nation's housing markets, across financial markets, and across the economy. It is no exaggeration to say that the future state of the housing finance system is central to the future of our nation as a whole. Regardless of what Congress chooses, the transition from our delicate current situation to the future must be carefully considered.

We have discussed above SIFMA's view that the TBA market is central to the functioning of our mortgage markets. To the extent that Congress desires to create a new mortgage finance regime that makes this possible, SIFMA would strongly support doing so. It will be important to put in place the basic structures that are required, as we have discussed, to allow for a transition from one TBA environment to the next with minimal disruption to current securities or mortgage markets. Such a regime would allow for the preservation of a homogeneous mortgage market eligible for TBA trading.

To the extent that Congress decides to significantly pull back or completely eliminate the government support for mortgage lending and thereby significantly shrink or make impossible TBA trading, it will be important to create a smooth path from the current state, which is over 90% government supported, to the future state. Ultimately, as the government role is pulled back, something or a combination of things must fill in the hole in mortgage funding that will be left behind.

In either case the role of the Agency MBS market should and will shrink from where it is today. Likely the most critical of the components that will allow this to happen will be the reinvigoration of the non-Agency MBS markets. These markets, aside from a few small transactions, have been dormant in terms of their funding of new origination. The bottom line to get these markets going is that we must get to a point where issuers of

MBS and investors in MBS see eye to eye on the value proposition. Investors must receive a return that meets their needs, and issuers must pay a cost that works economically. There are a number of obstacles in the path. For example, many investors suffered significant losses on holdings of non-agency MBS in the latter part of the last decade, and it will take time for confidence to be fully restored in those products. Mortgage demand from consumers, because of the depressed economy, has significantly dropped. Importantly, both investors and issuers face significant regulatory uncertainty in addition to and apart from of the issues presented by resolution of the conservatorships of Fannie Mae and Freddie Mac.

For example, servicing is a key component of the value proposition for non-agency MBS. At this time, the future regulatory regime for servicing is up in the air. Investors have identified a number of concerns with current and past practices, and the market expects that the current paradigm may see dramatic changes. However, no one is certain of the timing or scale of these changes, which creates significant uncertainly. A precedent-setting settlement of major servicers with the State Attorneys General is expected, but the scope and timing are unknown. FHFA is leading an important industry discussion of the potential for revisions to the compensation of servicers in Agency and non-Agency markets, but again, the end of the story is still being written. The SEC in 2010 proposed a major set of revisions[3] to rules that govern asset-backed securities, some of which were re-proposed[4], and some of which have been finalized[5], but the most critical elements are not yet final.

Another issue relates to recently proposed credit risk retention[6] and mortgage underwriting rules[7]. The three main issues here are risk retention, the definition of a Qualified Residential Mortgage (QRM), and the definition of a Qualified Mortgage (QM). Each of these items is open, and is expected to be finalized by regulators in the future. Risk retention rules by their nature will change the economics of many securitization transactions. In part, this is expected to help restore the confidence of investors in securitized products and therefore stands to provide a benefit to the securitization markets. On the other hand, this benefit must be balanced by the preservation of securitization as an economical funding alternative for lenders. However, certain proposed provisions found in the credit risk retention proposal, such as so-called "premium capture", have raised concerns among many market participants as to their potentially devastating impact on the economics of, and therefore future of, many type of securitization transactions.[8]

We expect the final form of the QRM and QM definitions to essentially define the shape of the mortgage market after they become effective. We expect that there will be little or no lending that falls outside of the QM standards, given that significant liability may attach to such loans. SIFMA has advocated that the final rules delineating QM include a true, bright line, legal safe harbor so that lenders will be comfortable to originate, and secondary markets will be comfortable to purchase QMs in steady volumes. Many expect that mortgage rates on QRMs will be lower level than those of non-QRMs (to an extent that is unknown). Regardless of any

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[3] SEC's April 2010 Asset-Backed Securities rule proposal here: http://www.sec.gov/rules/proposed/2010/33-9117.pdf, SIFMA comment letter in response here: http://www.sec.gov/comments/s7-08-10/s70810-79.pdf

[4] E.g., rules related to asset-level disclosure, shelf eligibility, and disclosure in non-registered transactions reissued for comment on July 26: http://www.sec.gov/news/openmeetings/2011/agenda072611.htm

[5] E.g., disclosure related to repurchase demands: http://www.sec.gov/rules/final/2011/33-9175.pdf

[6] Credit Risk Retention NPR: http://www.sec.gov/rules/proposed/2011/34-64148.pdf, SIFMA's sponsor/issuer response: http://www.sec.gov/comments/s7-14-11/s71411-79.pdf, SIFMA's AMG response: http://www.sec.gov/comments/s7-14-11/s71411-80.pdf

[7] See proposal from Federal Reserve Board under Regulation Z that would require creditors to determine a consumer's ability to repay a mortgage before making the loan and would establish minimum mortgage underwriting standards: http://www.federalreserve.gov/newsevents/press/bcreg/20110419a.htm

[8] For further discussion of premium capture and its potential impact, see SIFMA letters referenced above

individual decision with respect to QM and QRM, it is important that these regulations be closely coordinated and finalized in a manner where it is explicit to lenders and secondary markets what is, or is not, a QM or QRM.

There are also significant regulatory revisions being made to the permitted activities of banks, to global and national capital standards, to the activities of credit rating agencies, the process of obtaining ratings, and the usage of their ratings. These changes include the capital treatment of mortgage servicing rights, eligible assets for various liquidity and capital buffers, and more generally changes to the capital treatment of securitized products.

All of this contributes to a great uncertainty as to the size, scope, and liquidity of securitization as a funding tool for consumer credit. It is difficult for lenders and creditors to make long-term plans for how they want to run their lending programs and how they will fund them, and it is difficult for investors to know the terms on which they will be expected to invest. Key principles must be followed to resolve this uncertainty: (1) Regulatory changes must be coordinated and sequenced properly; (2) changes must be based on robust data collection and analysis; (3) changes must keep in mind the dual needs of any financial markets: investors must receive adequate returns, and issuers must be able to fund at affordable cost levels.

All of these changes that directly impact the non-Agency markets, and the goal of promoting the responsible resurgence of those markets must then be viewed in connection with the resolution of Fannie Mae and Freddie Mac, as they cannot be separated. One cannot come before the other – they must work together. The ultimate question, yet to be addressed, is that of the capacity of other forms of funding of mortgage finance, be they non-agency securitization, covered bonds, or new measures, to replace the support for mortgage lending that the government currently provides.

F. Conclusion

SIFMA greatly appreciates the opportunity to present this testimony today and we hope that it is useful and informative to members of the Subcommittee. SIFMA believes that the TBA markets play a critical role in the current housing markets, and have provided tremendous benefits to mortgage markets and consumers of mortgage loans. SIFMA therefore believes that TBA markets can and should play a role in the future housing finance system in this country. Regardless of the path chosen for mortgage finance, SIFMA believes it is critical to properly transition from the current market structure to the future. We stand ready to assist Congress in any way necessary.

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Richard A. Dorfman

Richard A. Dorfman is managing director and head of the SIFMA Securitization Group (SSG). In his role, Mr. Dorfman leads SIFMA's efforts to address the securitization-related provisions of financial regulatory reform and its efforts to develop market-led solutions to revive the securitization industry.

Mr. Dorfman joined SIFMA in 2010 from the Federal Home Loan Bank of Atlanta, the second largest Federal Home Loan Bank, where he was president and CEO. Prior to that role, he was a managing director and the head of the U.S. agencies and mortgages business at ABN AMRO. He also worked in Lehman Brothers mortgage division as a managing director and head of originations, U.S. government and agency business. Early in his career, Mr. Dorfman was employed as an attorney with the FDIC, and held positions at mortgage banking and mortgage securities firms.

Mr. Dorfman is a graduate of Hofstra University and received his law degree from Syracuse University.

Testimony of

Michael A.J. Farrell

Chairman, Chief Executive Officer and President

Annaly Capital Management, Inc.

Before the

U.S. House of Representatives

International Monetary Policy and Trade Subcommittee

of the Committee on Financial Services

Hearing on

"The U.S. Housing Finance System in Global Context: Structure, Capital Sources, and Housing Dynamics"

October 13, 2011

Washington, DC

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Good morning, my name is Michael Farrell, and I am the CEO of Annaly Capital Management, the largest residential mortgage Real Estate Investment Trust (or REIT) in the country. Through Annaly and our subsidiaries and affiliates we own or manage a wide range of mortgages and other real-estate related assets, including Agency and non-Agency residential mortgage-backed securities (or MBS).

I represent the mortgage REITs and other secondary mortgage market investors who provide the majority of the capital to finance America's homes. Through our MBS holdings my company and its affiliates alone are responsible for funding almost a million American households.

At this point in history, while our nation's banks have about $13 trillion in total assets, the amount of mortgage debt outstanding totals about $10.5 trillion. There isn't enough capacity in our banking system to hold the outstanding mortgage debt, and as a result about two-thirds of that total, or $6.8 trillion, is held in securitizations--$5.5 trillion in Agency mortgage-backed securities and the balance in private label mortgage-backed securities. The American mortgage finance system needs to have effective long-term holders of mortgage credit outside of the banking system. It is thus axiomatic that without a healthy securitization market our housing finance system would have to undergo a radical transformation.

Some have argued that this should not be a problem because other countries have similar home-ownership rates and manageable mortgage costs. These arguments miss some very significant points.

First, the US mortgage market is unique. In the US, securitization is the largest mortgage funder with banks a distant second, while Europe is almost the exact opposite, with about two-thirds of mortgages funded by bank deposits, covered bonds a distant second and very little securitization. So the European model is largely dependent on the deposits and individual credit ratings of European banks. As proof, consider that in the US, bank assets total about 80% of GDP, while in Canada, Denmark, France, Germany and Spain bank assets are anywhere from two to four times GDP. Moreover, most mortgages in other countries are recourse to the borrower, shorter-term, prepayable only with a penalty and variable-rate, which makes it a much different product than the typical American mortgage, with much different risks for the borrower and the lender.

Second, our current housing finance system is the most efficient credit delivery system in the world. Securitization allows borrowers of similar creditworthiness using similar mortgage products to receive the benefits of scale in pricing. In addition, the government guarantee to make timely payments of interest and principal on a large portion of these mortgages scales the process even further. The TBA, or to-be-announced market, is the window through which much of this scale occurs; it maintains a consistent underwriting standard, levels the playing field for smaller loan originators and community banks and enables lenders to offer longer rate-locks to borrowers. It is an important tool for making possible the availability of the very popular 30-year fixed-rate, prepayable, mortgage with a manageable down payment for a wide swath of creditworthy borrowers.

Third, unlike the smaller, domestically financed housing markets of other countries, our system attracts a much broader investor base for residential mortgages, including institutional investors here and around the world. These investors include US and foreign banks, central banks and sovereign wealth funds, mutual funds, state and local governments and the GSEs themselves. According to Freddie Mac, foreign investors constitute the third largest single holder of Agency MBS. What attracts these investors to fund US residential mortgages? It is the size, scale and flexibility of the Agency MBS market, its homogeneity, liquidity, ease of pricing and, importantly, their capital risk-weightings.

Finally, I want to get to the heart of the current debate: Can the private label MBS market come back to fill the credit gap that is currently filled by the GSEs? The short answer is: Not at the same level of mortgage rates and not in the same size. Many, if not most investors in Agency MBS won't invest in private label MBS at any price or only in reduced amounts because of their need for liquidity or the restrictions of their investment guidelines. Some of these so-called "rates investors" could cross over, and investors in other asset classes might be attracted to a deeper private label MBS market, but we can't say for sure how many or at what price or in what time frame. Analysts at Credit Suisse have estimated that US housing could lose roughly $3 to $4 trillion in funding from domestic and foreign investors if Agency MBS were replaced by credit-sensitive products. The impact of this loss could have adverse consequences for the housing market and the economy for years to come.

In conclusion, the American mortgage market and the sources of funding for America's mortgages are unique. The domestic and global investors who provide so much capital to buy American homes will adapt to whatever Congress decides to do with housing finance policy, but they may adapt by not investing at all. I believe that a housing finance system that does not include the homogeneity and liquidity made possible by government involvement will be smaller and more expensive, with potentially negative consequences for home prices and homeowner flexibility.

I welcome any questions you may have.

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TESTIMONY OF

MOE VEISSI
2011 PRESIDENT-ELECT
NATIONAL ASSOCIATION OF REALTORS®

BEFORE THE

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON FINANCIAL SERVICES
SUBCOMMITTEE ON INTERNATIONAL MONETARY POLICY AND TRADE

HEARING TITLED

THE U.S. HOUSING FINANCE SYSTEM IN THE GLOBAL CONTEXT: STRUCTURE, CAPITAL SOURCES, AND HOUSING DYNAMICS

OCTOBER 13, 2011

INTRODUCTION

On behalf of the more than 1.1 million members of the National Association of REALTORS® (NAR), thank you for holding this important hearing examining the U.S. housing finance system.

My name is Moe Veissi, and I am the 2011 President-Elect of the National Association of REALTORS®. I have been a REALTOR® for over 40 years, and am the broker-owner of Veissi & Associates, Inc. in Miami, FL. Since 1981, I have served the REALTOR® community in many capacities, from local association president, to state association president, to regional Vice-President, and now on the national stage as the NAR President in 2012. My life and my passion are real estate. So, it is my honor to be here today to lend voice to NAR's 1.1 million members, and the millions of Americans who own a home, want to sell a home, or just provide rental opportunities to those who require a home.

Since the onset of the global financial crisis there have been relentless attacks on the U.S. housing finance system. The majority of these attacks were carried out by groups who are ideologically opposed to the existing system, which includes some government participation in the conventional conforming market. Of distinct interest to NAR as an advocate for the housing consumer is that this vocal minority is increasingly being told that the current guiding principles of the U.S.' existing housing finance system (e.g. long-term payment structures and reasonable down payment levels), including government participation, are appropriate and necessary. The American public and policy experts are saying that "we"—lenders, consumers, real estate professionals, regulators, and Congress—must be better stewards of the system if it is to effectively serve future American homebuyers and mortgage investors as it did prior to the recent financial market meltdown.

THE U.S. HOUSING FINANCE SYSTEM: THE REALTOR® PERSPECTIVE

There are many systems of housing finance globally, and all have their merits for the countries they serve. REALTORS® believe that the U.S. housing finance system, which utilizes securitization to recapitalize mortgage lenders, works best for a nation of our size with our fervor for ownership of real property. Mortgage products that offer the populace reasonable down payment requirements, as well as provide affordable access to the remaining capital required to close the property sale, are what REALTORS® believe is in the best interest of the American public. We do not believe that the underlying system, which until recently has afforded many qualified, middle and lower income American families the ability to purchase a home, should be easily scrapped.

Our belief in the existing U.S. housing finance system does not mean that REALTORS® do not believe that reforms cannot, or should not, be undertaken. Over the past 3 years, in testimony before the House Financial Services Committee, and many of its subcommittees, as well as the Senate Banking, Housing, and Urban Affairs Committee, REALTORS® have indicated the need for repairs to the U.S. housing finance structure (see Appendix A).

REALTORS® are fervent believers in "free markets", and acknowledge the need for private capital to reduce the Federal government's role in this sector. However, our members are practical and understand that in extreme economic conditions private capital will retreat from the market, requiring the participation of an entity(s) that will remain active in the marketplace regardless of economic conditions. The government-sponsored enterprises (GSEs) were created to support this specific mission within the secondary mortgage market. Future secondary mortgage market facilities must be created with this mission as their basis in order to ensure that creditworthy American families will always have access to affordable mortgage capital.

Finally, REALTORS® agree with lawmakers and the Administration that taxpayers should be protected, private capital must return to the housing finance market, and that the size of government participation in the housing sector should decrease if the market is to function properly. Where we continue to disagree with some is "how" these aspirations should be accomplished. Those who advocate for legislation that effectively constrains, shuts-down the secondary mortgage market functions traditionally served by Fannie Mae and Freddie Mac, removes government participation from the conventional mortgage market, and/or relies only on private capital to operate the secondary mortgage market need only examine the current miniscule activity in the jumbo and manufactured housing mortgage markets in order to understand the implications of private capital as the sole participant in the secondary mortgage market. In both of these markets, mortgage capital became nearly non-existent, which prohibited creditworthy borrowers from access to the funds required to purchase a home.

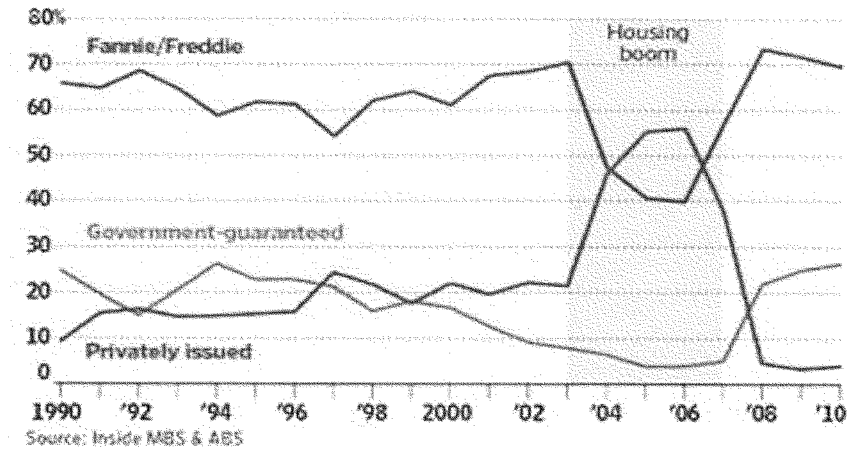
OUR NATION'S UNIQUE SECONDARY MORTGAGE MARKET

Congress chartered Fannie Mae and Freddie Mac to expand homeownership opportunities and provide a stable foundation for our nation's housing financial system. Unlike private secondary market investors, Fannie Mae and Freddie Mac remained in housing markets during past market downturns, and have used their federal ties to facilitate ongoing access to mortgage finance when other players have left the market.

REALTORS® believe that the GSEs' housing mission, and the benefits that are derived from it (e.g. long-term fixed-rate mortgages), played a vital role in the success of our nation's housing system, and continue to play a key role today. Without these secondary mortgage market facilities providing affordable mortgage capital during the current market disruption, there would have been a much more serious disruption to the market.

As the market turmoil reached its peak in late 2008, it became apparent that the role of the GSEs, even in conservatorship, was of utmost importance to the viability of the housing market as private mortgage capital effectively fled the marketplace. As indicated in Table 1, below, if no government-backed conventional mortgage market facility entity (i.e. Fannie Mae and Freddie Mac) existed as private mortgage capital fled to the side lines, the housing market would have fallen even further and thrown our nation into a deeper recession, or even a depression.

Table 1
Share of Mortgage Securitization Market By Segment



THE 30-YEAR FIXED-RATE MORTGAGE

Unique to the U.S. housing finance sector is the availability of affordable, long-term fixed-rate mortgages. The 30-year fixed rate mortgage is the bedrock of the U.S housing finance system. And now, more than ever, consumers are seeking fixed rate 30-year loans because they are easily understood and offer a predictable payment schedule.

REALTORS® believe that full privatization is not an effective option for our secondary mortgage market because private firms' business strategies will focus on optimizing their revenue/profit generation. This model would foster mortgage products that are more aligned with these business' goals (e.g. based upon significant financial risk-taking) than in the best interest of the nation's housing policy, or the consumer. We believe that this would lead to the elimination of long-term, fixed rate mortgage products (e.g. 30-year fixed-rate mortgage), and an increase in the costs of mortgages to consumers.

In fact, based on early data from a survey that NAR is conducting on the impact of the new, lower FHA and GSE loan limits, we are beginning to see signs of how the private market impacts consumers. Preliminary data indicates that consumers who are now above the new lower conventional conforming loan limit are experiencing significantly higher interest rates and the need for substantially larger down payments. According to data, this is leading to "a loss of interest" in real estate sales. (NAR will provide the committee with details from the full report once the data has been fully analyzed.) At a time when our economic recovery teeters on the edge of collapse, activities and reforms that force further constriction of economic activity should be resisted.

According to research by economist Dr. Susan Woodward, there is no evidence that a long-term fixed-rate residential mortgage loan would ever arise spontaneously without government urging.

Dr. Woodward points out that a few developed countries have encouraged the use of amortizing long-term loans, but in all instances (save for Denmark) where they do exist, the loans have adjustable rates and recast every 5 years. She goes on to indicate that the United States is unique in having a residential mortgage that is long-term, amortizing, fixed-rate and pre-payable, and that Americans have come to view this product as one of their civil rights. Dr. Woodward points out that in early 2000, when Former Federal Reserve Chairman, Alan Greenspan, hinted at its abandonment, the public outcry was such that he eagerly abandoned that position.

The affordability and availability of the fixed-rate mortgage has yielded a US residential mortgage market that stands at approximately $11 trillion. Today, the GSEs own or guarantee $5 to $6 trillion of mortgage debt outstanding and providing capital that supports roughly 70% of new mortgage originations. REALTORS® believe that it is extremely unlikely that any secondary mortgage market structure that does not include securitization and have some government backing could support the existing mortgage funding needs of the United States housing sector, while making mortgages available in all markets under all economic conditions.

Lastly, REALTORS® fear that in times of economic upheaval, a fully private secondary mortgage market will largely cease to exist as has occurred in the jumbo mortgage, the commercial mortgage, and the manufactured housing mortgage markets. When the economy turns down, private capital understandably flees the marketplace. Should that happen under a fully private secondary mortgage market model, the results for the entire economy would be fatal because affordable long-term fixed-rate mortgage funding would no longer be available, thus the plethora of peripheral industries that support and benefit from the residential housing market would suffer from the catastrophic effects of this occurrence.

LEGISLATION THAT ENSURES THE AVAILABILITY OF LONG-TERM MORTGAGE CAPITAL

REALTORS® insist that the long-term viability of America's housing finance system requires comprehensive reform of the secondary mortgage market. Toward that end, the National Association of Realtors® supports H.R. 2413, the "Secondary Market Facility for Residential Mortgage Act of 2011." As the leading advocate for home ownership and housing issues, Realtors® want a secondary mortgage market that will serve home owners today and in the future, as well as support a strong housing market and economic recovery.

H.R. 2413, introduced by Chairman Gary Miller (R-Calif.) and Ranking-member Carolyn McCarthy (D-N.Y.), does exactly that. It offers a comprehensive strategy for reforming the secondary mortgage market and gives the federal government a continued role to ensure a consistent flow of mortgage credit in all markets and all economic conditions. Moreover, it supports and emphasizes the use of long-term fixed rate mortgage products in a manner that is consistent with the qualified residential mortgage (QRM) exemption to the Dodd-Frank Act that was crafted by Senators Isakson, Landrieu and Hagan. Continuing government participation and establishing a facility that will provide liquidity during all market conditions will help ensure that creditworthy home buyers can obtain safe and sound mortgage financing products even during market downturns, when private entities have historically pulled back.

Lastly, this legislation includes provisions to protect taxpayers and ensure safety and soundness through appropriate regulation and underwriting standards. Just as importantly, the bill's structure will keep the door open to lenders of all sizes without favoring large lenders over small and mid-sized institutions.

CONCLUSION

The National Association of REALTORS® supports a secondary mortgage market model that includes some level of government participation, but protects the taxpayer while ensuring that all creditworthy consumers have reasonable access to mortgage capital so that they too may attain the American Dream – homeownership. We believe that the U.S. housing finance system is unique and serves a unique group of people who strongly desire a real piece of America. All potential solutions should focus on this key point.

I thank you for this opportunity to present our thoughts on the U.S. housing finance system, and as always, the National Association of REALTORS® is at the call of Congress, and our industry partners, to continue working toward finding a solution that best meets the needs of the U.S. housing consumer and their desire for homeownership.

APPENDIX A

KEY GSE REFORM POINTS BASED ON NAR's PRINCIPLES

- An efficient and adequately regulated secondary market is essential to providing affordable mortgages to consumers. The secondary market, where mortgages are securitized and/or combined into bonds, is an important and reliable source of capital for lenders and therefore for consumers.

  Without a secondary market, mortgage interest rates would be unnecessarily higher and unaffordable for many Americans. In addition, an inadequate secondary market would impede both recovery in housing and the overall economic recovery.

- We cannot have a restoration of the old GSEs with private profits and taxpayer loss system. The current GSEs should be replaced with government chartered, non-shareholder owned entities that are subject to sufficient regulations on product, revenue generation and usage, and retained portfolio practices in a way that ensures they can accomplish their mission and protect the taxpayer.

- Government-chartered entities have a separate legal identity from the federal government but serve a public purpose (e.g. the Export-Import Bank). Unlike a federal agency, these new entities will have considerable political independence and be self-sustaining given the appropriate structure.

- The mission must be to ensure a strong, efficient financing environment for homeownership and rental housing, including access to mortgage financing for segments of the population that have the demonstrated ability to sustain homeownership. Middle class consumers need a steady flow of mortgage funding that only government backing can provide.

- The government must clearly, and explicitly, guarantee the issuances of the entities. Taxpayer risk would be mitigated through the use of mortgage insurance on loan products with a loan to value ratio of 80 percent or higher and guarantee or other fees paid to the government. This is essential to ensure borrowers have access to affordable mortgage credit. Without government backing, consumers will pay much higher mortgage rates and mortgages may at times not be readily available at all (as happened in jumbo and commercial real estate loans)

- The entities should guarantee or insure a wide range of safe, reliable mortgages products such as 30 and 15 year fixed rate loans, traditional ARMs, and other products that have stood the test of time and for which American homeowners have demonstrated a strong "ability to repay."

- For additional safety, sound and sensible underwriting standards must be established for loans purchased and securitized in MBSs, loans purchased for portfolio, and MBS purchases.

- The entities should price loan products or guarantees based on risk. The organization must set standards for the MBS they guarantee that establish transparency and verifiability for loans within the MBSs.

- Political independence of the entities is mandatory for successful operation (e.g. the CEOs will have fixed terms so they cannot be fired without cause, they should not be allowed to lobby, and the authorities should be self-funded – no ongoing appropriations).
- In order to increase the use of covered bonds, particularly in the commercial real estate arena, the entities should pilot their use in multifamily housing lending and explore their use as an additional way to provide more mortgage capital for owner-occupied housing. The entities should be allowed to pave the way for innovative or alternative finance mechanisms that meet safety criteria.
- There must be strong oversight of the entities (for example, by the Federal Housing Finance Agency – FHFA or a successor agency), that includes the providing of timely reports to allow for continual evaluation of the entities' performance.

THE U.S. HOUSING FINANCE SYSTEM IN THE GLOBAL CONTEXT: STRUCTURE, CAPITAL SOURCES, AND HOUSING DYNAMICS

HEARING

before the

SUBCOMMITTEE ON
INTERNATIONAL MONETARY POLICY AND TRADE

of the

COMMITTEE ON
HOUSE COMMITTEE ON FINANCIAL SERVICES
UNITED STATES HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELTH CONGRESS

FIRST SESSION

ON

U.S. HOUSING FINANCE SYSTEM IN THE GLOBAL CONTEXT: STRUCTURE, CAPITAL SOURCES, AND HOUSING DYNAMICS

OCTOBER 13, 2011

PREPARED STATEMENT OF SUSAN M. WACHTER
Richard B. Worley Professor of Financial Management, Professor of Real Estate and Finance, The Wharton School,
University of Pennsylvania
OCTOBER 13, 2011

Chairman Miller, Ranking Member McCarthy, and other distinguished Members of the Committee, thank you for the invitation to testify at today's hearing on the ``U.S. Housing Finance System in the Global Context.'' It is my honor to be here to discuss the relationship between the US housing finance system and global financial stability, how the US mortgage market structure differs from other countries in terms of the securitization system and mortgage products, the benefits and weaknesses of unique features of housing finance in the US, and foreign involvement in the housing finance system, specifically the motivations of foreign investors in purchasing residential mortgage-backed securities.

The US housing finance system relies on global capital sources for funding. The mortgage related bond market as of the second quarter 2011 amounts to approximately $7 trillion, most of which today is securitized and guaranteed by the US government. As the subprime crisis demonstrated, disruptions in US mortgage system destabilized financial markets across the world. The structural soundness of this sector is important for US home borrowers, the US economy, and for overall global financial stability.

The US housing finance system, prior to the crisis, was financially sound. The system prevalent in the US provided US home buyers, unlike buyers elsewhere, a choice of fixed and variable rate mortgage product and provided financial stability for mortgage borrowers and for global capital markets. The unique features of housing finance in the US which undergird this system include access to stable long term fixed rate mortgages and the financing of these mortgages funded by a sound securitization system.

The long term fixed rate mortgage prevalent in the US, what Richard Green and I term the American mortgage, is unique to the US. In most developed countries, with few exceptions, the adjustable rate mortgage prevails. The fixed rate pre-payable mortgage, with the ability to lock-in financing at the point of home selection, is found solely in the US. While adjustable rate mortgages are a good and safe alternative to fixed rate mortgages in periods of stable or declining interest rates, the weakness of such mortgages is that they threaten borrowers with payment shock when interest rates rise. Shocks to households' balance sheets due to rising interest rates or limited availability of finance threaten the financial system as a whole. Indeed versions of this scenario played out in the subprime crisis and the Great Depression.

The US mortgage system also differs from most of our developed country peers in the use of securitization as opposed to the holding of mortgages in bank portfolios. In research with co-author Adam Levitin, we show why the fixed rate mortgage requires securitization. Securitization first arose out of the need to replace the short term variable rate mortgage with so-called bullet payments implicated in the high foreclosure rate of the Great Depression. While the fixed rate long term self-amortizing mortgage developed in the aftermath of the Great Depression protects borrowers against interest rate spikes, as shown by the savings and loan crisis, short term demand deposits cannot be relied upon to fund long term mortgages. Securitization is a necessary replacement for demand deposit based bank portfolios. The system of fixed rate mortgages financed through stable securitization provided for a period of remarkable stability in the US economy, coinciding with what has been termed the Great Moderation, a period of economic growth, strong and sustainable homeownership, uniform and intrinsically safe underwriting practices, and importantly for the Committee, the ability to access global capital markets.

This system underwent major shifts beginning in 2000. The changes over the subsequent decade caused the system to fail, threatening global financial stability with outcomes that still threaten the US economy. In the period 2000 to 2006, nontraditional mortgages, previously niche products, such as adjustable rate teasers, subprime, interest only with bullet payments, grew to represent, in 2006, almost half of mortgage originations.

The origin of the mortgage system failure was credit expansion through private label securitization accompanied by the undermining of lending standards, despite the Triple-A credit rating granted for much of the MBS debt. Global capital funded this expansion in part relying on credit ratings. Fannie and Freddie market share at first was eroded by the expansion of PLS but then these institutions themselves funded risky MBS and extended and deepened the subsequent crisis. Foreign investors purchase residential mortgage-backed securities guaranteed by Fannie Mae and Freddie Mac and they do so because these instruments are perceived to have essentially no credit risk; the PLS similarly were understood to have little or no risk in part due to high credit rating scores and in part because the US mortgage and housing market were perceived to be impervious to declines. The expansion of credit that this perception allowed and the deterioration in lending standards fueled the price bubble with a bust when the limits to lending expansion were reached accompanied by the epidemic of foreclosures and value destruction that we are currently facing.

Failure in the US mortgage system directly caused the 2009 recession. We were not alone in this. The United Kingdom, Spain, and Ireland suffered recessions accompanied by mortgage market crises and sharp housing price declines. Nonetheless, the size of the US market means that it relies on global finance and the failure of the US housing finance system put the global finance system at risk. The response in the US of the bailouts of failing financial institutions and the conservatorship of Fannie Mae and Freddie Mac is ongoing. Private securitization has not come back and for now we are now reliant on a federalized system. Elsewhere we discuss the necessity of long term reforms. The key going forward is rebuilding confidence in the US mortgage system. This is necessary for potential home buyers to come back to the market and it is also key for global investors on whom this market depends to provide capital for what once again must be perceived to be and must be a system that structurally sound and safe for home purchasers, investors and the overall economy.

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The American Mortgage in Historical and International Context

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Home mortgages have loomed continually larger in the financial situation of American households. In 1949, mortgage debt was equal to 20 percent of total household income; by 1979, it had risen to 46 percent of income; by 2001, 73 percent of income (Bernstein, Boushey and Mishel, 2003). Similarly, mortgage debt was 15 percent of household assets in 1949, but rose to 28 percent of household assets by 1979 and 41 percent of household assets by 2001. This enormous growth of American home mortgages, as shown in Figure 1 (as a percentage of GDP), has been accompanied by a transformation in their form such that American mortgages are now distinctively different from mortgages in the rest of the world. In addition, the growth in mortgage debt outstanding in the United States has closely tracked the mortgage market's increased reliance on securitization (Cho, 2004).

The structure of the modern American mortgage has evolved over time. We begin by describing this historical evolution. The U.S. mortgage before the 1930s would be nearly unrecognizable today: it featured variable interest rates, high down payments and short maturities. Before the Great Depression, homeowners typically renegotiated their loans every year.

We next compare the form of U.S. home mortgages today with those in other countries. The U.S. mortgage provides many more options to borrowers than are commonly provided elsewhere: American homebuyers can choose whether to pay a fixed or floating rate of interest; they can lock in their interest rate in between the time they apply for the mortgage and the time they purchase their house; they can

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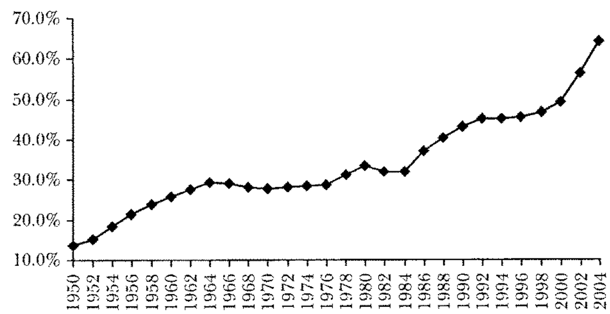
Figure 1
Mortgage Debt as Percentage of GDP



Source: GDP data are from ⟨http://www.bea.gov/bea/dn/gdplev.xls⟩. Mortgage debt data are from ⟨http://www.federalreserve.gov/releases/⟩.

choose the time at which the mortgage rate resets; they can choose the term and the amortization period; they can prepay freely; and they can generally borrow against home equity freely. They can also obtain home mortgages at attractive terms with very low down payments. We discuss the nature of the U.S. government intervention in home mortgage markets that has led to the specific choices available to American homebuyers. We believe that the unique characteristics of the U.S. mortgage provide substantial benefits for American homeowners and the overall stability of the economy.

Historical Context

Before the Great Depression, the single-family home mortgage was a very different instrument. Until the 1930s, residential mortgages in the United States were available only for a short term (typically 5–10 years) and featured "bullet" payments of principal at term. Unless borrowers could find means to refinance these loans when they came due, they would have to pay off the outstanding loan balance. In addition, most loans carried a variable rate of interest. Bartlett (1989) presents a fine historical overview of the origins of the modern U.S. mortgage.

Home mortgages typically had very low loan-to-value ratios of 50 percent or less and thus did not, by themselves, place substantial stress on lenders, because when borrowers were short of cash, their property could be sold if necessary to redeem their loan. But during the Great Depression in the early 1930s, property values in the United States declined by 50 percent relative to peak values. Holders of these mortgages, knowing their positions were insecure, refused to refinance loans that came due; as a result, borrowers defaulted, having neither the cash nor the home equity necessary to pay the loans back. A wave of foreclosures resulted—typically 250,000 per year between 1931 and 1935. At the worst of the Depression, nearly

10 percent of homes were in foreclosure. Financial institutions would in turn attempt to resell the properties that they repossessed, which placed even further downward pressure on the housing market.

In response to these calamities, the federal government began intervening in the housing finance market. It created three particularly important institutions: the Home Owner's Loan Corporation (HOLC), the Federal Housing Administration (FHA) and the Federal National Mortgage Association (FNMA). Table 1 provides a timeline of major government housing finance legislation.

The Home Owner's Loan Corporation (HOLC) raised funds using government-backed bonds, used the funds to purchase defaulted mortgages from financial institutions and then reinstated the mortgages. The HOLC changed the terms of the mortgages drastically, converting variable-rate, short-term, nonamortizing mortgages into fixed-rate, long-term (20-year) fully amortizing mortgages. (An "amortizing" mortgage is one where the principal is repaid over the life of the loan, so that the borrower does not face a large lump-sum payment at the end of the loan.) The HOLC ultimately purchased, reinstated and converted one million mortgages.

Because the federal government did not see itself as being in the business of holding mortgages in the long term, it needed to find a way to make these mortgages marketable. In particular, investors in the mortgages wanted assurance that they would receive the full principal balance and scheduled interest payments. While some private mortgage insurance companies were in business for this purpose before the 1930s, they were insufficiently capitalized and failed in the early 1930s. Consequently, the government established the Federal Housing Administration (FHA) to provide the mortgage insurance necessary for investors to purchase mortgages with confidence.[1]

Thus, the invention of the fixed-rate, self-amortizing, long-term mortgage was, above all else, a response to a general financial crisis, as opposed to a design for the promotion of homeownership per se. FHA adopted this form of mortgage to avoid the problem of people needing to refinance, which had clearly led to disaster. The combination of HOLC and the FHA represented a piece of early "financial engineering" that allowed illiquid financial institutions to become liquid again. The new long-term mortgage was of course no panacea for U.S. banking problems—one-third of U.S. banks failed during the Great Depression (Friedman and Schwartz, 1963)—but it helped.

The Home Owner's Loan Corporation, having performed its task, was disbanded in 1936. In its place, the Federal National Mortgage Association (FNMA,

[1] For FHA insurance, the borrower pays an upfront mortgage insurance premium (today 1.5 percent) and in addition, pays an annual insurance premium that declines over the life of the loan (today, this starts at around 0.5 percent of the loan balance) until the loan-to-value ratio falls below 75 percent. FHA has been consistently profitable, excluding the late 1980s. In a typical year, like 1992, it contributed $1.4 billion to the U.S. Treasury, as shown at p. 50 of ⟨http://www.whitehouse.gov/omb/budget/fy2006/pdf/cr_supp.pdf⟩. There has never been a taxpayer payout for FHA. Reserves were used for the high default period of the late 1980s, which was associated with the savings and loan crisis and overlending in certain states like Texas.

Table 1
Federal Legislation Timeline

1933	The Federal Deposit Insurance System and Home Owners Loan Corporation were established.
1936	The Federal Housing Administration was created.
1938	Fannie Mae was created to provide a secondary market by for FHA-insured loans.
1944	VA loan program was created as part of the Veterans Bill of Rights.
1948	Fannie Mae begins to purchase VA loans.
1968	HUD and Ginnie Mae were created, and Fannie Mae became a shareholder-owned government-sponsored enterprise.
1970	Freddie Mac was created (the Federal Home Loan Mortgage Corporation Act).
1981	Savings & loans were allowed to invest in ARMs, and deposit ceilings were removed.
1982	Savings & loans securitize and sell off below-market-rate mortgages.
1986	The Tax Reform Act of 1986 eliminated all interest-related personal deductions except for mortgages and home equity loans.
1989	Freddie Mac was restructured as a publicly traded corporation, and the Federal Institution Reform Recovery and Enforcement Act passed.

which would later be Fannie Mae) was invented as a government agency in 1938 for the purpose of abetting a secondary market in FHA mortgages. In particular, FNMA issued bonds for purchasing mortgages at par, so that investors in affluent communities could invest with confidence in mortgages in communities with little local capital. (Buying at par meant banks had no exposure to interest rate risk when lending long term and funding these loans by FNMA-issued bonds.)

The mortgage market changed little in the six years following the invention of FNMA. The Depression, the late 1930s and World War II were all times when the housing market had relatively little construction and few transactions. In 1925, new home construction in the United States peaked at 937,000 new units. This total fell to 93,000 units in 1933, and the 1925 peak was not surpassed (in fact was not even approached) until after World War II (U.S. Bureau of the Census, 1975).

With the anticipation of the end of World War II came the G.I. Bill of Rights, officially known as the Servicemen's Readjustment Act of 1944.[2] Included within the G.I. bill was the invention of the Veterans Administration mortgage insurance program—a program that allowed veterans returning home to obtain mortgages with very low down payments. The program was intended both to reward veterans and to stimulate housing market construction. At about this time, the Federal Housing Administration (FHA) also sought to stimulate housing construction by substantially liberalizing its terms. In 1948, the maximum term of a mortgage rose to 30 years (from an initial maximum of 20 years). In 1956, the FHA raised the maximum loan-to-value ratio to 95 percent (from an initial maximum of 80 percent) for new construction and to 90 percent for existing homes. However, the FHA did retain a cap on the size of the loan it would insure, and in doing so,

[2] G.I. stands for "government issue." The term originally applied to articles that were issued in accordance with military procedures or regulations. By the end of World War II, G.I. or G.I. Joe had become a nickname for American soldiers, too.

it allowed for a private sector market in mortgage insurance to develop for high-balance loans.[3]

With the strong expansion of the U.S. economy in the post–World War II period driving up incomes, together with the new institution of the long-term (and therefore affordable), fixed-rate, self-amortizing mortgage, homeownership expanded rapidly. America was transformed from a nation of urban renters to suburban homeowners: the ownership rate among U.S. households rose from 43.6 percent in 1940, the last census year before World War II, to 64 percent by 1980 (Census of Population and Housing, 1940 and 1980). The FHA mortgage was a key to this transformation. Its profitability to the U.S. Treasury (discussed in footnote 1) induced large-scale entry of the private sector, which developed the self-amortizing, privately insured mortgage. The "modern" private mortgage insurance business started with the Mortgage Guarantee Insurance Corporation in 1957 and allowed for lenders to make low down payment loans beyond FHA limits. Over time, the private sector market share for mortgage insurance grew as it outcompeted the publicly insured provision of mortgage finance: FHA mortgage insurance fell from 29.4 percent of the mortgage market in 1970 to less than 10 percent in the mid-1990s (Vandell, 1995). Together, the FHA- and the private sector–provided mortgage, which came to be called the "conventional mortgage," dominated the market.

This mortgage market settled into a pattern over the two decades following World War II. The major funders of mortgages during this period were commercial banks and savings and loans. These institutions had an inexpensive source of funds for mortgages: deposits backed by the Federal Deposit Insurance Corporation (in the case of banks) or the Federal Savings and Loan Insurance Corporation (in the case of savings and loans). Because typical relatively small depositories had the full faith and credit of the U.S. government guaranteeing their deposits, these financial institutions could offer low interest rates.[4] Fixed-rate mortgages typically paid between 5 and 6 percent in the market. Between 1945 and 1966, yields on three-month Treasury bills never rose above 4 percent. Depository institutions could thus raise capital from depositors, who could get a safe government-protected yield and a higher return than Treasury bills by putting their funds in a depository institution.

This arrangement began to show some cracks in 1966, when the three-month Treasury yield rose above 4 percent, and deposits flowed out of savings and loans and into Treasury bonds, resulting in a shortage of funds for mortgage borrowers. One of the responses to this event was the 1968 splitting of Fannie Mae into two pieces: the Government National Mortgage Association, known as Ginnie Mae, and

[3] FHA mortgages also did not have prepayment penalties, meaning that households were insulated from interest rate risk relative to adjustable-rate mortgages. Both adjustable-rate mortgages and fixed-rate mortgages without prepayment penalty allow borrowers to take advantage of declining interest rates, however, adjustable-rate mortgages expose the borrower to the risk of interest rate increases. For a history of the terms of the FHA program, see Cutts and Nothaft (2005).

[4] Deposits were insured up to $5,000 until 1950, $10,000 until 1966, $15,000 until 1969, $20,000 until 1974, $40,000 until 1980 and $100,000 thereafter.

the "new" Fannie Mae, which would now be privately held and would be able to buy and sell non–government-backed mortgages to raise additional funds for mortgages. In addition, by taking Fannie Mae private, the government was able to remove Fannie Mae's debt from its balance sheet. Congress created Freddie Mac in 1970 to securitize mortgages issued by savings and loans. A mortgage insurance function was kept inside the government through Ginnie Mae for two reasons: first, to continue to provide a full government-backed guarantee of timely payments of FHA-foreclosed mortgages to the lender; and second, to be able to package and securitize FHA loans.

Congress's intent with the creation of Ginnie, the new Fannie and Freddie was at least in part to assure that the mortgage liquidity problems of 1966 would not recur. The federal charters that were granted to Fannie and Freddie require them to promote liquidity and stability in the secondary market for mortgages as well as to provide mortgage credit throughout the nation. These institutions would in turn bring uniformity to the mortgage market and invent financial instruments—derivatives of mortgage-backed securities—that would help keep the mortgage market liquid from the mid-1980s until today.

The ignition of inflation in the later 1960s and 1970s altered the ability of depositories to fund long-term, fixed-rate mortgages: inflation pushed up nominal interest rates and eroded the balance sheets of depositories that funded fixed-rate mortgages. Depositories found themselves in a straitjacket due to Regulation Q, a federal rule that placed a ceiling on the rate that depositories could pay depositors. As nominal interest rates rose, depositories could not match what the market was paying, and they saw deposits flow out their doors to U.S. Treasury securities—assets back by the full faith and credit of the United States that paid a market rate of interest. A second factor in limiting the ability of depositories to fund fixed-rate mortgages was the rise of new competing savings vehicles, such as money market funds, mutual funds and pension funds, which paid higher rates than depositories and which had become accessible to small savers. Also, long-term savings vehicles, such as pension funds, were better suited to hold investments in long-term assets, such as securitized long-term mortgages.

The result of the ignition of inflation and the new savings vehicles was an outflow of funds from the banking sector. This outflow led to a crisis in the savings and loan industry, a major structural change in U.S. mortgage markets and, ultimately, a transformation of the housing finance system.[5] The commercial banking industry was not nearly as affected since, unlike savings and loans, which by statute invested in mortgages, banks were able to invest in a variety of assets. Legislation responded to the new environment and removed deposit ceilings and allowed savings and loans to invest in adjustable-rate mortgages.[6] But having been

[5] For a discussion of the savings and loan crisis and its aftermath, see Benston and Kaufman (1997).

[6] The legislation that allowed adjustable-rate mortgages and eliminated interest rate ceilings for savings and loans was the St. Germain Depository Institutions Act of 1982. Specifically, Title VIII—the "Alternative Mortgage Transaction Parity Act of 1982" Sec.803 (A)—"in which the interest rate or finance charge may be adjusted or renegotiated."

burned once, depository institutions were worried about lending at a fixed rate when there was a risk that nominal interest rates would rise. If a homebuyer chose an adjustable-rate mortgage, the depositor typically held on to it—since the borrower was absorbing the interest rate risk. If the homebuyer chose a fixed-rate mortgage, then the lender typically sold it to Fannie Mae, Freddie Mac or Ginnie Mae, which then packaged the loans into mortgage-backed securities and resold them to individual investors and institutions whose balance sheets were more compatible with holding a long-term asset with a fixed nominal rate. Instead of the traditional reliance on savings and loans and commercial banks as sources of funds for mortgage loans, funds began to come from securities backed by mortgages and then traded in a secondary mortgage market. Thus, securitization became a dominant source of funds for long-term residential mortgages.

For a time in the early 1980s, when adjustable-rate mortgages became available and when many pundits were projecting massive and variable inflation for years to come, it even appeared that the fixed-rate mortgage might become an historical anomaly, and that the U.S. mortgage market would return to the adjustable-rate mortgages that had been common before the 1930s. In a highly volatile inflationary context, fixed-rate mortgages become exorbitantly costly, largely eliminating their market, as shown in Figure 2. However, the Federal Reserve brought inflation under control, and the fixed-rate mortgage regained its vitality, so that it remains the most common form of residential mortgage financing in the country. In no year since 1995 has the share of fixed-rate mortgages fallen below 70 percent of the total market, and in some years, the fixed-rate share has been nearly 90 percent (Freddie Mac, 2005).[7]

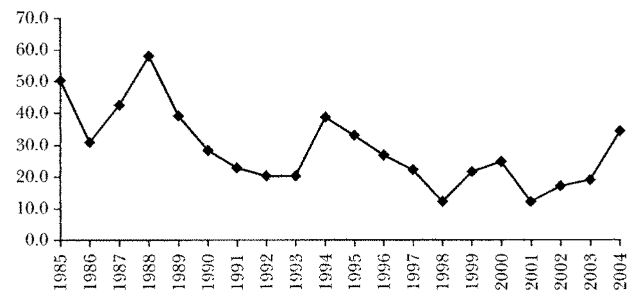
The shift to mortgages being funded by capital markets rather than by depositories has continued. By the end of 2003, Fannie and Freddie either guaranteed or held more than $3.6 trillion of mortgages, or about 60 percent of the market in which they are allowed to participate and 43 percent of the overall market.[8] Firms that purchase U.S. mortgages in the secondary market are managed by professionals who are certainly more capable of bearing, matching and managing these risks than are individual homeowners, thereby reducing the risk that U.S.-style mortgage lending imposes on homeowners and the overall economy.

In retrospect, the 1950s arrangement of deposit mortgage funding in the United States came apart on two dimensions. First, people stopped saving solely in bank accounts and instead, with the liberalization of capital markets, increasingly used mutual funds, pension funds and the like as savings vehicles. In fact, given the

[7] The adjustable-rate mortgage (ARM) share of applications generally fluctuates with the yield curve: as the yield curve steepens, the ARM share increases, as the cost of ARMs drops relative to fixed-rate mortgates. The recent increase in the share of ARMs to a 10-year high of 36 percent, coupled with a flat yield curve, is anomalous, which raises questions as to its origin. Many variants of traditional ARMs have also been recently developed such as hybrid instruments, interest only loans and option ARMs, which allow negative amortization. Affordability pressures in some markets may be at work.

[8] Fannie Mae and Freddie Mac are permitted to purchase only conforming mortgages—those mortgages whose balance falls below a regulatory maximum that changes each year with house prices. In 2005, the conforming loan limit is $359,650.

Figure 2
Adjustable Rate Mortgages as a Percentage of all Loans



Source: FHFB.

growth in the mortgage market, depositories today have insufficient funds to back the entire demand for mortgages. Second, borrowers want long-term fixed-rate mortgages. The fixed rates protect them against rising interest rates, and the ability to refinance protects them against falling interest rates. The savings and loan crisis made clear the dangers of funding short-term liabilities with long-term assets in markets with volatile interest rates. Depositories can only hold long-term fixed-rate mortgages when nominal interest rates are low and stable, as they were in the 1950s and 1960s. With securitization, long-term assets can be funded through accessing capital markets, which are increasingly global in scale.

International Context

The U.S. home mortgage is unique in comparison to its international counterparts in developed countries around the world.[9] We compare the U.S. mortgage market with those in the United Kingdom, France, Germany, Italy, Canada and Japan. We also add Denmark to this mix, as it has the mortgage market that is arguably most similar to the United States, as well as South Korea, because it is a puzzling example of a country with a sophisticated (although still developing) economy and an unsophisticated mortgage market.

Table 2 summarizes key mortgage terms in these countries and is based on the work of Lea (2003), Diamond (2004), Dübel (2004), Wyman (2003) and Renaud

[9] Any discussion of how mortgages in the United States compare with their international counterparts becomes quickly limited to a comparison with mortgages in developed countries. Countries that are not high-income countries have little in the way of liquid assets relative to GDP and as a result are unable to fund mortgages easily (Renaud, 2004a). While the ratio of mortgage debt outstanding to GDP was 58 percent in the United States in 2002, it was no more than 14 percent in any Latin American country, was no more than 11 percent in any Middle Eastern country (other than Israel) and was no more than 22 percent in any South or East Asian country (other than Japan, Hong Kong, Singapore and Taiwan).

Table 2
Mortgages Terms across Different Countries

	Typical LTV	*Maximum LTV*	*For 2nd mortgage*	*Mortgage debt to GDP*	*Fixed-term range 10–20 years*	*Fixed-term range 20+ years*	*Repayment by fee-free redemption*
U.S.	75%	97%	A	69%	A	A	A
Denmark	80%	80%	A	70%	A	A	A
France	67%	100%	L	25%	A	L	N
Germany	67%	80%	A	53%	A	L	N
Italy	55%	80%	A	13%	L	L	N
Netherlands	90%	115%	A	100%	A	L	N
Portugal	83%	90%	A	51%	N	N	N
Spain	70%	100%	A	42%	L	L	N
UK	69%	110%	A	69%	L	N	L
Japan	80%	80%		36%	A	A	L
Korea	40%	75%	N	14%	L	N	A
Canada	65%	90%	A	44%	N	N	N
Australia	63%	80%	A	74%	N	N	L

Notes: Key A = available; L = limited availability; N = no availability.
Source: From Mercer Oliver Wyman and European Mortgage Federation (2003), with supplemental data on the United States, Japan, Korea, Canada and Australia from Cho (2002), the International Union for Housing finance (⟨www.housingfinance.org⟩, 2005) and authors' calculations.

(2004a). The first column shows the average ratio of the home loan to the value of the home at the time of purchase; the second column shows the highest loan-to-value ratio commonly available. The loan-to-value of the U.S. mortgage is actually higher than in many countries, and the maximum value is high, but by no means the highest. A number of countries allow borrowing the full value of the home, and in the United Kingdom and the Netherlands, a homebuyer can borrow more than the value of the home. (Mortgages with a 110 percent loan-to-value ratio are possible, although risky, if they are underwritten as though they are consumer loans with the home as additional collateral.) The third column states whether or not citizens may take out a second mortgage. The fourth column reports information about the total level of these countries' ratio of mortgage debt outstanding to GDP. The fifth and sixth columns show that the United States, Denmark and Japan are the only countries in which fixed-rate mortgages are available at all maturities. In a few other countries, fixed-rate mortgages are available at shorter terms of 10–20 years only. With the exception of Turkey, consumer price index growth was less than 5 percent in all OECD countries in 2004, yet fixed-rate mortgages are still rare in most countries, and around the world adjustable-rate mortgages prevail. The final column shows how easy it is to pay off the mortgage in advance. The U.S. mortgage market is one of only three in which fee-free prepayment is widely available, and in only a few other countries, prepayment is of limited availability. Refinancing a mortgage is clearly much easier in the United States.

To clarify patterns of mortgage markets, we group countries into three categories: 1) economies with low levels of securitization, which are the United

Kingdom, Canada and Japan; 2) economies with substantial levels of securitization, which include Germany and Denmark; and 3) economies with (relative to the others) less developed financial markets and low mortgage debt obligations, including France, Italy and South Korea.

Countries with Low Levels of Securitization: United Kingdom, Canada and Japan

In the United Kingdom, variable-rate mortgages dominate. Thus, British homeowners bear significant interest rate risk, a risk that they are not particularly well-suited to bear and cannot easily hedge. One of the reasons for reliance on variable-rate mortgages is that the United Kingdom relies on depository institutions, rather than capital markets, to fund mortgages—and depositories prefer to have borrowers absorb the interest rate risk. But Miles (2003) also suggests that borrowing habits in the UK are path-dependent—that because fixed-rate mortgages have never been widely used in the UK, borrowers do not understand the benefit of paying a higher coupon rate in exchange for a reduction in balance sheet risk.

Canadian borrowers also, unlike their U.S. counterparts, lack access to mortgages with fixed rates, penalty-free prepayment and high loan-to-value ratios. Canadian mortgages rarely have rates that are fixed for more than five years—and seven seems to be the outside limit.[10] They almost always have "yield maintenance" penalties—that is, penalties that guarantee lenders a minimum rate of return over a minimum period of time—for the period of time at which the interest rate *is* fixed. Finally, Canadian mortgages without mortgage insurance can take on a maximum loan-to-value ratio of 75 percent; where as the U.S. rule is 80 percent.

Canada does have an FHA-like mortgage insurance fund, called the National Housing Act (NHA) fund. NHA loans have the full faith and credit of the Canadian government behind them, and the investors in these loans are guaranteed the timely payment of principal and interest. Loans insured by this fund can generally have loan-to-value ratios of up to 90 percent and sometimes more. Mortgages backed through the NHA are also securitized and resold to the capital markets: in fact, the mortgage-backed securities issues by NHA are therefore quite similar to those issues by Ginnie Mae in the United States. But beyond those mortgages explicitly backed by the Canadian government, mortgages in Canada are not securitized, but are rather largely held by depositories. In 2004, more than 75 percent of mortgage debt outstanding in Canada was held in portfolios of bank and credit unions (which helps to explain why interest rates are fixed only for short periods), and mortgage-backed securities represented only 12.7 percent of the total residential credit outstanding in Canada. Apparently, if the Canadian government does *not* back mortgages, Canadian capital markets have little appetite for other mortgage-backed securities.

The Japanese mortgage market has grown rapidly in the past 30 years; the ratio of mortgage debt outstanding in that country has risen from 21 percent in 1980 to 36 percent in 2003. In fact, Japan's mortgage market has evolved in a way that

[10] We consulted the websites of the largest Canadian banks to form this conclusion.

resembles the evolution of the U.S. mortgage market, although with a lag. An excellent overview of mortgage finance in Japan comes from Credit Suisse First Boston (2004).

In 1950, Japan set up a government corporation, the Government Housing Loan Corporation (GHLC), to provide stable housing finance and to stimulate the construction of housing after World War II. GHLC provided long-term fixed-rate mortgages with spreads of roughly 100 to 150 basis points over Japanese ten-year Treasury notes. Currently, GHLC mortgages make up about one-third of the mortgage market in Japan; the rest comes largely from private sector banks. GHLC borrowers faced some limits; for instance, they can pay no more than 25 percent of their income in mortgage payments.

Securitization of residential mortgages has come to Japan relatively recently, under conditions somewhat reminiscent of the U.S. housing market in the 1930s. With the collapse of Japanese real estate values in the early 1990s, specialized housing lending institutions in Japan became insolvent, as mortgage defaults rates increased. As part of the structural reform of Japanese financial institutions, the Japanese government enacted a 1998 law that allowed for asset-backed securitization; in 2001, the government charged GHLC with the responsibility for developing residential mortgaged-backed securities. GHLC mortgages by law may not carry a prepayment penalty, unlike the long-term mortgages offered by banks. However, banks offer mostly adjustable-rate or short-term (typically three-year) fixed-rate mortgages.

In 2003, around $8 billion in new Japanese mortgages were securitized through GHLC. This is a start, but only a small part of the country's mortgage market. There are also proposals to replace GHLC with another institution in the near future to encourage securitization and fixed-rate long-term mortgages, but no plans for this new institution have yet been set forth.

Countries with Securitization: Germany and Denmark

German mortgages appear to provide only limited options to borrowers. The loan-to-value ratios on first position mortgages are low (60 percent or less), and such mortgages generally have "yield maintenance" clauses—requirements that when borrowers prepay, they pay the lender all the interest they would have paid had they amortized the mortgage to maturity. If borrowers wish to borrow more than 60 percent, they may take out second mortgages up to an additional 20 percent of value. The result is that lenders in mortgage bonds in Germany take on little credit risk, and much more risk is born by borrowers. In addition, German borrowers may not easily extract equity from their homes through the mortgage market.

Nonetheless, Germany has a deep mortgage market, with a ratio of mortgage debt outstanding to GDP ratio of 54 percent. Germany's mortgage system relies on capital markets to fund mortgages through bonds called *Pfandbriefe* and not just depositories. The interest rates charged on first mortgages are only slightly above rates on government bonds of similar maturity. Germany also has a government-backed institution for funding mortgages aimed at lower-income and first-time homebuyers.

Denmark is the only country to have a widely available mortgage that contains most of the key features of the U.S. mortgage. Denmark's mortgage market also relies heavily on capital markets for financing its mortgages. Danish mortgages are freely pre-payable in the U.S. sense without a penalty per se—although Danish borrowers must redeem the bonds underlying their mortgages at market value, rather than at par.[11] In addition, Danish borrowers have an option not generally available to U.S. borrowers: when Danes sell their homes, they can essentially pass on their mortgage to the next homeowner. As such, a mortgage whose coupon rate is below the market rate at the time of sale need not be paid off.

However, prospective Danish homebuyers face two limitations more severe than their U.S. counterparts. First, required down payments in Denmark are far higher than in the United States. In the United States, for example, mortgages with a loan-to-value ratio of 80 percent get the best terms available in the market, and mortgages with even higher loan-to-value ratios are readily available if the borrower purchases mortgage insurance. In Denmark, to get to a mortgage with an 80 percent loan-to-value ratio, borrowers must take out a variable-rate second mortgage. Second, borrowers in Denmark must fit a strict and uniform set of underwriting criteria to qualify for a mortgage. This provision makes the Danish mortgage homogenous with respect to credit risk and therefore easy to securitize. But it also means that some borrowers who would be able to qualify for a mortgage in the United States, where standards for qualifying are more flexible, would get shut out of the Danish market.

Countries with Low Mortgage Debt Outstanding: France, Italy and South Korea

For an economy of its size and sophistication, France has a remarkably small mortgage market. Its ratio of mortgage debt outstanding to GDP is only 25 percent, less than half the ratios found in the United States and Germany. Yet by world standards, French mortgage terms are consumer friendly. Over half the mortgages in France have fixed rates to term (although this term is generally less than 20 years), and prepayment penalties are limited by statute. But the regulatory environment for mortgages in France is complicated, which seems to have led to a business where risk-adjusted profits are lower than they are in other countries and the number of suppliers of mortgages in France is limited. In addition, mortgage interest is not subsidized in France, while the rental market is heavily regulated and subsidized.

The mortgage market in Italy is very small, with a ratio of mortgage debt outstanding to GDP ratio of 13 percent. The type of mortgages available helps to

[11] For an excellent description of Danish mortgages, see Frankel, Gyntelberg, Kjeldsen and Persson (2004). One caveat worth noting: Danish mortgages are not prepayable if they were financed with noncallable bonds—but most mortgages are backed with callable bonds. These transaction costs, as well as affordability pressures, may explain the development and growth of a new instrument in Denmark; the Bolix-X. The Bolix-X is an adjustable-rate mortgage with a cap (Jensen, 2005).

explain why: they carry variable-rates of interest, are short term, have low loan-to-value ratios and have prepayment penalties. Moreover, the banking and property registration systems are far less developed in Italy relative to the rest of Europe. Italy continues to regulate interest rates paid on deposits as well as bank staffing levels and has among the longest processing times for mortgages in Europe. Moreover, Italy lacks a central, electronic property registration database, which means that the process of valuing collateral takes longer than in other countries (European Mortgage Federation, 2003).

However, Italy's mortgage market is developing. Italy has begun to turn to capital markets for funding mortgages. While the volume of Italian mortgage securities remains small (around $10 billion were issued in 2003), it has been growing at a double-digit pace (ESF, 2004). Italy's ratio of mortgage debt to GDP, while still small, is four times larger than it was only 15 years ago. In addition, Italy's unfortunate experiences with high inflation since World War II have made long-term lending less attractive. But since Italy now uses the euro for its currency, the legacy of high inflation may no longer cast a shadow of high inflation risks for the future.

We finish our world tour of mortgage markets with a brief stop in South Korea, which offers an interesting case of a country whose economy has developed impressively over the past 50 years, but whose mortgage system has not. This is in contrast with other affluent Asian countries such as Singapore and Taiwan. For example, the ratio of mortgage debt outstanding to GDP in Korea is 14 percent—similar to the level in Italy. The corresponding level in Singapore is 59 percent.

Loan-to-value ratios in Korea, although rising, remain very low at 40 percent or less (Cho, 2002). In response, the Korean government in 1999 developed a corporation called KoMoCo, which became Korea Housing Finance Corporation (KHFC) as of 2004, whose purpose is to securitize mortgages. KHFC acts as a conduit between mortgages and capital markets, much as Fannie, Freddie and Ginnie do in the United States, and much as *Pfundbriefe* do in Germany and mortgage-backed bonds do in Denmark. However, Korean housing and mortgage markets face two fundamental issues not found in other countries.

First, the Korean land market was heavily regulated through the period leading up to the Asian financial crisis in 1997–1998 (Renaud, 2004b). Property values become artificially high as the demand for land in the rapidly growing country vastly outstripped the supply made available by the government. As land use became liberalized and the economy slowed in the late 1990s, property values fell. This recent volatility in the property market in Korea will make higher loan-to-value mortgages less attractive to investors.

Second, distribution channels for mortgages in Korea are highly concentrated and limited. In 1999, a single lender originated 75 percent of mortgages in Korea (Cho, 2002); this contrasts with a 9 percent market share for the top lender in the United States. The lack of competition in the origination market offers less incentive to provide Korean borrowers with a variety of mortgage products. Today, the vast majority of mortgages offered in Korea are short-term (three-year) adjustable-rate bullet loans, which make households and the economy highly vulnerable to mortgage payment shock if interest rates rise and explains the effort on the part of the government to encourage long-term mortgages.

Our tour of world markets illustrates differing outcomes in mortgage systems across countries: for those countries where depository institutions prevail, including the UK and Canada, mortgages tend to be held in depository portfolios, there is a lack of securitization, and borrowers tend to be limited to adjustable-rate mortgages or short-term instruments. For countries with substantial mortgage securitization, such as Denmark and Germany, concern over bank solvency has led to regulations that limit borrowers' option to prepay and to refinance at lower rates when rates drop (because this would increase financial institutions' earnings volatility). Countries with low mortgage debt outstanding, such as France, Italy and South Korea, tend to have less developed financial markets in general and, as a result, lack securitization and mortgage choice, limiting borrowers' interest rate and prepayment options.

The Future of the American Mortgage

The United States seems to have found a formula for offering favorable conditions and choices to mortgage borrowers, maintaining liquidity in mortgage markets and managing the risks of lending at fixed interest rates. The Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation—that is, Fannie Mae and Freddie Mac—play a central role in the U.S. mortgage market by raising funds to issue securitized mortgages and by playing an active role in the secondary market for mortgage-backed securities. This institutional framework for the U.S. mortgage market raises several questions. First, just how do Fannie and Freddie distribute the risk from mortgages with fixed interest rates and easy prepayment options across the economy? Second, even if Fannie and Freddie were useful in developing the U.S. market for securitized mortgages, could their functions now be replaced by fully private agents? Third, a number of analysts have pointed out that Fannie Mae and Freddie Mac have an anomalous status of being nominally private firms that nonetheless are perceived by capital market to have ties with the federal government that allow them access to funds more cheaply than any potential competitors (in this journal, for example, Frame and White, 2005). Does the existence of such government-sponsored enterprises, as they are sometimes called, create potential risks that may offset any benefits they provide? To understand the future of the American mortgage, we examine these questions in turn.

How Do American Financial Institutions Distribute the Risk from Fixed-Interest Rate, Prepayable Mortgages across the Economy?

Both the agency and private label mortgage-backed securities use structured transactions to manage the risk from fixed-interest rate, prepayable mortgages. These structured transactions allow for the distribution of this risk through the economy. Fixed-rate, prepayable mortgages present two major risks: interest rates may change; and since borrowers can prepay, the duration of the mortgages is uncertain.

To understand how these risks can interact, consider a life insurance company that invests in mortgages and/or mortgage-backed securities. Let us say that the present value of the cash-flow owed to their policyholders is paid out, on average, in year ten. The insurance company then buys mortgages or mortgage-backed securities with an expected duration of ten years. If interest rates rise, then the insurance company finds that the value of its mortgage securities has declined, and it may have insufficient reserves to pay off its claims, unless the duration is matched precisely with the obligation. Now suppose interest rates fall. Borrowers have an incentive to prepay, and the duration of the insurance company's assets shortens. Cash that comes in must be reinvested at a lower rate—meanwhile, the present value of the company's liabilities increase with the falling discount rate. The insurance company is foiled in its attempt to match its long-term obligations with a long-term asset, as the duration of mortgages decreases in a falling interest rate environment.

To hedge against interest rate changes and to reduce the volatility of duration, mortgage-backed securities in the United States are sliced using one of four broad derivative types: 1) sequential tranches; 2) planned amortization class (PAC) and companion bonds; 3) interest only (IO) and principal only (PO) strips; and 4) floaters and inverse floaters. Let us briefly describe these derivatives and their purposes.

In a *sequential tranch*, the cash flows from the mortgage-backed securities are divided into rating classes.[12] A common pattern is for senior tranches to receive principal—both scheduled and unscheduled (that is, what occurs from prepayments)—before junior tranches. Until senior tranches get paid off, junior tranches receive only interest payments. The timing of payment to the more senior tranches occurs with a great deal of certainty, while the market for junior tranches is then left to speculators, who expect a higher return in exchange for the risk they assume.

In the *planned amortization class (PAC) structure*, which can be viewed as a form of tranch, investors in PACs are guaranteed the timing of their cash flows—so long as the underlying mortgage prepayments fall within a range of specified prepayment schedules. This security is very popular and accounts for more than 50 percent of residential mortgage-backed security derivatives (Fabozzi, 2001). However, the "companions" to these PACs that come into play when the underlying mortgage prepayments fall outside the specified schedules are very risky.

In "stripped" securities, the payments from a security are divided into separate instruments. *Principal-only (PO) strips* are securities that pay investors only principal payments—scheduled and unscheduled—at the time the borrower makes these payments. As interest rates fall, principal payments arrive faster, and at a lower discount rate, meaning that the security becomes much more valuable; the converse happens when rates rise. PO strips thus make a good hedge to portfolios that

[12] For detailed descriptions of Sequential Tranching and Planned Amortization Class Securities, see Fabozzi (2001, chapters 9 and 10, respectively).

would suffer from falling interest rates. *Interest only (IO) strips*, on the other hand, can rise in value as interest rates rise. Although the discount rate rises with interest rates, the sum total of interest payments rises, too, as prepayments slow. IO strips are thus useful hedges for portfolios that would suffer from rising interest rates.

Finally, *floaters* have a small duration, while *inverse* floaters have an extreme duration. These derivatives break a fixed-rate underlying security into two pieces: the return of the floater is usually contracted to be some specified spread over the benchmark London Interbank interest rate (LIBOR). Therefore, the return on the floater rises or falls with prevailing interest rates, and it tends to keep roughly the same value regardless of the interest rate environment. The return on the inverse floater moves inversely with interest rates—that is, it generally falls as the benchmark LIBOR interest rate rises—and therefore its value is exceptionally sensitive to changes in interest rates. The inverse floater is an important hedge instrument for institutions that would suffer from falling interest rates, but it is a highly speculative financial instrument. The financial difficulties of Orange County, California, in the early 1990s were in large part a function of an over-reliance on inverse floaters as an investment (Erisk, 2001).

These financial instruments are crucial to the ability of the United States to finance its unusual mortgage structure, because they allow investors to manage the complicated interest rate risk embedded in the U.S. mortgage. No other country, so far as we can tell, has anything like the panoply of financial products in the United States. Japan does have a mortgage derivative structure that resembles the United States, where the GHLC securitizes and then slices and dices mortgages, but the Japanese market for mortgage-backed securities is less than 1 percent of the size of the U.S. market. The derivative markets increase investment demand for mortgage-backed securities, thus supporting liquidity and delivering low-cost funding, even in times of financial distress, for the mortgage market.

Could Fannie Mae and Freddie Mac be Replaced by Fully Private Agents?

Some argue that even if Fannie Mae and Freddie Mac have indeed created substantial benefits to homebuyers and to the U.S. economy through their development of the secondary market for mortgage-backed securities, they have outlived their usefulness. As a parallel example in the housing market, private mortgage insurance learned from mimicking successful government mortgage insurance until the government program became redundant (White, 2002; Wallison, Stanton and Eli, 2004). Now that many agents in the U.S. financial markets have experience with mortgage-backed securities and derivatives, could Fannie Mae and Freddie Mac step aside with little loss?

One argument in support of Fannie Mae and Freddie Mac is that because they can borrow at preferential rates, due to their implicit federal government guarantee, they can pass on lower interest rates for home mortgages. But, of course, this argument cuts in several directions. Funneling lower-than-market rate financial capital raises the risk that society will invest an inefficiently high amount in housing, and also that the risks of that investment are being underpriced by the market. No one wants to find out if the federal government would really pay off tens of billions of dollars if Fannie Mae and Freddie Mac became bankrupt. But setting aside the argument about lower interest rates for a moment, Fannie Mae and Freddie Mac mortgage-backed securities have three other major differences with the private label market: 1) the ability to make forward commitments; 2) the structure of the securities; and 3) interest rate spreads relative to U.S. Treasury bonds at times of general financial market stress.

A substantial portion of Fannie Mae and Freddie Mac securities are sold into the so-called "To Be Announced," or TBA, market (Beller, 2004). These transactions involve forward sales of mortgage-backed securities comprised of pools of mortgages not yet identified and in many cases not yet in existence. Market participants in the TBA market set the standards that the securities and the mortgages in the pools must meet based on mortgage pools already available to the market. This mechanism allows Fannie and Freddie to "lock in" mortgage rates for borrowers in advance of having actual mortgage available for purchase. This provision is popular among borrowers, particularly for fixed-rate mortgages, but it is only possible because Fannie Mae and Freddie Mac do not face the same disclosure requirements for their debt securities as fully private firms.

The structure of mortgage-backed securities from Fannie Mae and Freddie Mac are quite different from private-label securities because Fannie and Freddie put their corporate guarantees behind every dollar of mortgage-backed securities that they issue. By contrast, in the private label market, the securities are divided into different credit rating classes, or credit tranches. The implicit government guarantee that allows Fannie Mae and Freddie Mac to raise funds more cheaply also gives them the ability to attract the best credit and collateral risk mortgages to their mortgage pools; they can use these good risks to offset higher credit and collateral risks from other mortgages. In return for the funding advantage, Fannie Mae and Freddie Mac must provide funding in all places at all times. For example, Ambrose and Buttimer (2005) show that rural housing markets, which are less informationally rich than more thickly traded urban markets, are tied into capital markets through Fannie Mae and Freddie Mac. The private label market, on the other hand, relies on structured transactions that separate risks instead of pooling them, which induces the private market to give favorable treatment to lower risk places. The ability of Fannie Mae and Freddie Mac to avoid credit tranching avoids the payment of fees to investment banks and rating agencies (Frame and White, 2005). It also results in more homogenous and therefore more liquid securities. Indeed, in our view, one key to the array of choices being offered to mortgage borrowers is that, because of the funding advantage of Fannie Mae and Freddie Mac, low-risk borrowers are offered an appealing contract so they will participate in the same mortgage pool as higher-risk borrowers.[13] Otherwise, higher- and medium-risk borrowers might face a very different menu of mortgage options than lower-risk borrowers. The private label market would likely charge more to borrowers of

[13] The way in which Fannie Mae and Freddie Mac use their funding advantage to create broader pools can be viewed as a clever, if accidental, method for solving the Stiglitz and Weiss (1981) pooling problem in the mortgage context.

different risk categories. The pooling of risk through Fannie Mae and Freddie Mac extends the market to marginally credit worthy borrowers and crowds out risk-based lending to this market segment.

For interest rate risk, both the private label market and the agencies have the option to tranch, which they sometimes, but not always, exercise. With respect to credit risk, however, the private label market nearly always tranches, and Fannie and Freddie nearly always pool. The Fannie and Freddie pools are treated as homogeneous securities by investors. This pattern leads to deep markets and economies of scale that reduce costs to all borrowers, including those who are the best credit risks.

While the private label market can offer fixed-rate mortgages in the United States, they do so both at higher mortgage rates and with higher down payment requirements (Wachter, 2002).[14] Moreover, as mortgage securities become more heterogeneous, there is a danger that liquidity in the mortgage market would be reduced, particularly to certain types of borrowers and places.

Finally, during periods of financial duress, the risk-based differentials would increase in the absence of mortgage-backed securities, which provide a safe haven for investors. For example, in the immediate aftermath of the 1997–1998 financial crisis and in the aftermath of 9/11, interest rate spreads related to risk widened for many corporate bonds, but the risk spreads of Fannie and Freddie securities changed very little. Similarly, in the wake of the Long-Term Capital Management financial crisis in of 1998, volumes in many debt markets fell dramatically, while they did not do so in the residential mortgage market.[15] The fact that investors perceive that Fannie Mae and Freddie Mac have implicit government backing may well have something to do with the fact that markets for residential U.S. mortgages remain liquid even in times of financial distress. The differentials in mortgage options offered to low-risk borrowers relative to high- and medium-risk borrowers would likely increase significantly in periods of financial crisis.

In short, U.S. mortgage markets would probably look quite different in the absence of Fannie Mae and Freddie Mac. Not only would interest rates probably rise for borrowers, but locking in a mortgage interest rate in advance would become harder or impossible, the menu of mortgage options might divide as mortgage pools broke up into smaller pieces with different risk characteristics, the segmented pricing of mortgages by borrower credit risk would increase, and financial markets would have one less safe haven. Perhaps most important, an entirely private market could well become one that led to an increased reliance on adjustable-rate mortgages. Work from the IMF (2004)—along with the fact that household balance sheets would be mismatched in an adjustable-rate mortgage heavy world—suggests that such an outcome could lead to macroeconomic instability.

[14] Private label mortgage rates, already higher than the rates for Fannie Mae and Freddie Mac, might even be higher in the absence of Fannie and Freddie, which provide a benchmark and hedging instruments with which the private mortgage-backed securities market trades.

[15] Lehnert, Passmore and Sherlund (2005) are skeptical, but they also point out that Fannie and Freddie bought 75 percent of the mortgages issued in the aftermath of the Russian financial crisis. This is much higher than the companies' typical market share.

Does the Implicit Government Support of Fannie Mae and Freddie Mac Create Potential Risks that May Offset any Benefits They Provide?

The implicit government guarantees for Fannie Mae and Freddie Mac create moral hazard problems; that is, risky loans may be made in the assurance that the government will not allow a default to occur. Frame and White (2005) and Jaffe (2003) both emphasize the risk of allowing Fannie Mae and Freddie Mac to borrow at a lower-than-market interest rate and suggest either the need to void the implicit subsidy so that the institutions pay the market rate of interest or to make sure that they are sufficiently tightly regulated to avoid an interest rate induced financial crisis. Obviously, an explicit removal of the implicit government guarantee would also eliminate the funding advantage that allows Fannie Mae and Freddie Mac to create such broad pools for their mortgage-backed securities and would also eliminate the market for mortgage-backed securities as a safe haven in times of financial distress. Jaffe also suggests that interest rate risk can be well-regulated, although he fears that Fannie Mae and Freddie Mac are still not regulated in a sufficiently rigorous way.

Indeed, Fannie and Freddie have added to the anxiety over risks they might pose to the U.S. Treasury by displaying inadequate accounting and financial controls (Poole, 2003). Baker-Botts (2003) performed an investigation of Freddie Mac's accounting practices at the request of that company's board of directors and had this to say:

> The Company's disclosure practices, especially as regards sensitive transactions such as Linked Swaps and those designed as a response to FAS 133, tended to produce generalized disclosures of strategies, rather than transparent disclosures of transactions. As a result, disclosure processes and practices fell below the standards required of a registered public company.[16]

To give a similar flavor for Fannie Mae, a story in the *Wall Street Journal* on March 9, 2005, reported (Hagerty, 2005):

> Fannie Mae's regulator announced that it has instructed the mortgage company to correct "deficiencies" in its controls over accounting ledgers and other corporate records. The new requirements include the adoption of policies banning falsified signatures on accounting journal entries and limiting employees' ability to alter database records.

Both companies clearly failed to perform one of the most basic functions of a publicly traded company: that is, to report earnings correctly and according to generally accepted accounting practices. At the center of these reporting problems is accounting for the derivatives that they issue and use to manage their interest rate

[16] A "linked swap" is a swap that is linked to some rate of return in the marketplace—for example, a swap that pays LIBOR plus some margin in exchange for a fixed-rate payment would be a linked swap. FAS 133 is the financial accounting standard for derivatives.

and duration risks. These particular accounting rules are complicated and controversial. But it is vital for Fannie and Freddie to manage and to report their interest rate risks well, or they could fail as did savings and loans in the 1980s crisis. The accounting and disclosure infrastructure for Fannie Mae and Freddie Mac appears to have been inadequate.

These risks from Fannie Mae and Freddie Mac are real, but there are also ways in which these institutions reduce systemic risk for the U.S. economy. The continuing liquidity of the mortgage market in recent decades has been consistent with, and perhaps has contributed to, a long period of relative macroeconomic stability (Peek and Wilcox, 2003; Wachter and Zandi, 2004). The mortgage market's ability to withstand the stress of interest rate spikes and deliver capital has likely contributed to an attenuation of the business cycle. The ability of mortgage-backed securities to offer a safe haven in times of financial stress has already been mentioned. The International Monetary Fund (2004) pointed out that as more variable-rate mortgages are used to finance housing, the more volatile is the housing market, which can induce the credit risk that raises the chance of a systemic failure. Similarly, an illiquid housing market could lead to falling housing prices, which can increase credit risk, which could induce systemic failure. Any risk that the implicit government guarantees for Fannie Mae and Freddie Mac might bring on a systemic crisis must be weighed against their ability in other settings to advance the stability of the financial system.

Conclusion

The home mortgages available to borrowers in the United States have evolved over time into a broadly available menu of choices that is not available anywhere else in the world. We believe that this menu of choices for the overwhelming majority of borrowers is possible because the U.S. mortgage system—with the implicit government guarantee for Fannie Mae and Freddie Mac—has solved the problem of how to persuade low-risk borrowers to join with higher-risk borrowers in broad mortgage pools, which provide the basis for mortgage-backed securities which can then be sliced up in financial markets.

But the benefits to mortgage borrowers come with their own set of risks: namely, the risk that Fannie Mae and Freddie Mac will malfunction in a way that will either cost the federal government a lot of money, or lead to a systematic crisis in U.S. financial markets, or both. This risk is real. But the benefits from the current U.S. system of mortgage finance for borrowers and macroeconomic stability are also real and should not be lightly discarded.

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THE RISE, FALL, AND RETURN OF THE PUBLIC OPTION IN HOUSING FINANCE

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INTRODUCTION

The U.S. housing finance system presents a conundrum for the scholar of regulation, as it simply cannot be described using the traditional regulatory vocabulary. Regulatory cosmology has long had but a limited number of elements: direct command-and-control legislation; Pigouvian taxation and subsidies; tradable Coasean quantity permits; and regulation via litigation.

None of these traditional regulatory approaches, however, is adequate to describe the regulation of housing finance in the United States. Instead, to understand U.S. housing finance regulation, it is necessary to conceive of a distinct regulatory approach, namely that of the "public option"—having the government compete in the market place for the provision of goods and services. Understanding the use of the public option in housing finance regulation—and its limitations—is critical to understanding the regulatory failures that precipitated the financial collapse in 2008, and holds lessons for a revised housing finance regulatory system.

Since the New Deal (and with roots going back to at least World War I), the fundamental approach of the US housing finance regulation has been the "public option"—having the government compete in the market against private enterprises. By having the government as a market participant with substantial market power, the government has been able to set the terms on which much of the market functions. In particular, the government has assumed a variety of secondary market or insurance roles that have allowed it to regulate the mortgage origination market upstream via market power in the secondary market and insurance markets.[2]

The public option approach to regulation is hardly unique to housing finance. It appears, in various forms, throughout government, whether from the most quotidian local government functions such as trash collection and policing to the provision of public pools, recreation facilities, parks, schools, universities, mass transit, and roads the provision of payment systems, pensions (Social Security), deposit insurance, medical insurance (Medicare and Medicaid), and national security and, most recently, the controversial (and ultimately abandoned) proposed "public option" for health insurance.

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[2] *See* Adam J. Levitin, *Hydraulic Regulation: Regulating Credit Markets Upstream*, 26 YALE J. REG. 143 (2009) (discussing concept of hydraulic regulation of primary markets through regulation and manipulation of secondary markets).

In some of these cases, the government competes directly with private parties, such as the U.S. military competing for national security work, such as security for U.S. embassies and government personnel, against private contractors like Xe (formerly Blackwater), a situation not unlike that of medieval and early modern Europe where royal armies had to compete against mercenary or baronial forces or 17^{th}-19^{th} century public navies competing against privateers for taking prizes.

In other cases of public options, there is a segmentation of the market, with the government competing in (or as the sole competitor in) part of the market, while ceding other parts of the market to private parties. For example, in the District of Columbia, the municipality handles trash collection for 1-4 family residences, while private contractors handle larger multi-family structures and non-residential structures.

Note that the municipality could simply require residents, under penalty to law, to have their trash picked up and leave it to residents to figure out how or it could tax those who failed to have their trash picked up or it could subsidize residents who had their trash removed. Or the municipality could do nothing at all and rely on the market to encourage trash removal via property prices; properties buried in trash would see their value eroded (with obvious externalities on neighbors). Whatever the reasons for the municipality handling trash removal, the point is that it is hardly the only regulatory option for a municipality that wishes to have trash removed.

Relatedly, the use of a "public option" may be segmented by locality; municipal fire departments exist in some (predominantly urban) communities, while others (often suburban or rural communities) have private (volunteer) fire companies. Historically, however, the fire company market was completely private, and rival fire companies would compete violently for the right to put out blazes; the development of municipal fire departments represents a displacement of private competitors. In related ambulance services, however, private companies continue to compete with the ambulances provided by municipal fire departments. Segmentation can occur as the result of monopoly-granting legislation, an unlevel playing field that favors the public option, or because of private market failures that cede the field to public participants.

Sometimes the "public option" exists in a complementary relationship to private firms, such as the employment of private police forces by universities to supplement public police resources. And sometimes the public option is the provision of a public good, such as the provision of lighthouses.

There are many other examples of public options that could be adduced, and obviously there are significant differences among these arrangements. One could rightly question whether they are in fact all manifestations of the same phenomenon or distinct phenomena. As it stands, we lack the regulatory vocabulary to have a taxonomy of public options and government-in-the-market. Despite the widespread existence of various types of "public options," they remain a virtually untheorized phenomenon.[3]

This Chapter does not attempt to present a general theory of public options as a form of regulation. Instead, having noted the phenomenon of the public option as a regulatory approach, this Chapter examines the use of public options in housing finance. It does so by tracing the arc of housing finance regulation from the Depression to the present. In so doing, it shows how public options were adopted during the Depression. Many of these public options were intended to be short-term measures, filling what were hoped to be temporary gaps in the market. Yet they endured and remained the major regulatory framework for housing finance for decades. Starting in the late 1960s, however, the public option regulatory approach began to be undermined, first by the privatization of Fannie Mae and creation of Freddie Mac, then by the relaxation of the remaining command-and-control regulations on mortgage lending, and then by the emergence of a private securitization market. The result was that when a wholly private market in housing finance emerged, there was simply no effective regulatory framework in place to address the risks attendant to the market.

The collapse of the housing finance market in 2008 returned us to a world of inadvertent public options. Going forward, as we rebuild the housing finance market, it is important to consider how the combination of the traditional regulatory tools of command-and-control, Pigouvian taxation, quantity limitations, and litigation might be best deployed to ensure a stable, liquid housing finance market.

This Chapter commences with a discussion of the housing finance crisis that was part of the Great Depression. It then turns to a

[3] Adam J. Levitin, *Public-Private Competition in Payments: The Role of the Federal Reserve*, Georgetown Law and Economics Research Paper, No. 1420061, June 23, 2009 (identifying public options as a distinct regulatory tool); DAVID A. MOSS, WHEN ALL ELSE FAILS: GOVERNMENT AS THE ULTIMATE RISK MANAGER (2004); JEAN-JACQUES LAFONT & JEAN TIROLE, A THEORY OF PROCUREMENT AND REGULATION 637-653 (1993) (modeling public private competition incentives).

consideration of the Hoover and Roosevelt regulatory response, which was to create government institutions in the market, rather than engaging in direct regulation or Pigouvian taxation. The Chapter then traces the fate of the public option approach through the privatization of the public options and the emergence of a new form of private competition. It shows that while the market developed, the regulatory framework did not; housing finance regulation continued to rely on a public option approach even as there was no longer a public option. The result was a functionally unregulated space in which housing finance's endemic information and agency problems returned in a déjà vu of the Depression-era mortgages.

I. Housing Finance Crisis During the Depression

The shape of the U.S. housing market was substantially different before the Great Depression. First and foremost, prior to the Depression, homeownership rates were substantially lower than today. From 1900 to 1930, homeownership rates hovered around 46%, and then declined slightly during the Depression. Renting, rather than owning, was pre-Depression norm, and those who owned their homes often owned them free and clear of liens. The prevalence of renting and of free and clear ownership was larger a function of the scarcity of mortgage finance.

Mortgage finance was scarcer in pre-Depression America because of the structure of U.S. financial markets. Pre-Depression mortgages were funded by primarily by depository institutions (national and state-chartered banks and state-chartered savings institutions), life insurance companies, or by individuals directly. They were not funded by capital markets, and no secondary market of scale existed.

A. *Non-Geographically Diversified Funding and Lending*

The funding of mortgages through depositaries, life companies and individuals meant that pre-Depression housing finance market was intensely local, yet still vulnerable to national waves in the availability of financing. Interest rates and the availability of financing varied significantly by locality and region. This was because of the local nature of the lending base. Interstate banking restrictions limited the geographic scope of banks' activities,[4] and individuals—who held a third of all mortgage debt as late as 1939—only lent locally.[5] Life companies lent on a more national scale using correspondent relationships, but they were a limited part of the market. Accordingly, there was much greater

[4] McFadden Act

[5] John H. Fahey, *Competition and Mortgage Rates*, 15 J. LAND & PUB. UTILITY ECON 150 (1939) (Fahey was Chairman of the Federal Home Loan Bank Board)

mortgage availability in capital-rich regions like the East than in capital-poor regions like the South and West.[6] Moreover, the pre-Depression the economy as a whole was much more localized, and consumer credit was more sensitive to local economic conditions. The result was that mortgage financing was highly cyclical and geographically based.

B. Flighty Funding

Compounding the local nature of funding for many mortgage lenders was its flighty nature, which exposed them to a large asset-liability duration mismatch. The duration of lenders' assets—mortgages—was longer than the duration of their liabilities—deposits and life insurance policies. This exposed lenders to a liquidity risk if their liabilities could not be rolled over.

Both deposits and life insurance policies are particularly flighty forms of funding. Depositors can rapidly withdraw their funds from banks and thrifts, and life insurance policyholders can often demand the cash value of their policies. Moreover, both deposits and life insurance policies have shown themselves to be vulnerable to runs, in which one depositor's withdrawal of funds will trigger others or panics, in which the travails of one institution will spread to others. The result is the problem faced by George Bailey in *It's a Wonderful Life* when the Bailey Building and Loan Association's depositors demand their money back. George tries to explain to them that the money isn't in the vault—it's in their homes and can't be immediately liquefied.

The problem of flighty funding was a familiar one to US finance prior to the New Deal, but none of the solutions adopted were particularly effective. Consortiums of financial institutions attempted to arrange private cross-guarantees of each others obligations, such as that done by the New York Clearing House Association during the Panic of 1907, but these private arrangements only covered the institutions that were party to them. Thus, in 1907, the New York trust companies were not Clearing House members, and did not benefit from the cross-guarantee.

Individual states had guaranteed some types of bank obligations, such as notes, from as early as 1829, and federal deposit insurance was

[6] Lance Davis, *The Investment Market, 1870-1914: The Evolution of a National Market*, 33 J. ECON. HIST. 355, 392 (1961) (finding empirical confirmation of regional interest rate differentials for both short-term and long-term capital); Kenneth A. Snowden, *Mortgage Rates and American Capital Market Development in the Late Nineteenth Century*, 47 J. ECON. HIST. 671, 688-89 (1987) (finding regional home and farm mortgage interest rate variation in excess of predicted risk premia); Kenneth A. Snowden, *Mortgage Lending and American Urbanization, 1880-1890*, 48 J. ECON. HIST., 273, 285 (1988).

proposed in Congress starting in 1886. By the turn of the century, deposit insurance proposals were part of both major parties' Presidential platforms. Individual states began to adopt deposit insurance (the Democratic proposal to address the flightiness problem) starting in 1907, but its effectiveness was limited by the extent of the guarantee and the fiscal strength of states. In 1911, the federal government had authorized the U.S. Postal Service to offer passbook savings accounts, which were guaranteed by the government. Postal savings accounts ended up being used primarily by immigrant populations and had the ironic effect of exacerbating runs on private banks during the Depression because of their government guarantee and statutorily fixed 2% interest rate, which was well above market during much of the Depression.

C. Thin Secondary Markets

Before the Depression there was no national secondary home mortgage market. While individual lenders could contract with private investors, the norm was for originators to retain mortgages on their books. This meant that originators bore a liquidity risk, even if it was mitigated by the short duration of the loans. The liquidity and lending capacity problems were particularly acute for lenders with short-term liabilities like deposits, as a run on the bank would leave a balance-sheet solvent institution unable to cover its liabilities as they came due.

Attempts had been made prior to the Depression to establish secondary mortgage markets in the United States based on European models. By the mid-nineteenth century, deep secondary mortgage markets were well-established in both France (the state-chartered joint-stock monopoly *Crédit Foncier*) and the German states (cooperative borrowers' associations called *Landschaften* and private joint-stock banks in Prussia and Bavaria), and "[b]y 1900 the French and German market for mortgage-backed securities was larger than the corporate bond market and comparable in size to markets for government debt."[7] Although there were significant design differences in the European systems, they all operated on a basic principal—securities were issued by dedicated mortgage origination entities. Investors therefore assumed the credit risk of the origination entities. Because these entities' assets were primarily mortgages, the real credit risk assumed by the investors was that on the mortgages.

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[7] 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, 270 (1995).

The European systems survived because they ensured that investors perceived them as free of default risk. This was done through two mechanisms. First, there were close links between the mortgage origination entities and the state. Mortgage investors thus believed there to be an implicit state guarantee of payment on the securities they held. Second, and relatedly, the state required heavy regulation of the mortgage market entities, including underwriting standards, overcollateralization of securities, capital requirements, dedicated sinking funds, auditing, and management qualifications.[8]

A series of attempts were made between the 1870s and 1920s to create secondary mortgage markets.[9] Generally these secondary market efforts focused on farm or commercial mortgages. No major attempt was made at developing a secondary market for residential real estate. All failed, resulting in ever-larger scandals. The details of these attempts and their failures need not concern us here; it is enough to note a few commonalities. First, all were purely private enterprises; there was no government involvement whatsoever. Second, they were virtually unregulated, and what regulation existed was wholly inadequate to ensuring prudent operations. Third, they all failed because of an inability to maintain underwriting standards, as the loan originators had no capital at risk in the mortgages themselves, regulation was scant, and investors in the mortgage-backed bonds lacked the ability to monitor the origination process or the collateral. In contrast, successful European structures, "were either publicly financed or sponsored and were subject to intense regulatory scrutiny."[10]

The failure of the United States to develop a secondary mortgage market prior to the New Deal compounded the problem of locality in mortgage lending. A national secondary market would have mitigated lenders' lack of geographic diversification in funding and lending and enhanced lenders' liquidity. In the absence of a secondary market, lenders were forced to manage risk through loan products.

D. The Unavailability of Long-Term Financing, High LTV Lending, and Fully-Amortized Loans

The funding base for pre-Depression mortgages dictated the terms of the mortgages because of the risks that lenders—and their regulators—could tolerate. The typical pre-Depression mortgage was a

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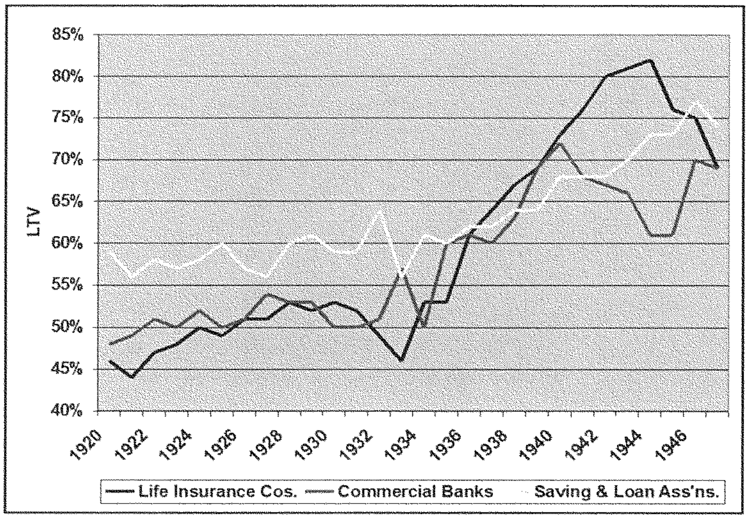
[8] *Id.* at 271-73.

[9] The 1870s saw a 44% increase in farm acreage and a 54% increase in the number of farms in the mid-continent states near the frontier. H. Peers Brewer, *Eastern Money and Western Mortgages in the 1870s*, 50 BUS. HIST. REV. 356, 356-57 (1976); Snowden, *supra* note 7, at 274-79.

[10] Snowden, *supra* note 7, at 263.

short-term, non-amortizing loan.[11] The ratio of the loan amount to the value of the collateral property (the loan-to-value ratio or LTV) was relatively low, meaning a high down payment was required for a purchase. Less than 50% downpayments were rare, [12] although mortgages from savings and loan associations had slightly lower downpayments. (See Figure 1.) Thus, D. M. Frederiksen reported that the average mortgage loan in 1894 was for between 35 and 40 percent of the property's value.[13]

Figure 1. Average Mortgage Loan to Value Ratio, 1920-1947[14]



The loans were also for short terms, typically five years or less. Frederiksen reported in 1894 an average loan lifespan 4.81 years. [15] There appears to have been some variance, however, based on type of lending institution; savings and loan associations extended longer-term credit, with contract lengths averaging around 10 years. (See Figure 2).

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[11] Richard H. Keehn & Gene Smiley, *Mortgage Lending by National Banks*, 51 BUS. HIS. REV. 474, 478-79 (1977); ALLAN G. BOGUE, FROM PRAIRIE TO CORN BELT 176 (1963) ("Most loans were repayable at the end of five years or by installments over a short term of years. The long-term amortized loan was not common in this period."). *See also* Richard Green & Susan M. Wachter, *The American Mortgage in Historical and International Context*, 19 J. ECON. PERSPECTIVES 93, 94 (2005).

[12] http://www.hud.gov/offices/hsg/fhahistory.cfm.

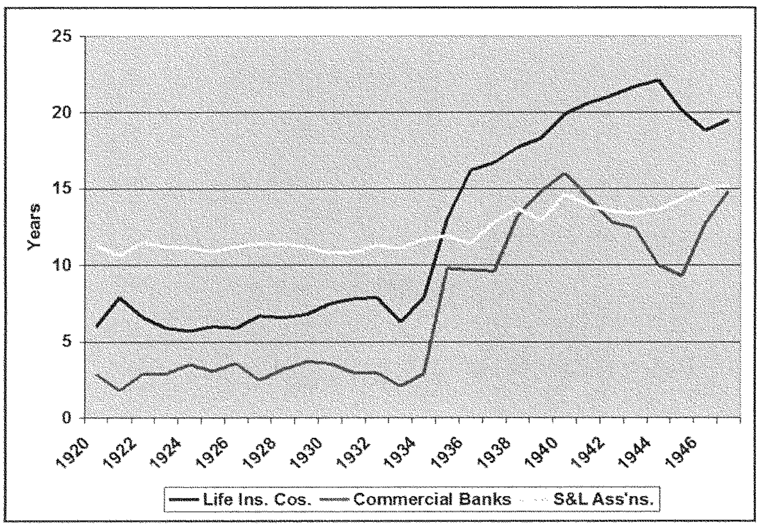
[13] D. M. Frederiksen, *Mortgage Banking in America*, 2 J. POL. ECON. 203, 204-205 (1894).

[14] LEO GREBLER *ET AL.*, *CAPITAL FORMATION IN RESIDENTIAL REAL ESTATE*, 503, Table O-6 (1956).

[15] Frederiksen, *supra* note 13, at 204-205.

The pre-Depression mortgage was generally short term albeit fixed-rate loan. The short term limited lenders' exposure to interest rate risk, but the fixed rate increased their interest rate risk exposure. If rates went up, the lender would find itself holding a below-market asset, while if rates fell, the borrower would refinance, but as indicated, the short term of the mortgage limited lenders' exposure, while increasing the borrowers' exposure. Given monetary instability in pre-Depression America, this was a significant risk, as inflation could quickly make a mortgage obligation unaffordable.

Figure 2. Average Contract Length of Mortgages on 1-4 Family Residences, 1920-1947[16]



The pre-Depression mortgage was also typically not fully amortizing—the borrower would make only periodic interest payments during the term of the mortgage, with the most or all of the principal due in a lump sum (a "balloon" or a "bullet") at the end. Again, savings and loan associations were more likely to make amortized mortgages than other lenders, "an adaptation of the concept of a continuing savings plan."[17] Most mortgaged homeowners did not have the cash to pay off the balance, so they would simply refinance the loan, frequently from the

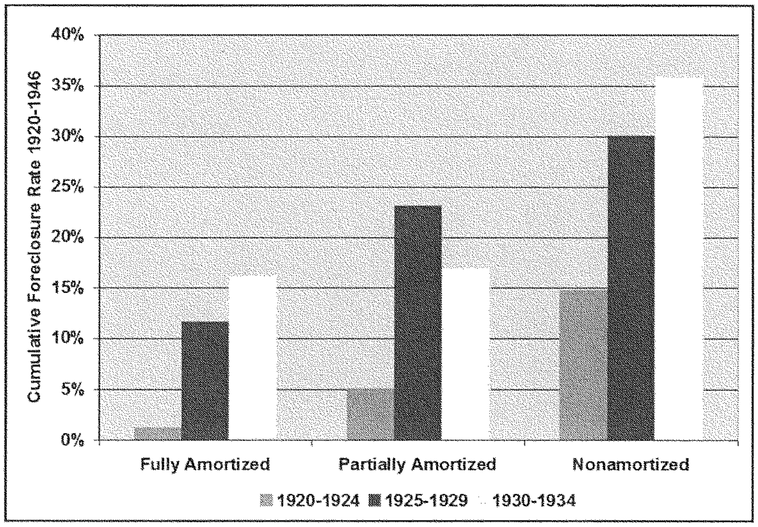
[16] GREBLER *ET AL.*, *SUPRA* note 14, 234, Table 67,

[17] Marc A. Weiss, *Marketing and Financing Home Ownership: Mortgage Lending and Public Policy in the United States, 1918-1989*, 18 BUS. & ECON. HIST. (2d Series) 109, 111 (1989).

same lender. This structure lowered the interest rate risk for the lending institution while raising it for the borrower.

The bullet loan structure made periodic mortgage payments more affordable. Yet because it was designed to be rolled over into a new loan, it always carried the risk that refinancing would not be possible. Not surprisingly, foreclosure rates were substantially higher on nonamortized or partially amortized loans.[18] (See Figure 3.)

Figure 3. Cumulative Foreclosure Rates 1920-1946 by Amortization and Loan Origination Year[19]



In the pre-Depression mortgage system, individual credit risk was fairly low because of the high down payments required. This made mortgage interest rates more affordable while making the home purchase less affordable. Although the homeowner might default due to a decline in income or disruption to cash flow or inability to refinance, there was likely to be a significant equity cushion in the property that would ensure that the lender would be able to get a full recovery in the event of a foreclosure, thus reducing the credit risk premium in the mortgage interest rate.

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[18] *See* RAYMOND J. SAULNIER, *URBAN MORTGAGE LENDING BY LIFE INSURANCE COMPANIES* 83, 85 (1950) (Also noting that "Amortization provisions are of most importance on loans made sufficiently long before a period of mortgage distress to permit repayments to reduce the principal substantially.").

[19] *See* SAULNIER, *SUPRA* note 18 at 140, Table B11 (1950).

Pre-Depression foreclosure rates were quite low; around .3% in 1929,[20] compared with an average of around 1% since 1978.[21] For 1920-1946, however, cumulative foreclosure rates were nearly double, for loans with LTV of 40% or more almost 20%[22] although they were lower for loans with lower LTVs.[23] Because the loans did not amortize, the LTV ratio did not decrease during the life of the loan.

In the event of a severe market downturn, such as the Great Depression, borrowers could find themselves with a depleted equity cushion, such that they would not be able to refinance. In such a case, the borrowers would be faced with having to make the large balloon payment out of pocket, and likely default. Moreover, because many loans were adjustable rate, a sudden increase in rates could leave many borrowers unable to afford their monthly payments. Borrower exposure to interest rate risk increased lender exposure to credit risk. The default risk engendered by adjustable rates, particularly in a volatile monetary environment, offset the protection of high LTV ratios.

E. Lack of an Effective Market-Clearing Mechanism

A final problem in the pre-New Deal mortgage market was not patent until the Great Depression: the lack of an effective market-clearing mechanism for underwater mortgages. The Great Depression brought with it a foreclosure crisis, a decline in home construction, and a precipitous drop in mortgage finance availability due to financial institution failure and retrenchment. New housing starts dropped 90% from their peak in 1925 to 1933,[24] contributing to unemployment in home building and related industries. As unemployment soared, many homeowners found themselves strapped to make mortgage payments.

Moreover, the Depression's credit contraction left homeowners with bullet loans unable to refinance and facing unaffordable balloon payments. The predominant mortgage structure exposed homeowners to interest rate risk. Interest rate risk metastasized into credit risk. Home prices dropped as much as 50%, half of all residential mortgages were in

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[20] *See ID.* at 80.

[21] MBA National Delinquency Surveys.

[22] *See* SAULNIER, *SUPRA* note 18 at 89, Table 26 (1950) (9.5% cumulative foreclosure rate for LTV<40%, 18.6% cumulative foreclosure rate for LTV≥40%). Many borrowers also had junior mortgages on their properties, increasing the cumulative LTV ratio.

[23] *See ID.* at 91, Table 27 (1950) (providing data on foreclosure loss rates for life insurance companies).

[24] Weiss, *supra* note 17, at 112.

default in 1933,[25] and at the worst of the Depression, nearly 10% of homes were in foreclosure.[26]

The fall in home prices during the Depression was a problem because the only way for the market to clear was through foreclosure. Absent foreclosure, lenders continued to carry non-performing assets on their books, making creditors unsure of the lenders' real financial position and unwilling to extend credit to them. Similarly, the lenders themselves retrenched in the face of non-performing, underwater assets. Foreclosures cut through the fog of non-performing assets, but they were—and are—a slow clearing mechanism with many potential externalities—and states' Depression-era legislation aimed to make them even slower.

II. THE NEW DEAL AND THE INADVERTENT RISE OF THE PUBLIC OPTION

The New Deal response to the market failures in the housing finance market was for the federal government to create new institutions that were active as market participants, offering liquidity and insurance to financial institutions. This was done through several new institutions: the Federal Home Loan Banks, the Federal Deposit Insurance Corporation, the Federal Savings and Loan Insurance Corporation, the Home Owners Loan Corporation, the Federal Housing Authority, the Reconstruction Finance Corporation, the Federal National Mortgage Corporation (Fannie Mae), and later the Veterans Administration.

These institutions assisted in the provision of adequate housing; helped to spur economic recovery, by encouraging the residential construction industry; and helped to rejuvenate financial institutions by improving their balance sheets and easing cash flows to enable them to make more loans. And yet their creation was entirely reactionary. Each of these institutions was created as a response to a specific perceived market problem, and most were intended to be temporary stabilization devices that would hold the gap until the private market revived. Despite the inadvertent creation of a set of public options in housing finance, they remained the dominant regulatory mode, although their effectiveness started to erode by the 1990s.

The New Deal regulatory response to the market failures in the housing market is notable for what it did *not* do. It did not proceed

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[25] Weiss, *supra* note 17, at 112.

[26] Richard Green & Susan M. Wachter, *The American Mortgage in Historical and International Context*, 19 J. ECON. PERSPECTIVES 93, 94-95 (2005).

through command-and-control regulation. For example, it did not prohibit non-amortizing mortgages. Nor did it contain individual mandates for the purchase of private mortgage insurance. Similarly, it did not proceed through the Internal Revenue Code by taxing disfavored mortgage products (such as non-amortized or uninsured mortgages). Instead, the Hoover-Roosevelt response was to use government as a gap-filler in the market: where the market did not produce services and products, the government would.[27] Interstitial government.

The Hoover-Roosevelt response involved the creation of four distinct public options.[28] These pieces were not part of a master plan devised beforehand. The initial two components were responses to different exigencies and interest groups, while the later two were responses to the problems created by the first two components.

A. Liquidity and Diversification: FHLB

First, in 1932, Congress created the Federal Home Loan Bank (FHLB) system, a credit reserve system modeled after the Federal Reserve, with 12 regional FHLBs mutually-owned by their member institutions and a central Federal Home Loan Bank Board to regulate the system.[29] Membership in the regional FHLBs was initially limited to safe and sound savings and loan associations, building and loan associations, savings banks, and insurance companies that were in the business of making long-term loans.[30] Thus, commercial banks—which could joint the Federal Reserve's discounting system—were excluded from the FHLB system. The Federal Reserve at this time could not make advances against mortgage collateral.[31]

The FHLBs' provided liquidity to mortgage lenders through the rediscounting of mortgages, meaning lending against mortgage

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[27] There was some precedent to this in the housing space; during World War I, the industrial boom in war production lead to a rapid influx of rural residents to urban industrial areas, where there was inadequate housing stock. U.S. Housing Corporation was created to build affordable housing stock for war production workers.

[28] This is not meant to imply that these four pieces were the entirety of federal involvement in the housing market. For example, the Emergency Relief and Construction Act of 1932 authorized the Reconstruction Finance Corporation to make loans to corporations formed to provide low income housing or urban renewal. Emergency Relief and Construction Act of 1932, 72 P.L. 302 § 201(a)(2); 72 Cong. Ch. 520; 47 Stat. 709, 711 (July 21, 1932).

[29] Federal Home Loan Bank Act, 72 P.L. 304; 72 Cong. Ch. 522; 47 Stat. 725 (July 22, 1932).

[30] Federal Home Loan Bank Act, 72 P.L. 304 §4(a); 72 Cong. Ch. 522; 47 Stat. 725, 726 (July 22, 1932).

[31] Paul Matthew Stoner, *The Mortgage Market—Today and After World War I*, 19 J. OF LAND & PUB. UTILITY ECON. 224, 227 (1943). Starting in 1974, the Federal Reserve was permitted to rediscount mortgages, like the FHLBs. The Emergency Home Purchase Assistance Act of 1974, P.L. 93-449, § 5, 88 Stat. 1368 (Oct. 18, 1974), *codified at* 12 U.S.C. § 347b(a) (second paragraph).

collateral. FHLB rediscounting was initially restricted to lending against long-term mortgages with maturities between 5 and 15 years[32] and up to the lesser of 60% of the mortgage loan principal or 40% of the property value.[33] Maximum property values were also prescribed for eligible collateral.[34] The FHLBs funded their own operations by issuing bonds, for which they were jointly and severally liable.[35] The FHLBs debt was not backed by the federal government, although an implicit guarantee might well have been assumed.[36]

The FHLB system created a secondary market for mortgages in the U.S. solved the problems of locality in mortgage lending. Whereas mortgage lenders were geographically constrained in both their lending and funding bases, the FHLB system provided a method for diversifying geographic risk in lending and tapping a national (or international) funding base.

Starting in 1933, the FHLB system also assumed regulatory oversight of the new federal savings and loan associations authorized by the Home Owners' Loan Act.[37] This new type of lending institution was to promote mutual thrifts for savings and mortgage lending. The Home Owners' Loan Act limited federal S&L lending activity: all lending had to be against real estate, and loans beyond 15% of total assets had to be secured by first liens on properties located within 50 miles of the S&L's

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[32] 12 U.S.C. § 1421(a)(1)(C) (restricting FHLB membership eligibility to institutions making long-term loans, and deferring to Federal Home Loan Bank Board discretion on what is long-term); 12 C.F.R. § 925.1 (defining long term as longer than five years); Federal Home Loan Bank Act, 72 P.L. 304 §10(b); 72 Cong. Ch. 522; 47 Stat. 725, 732 (July 22, 1932) (mortgages with more than 15 years remaining to maturity ineligible as collateral for FHLB advances). The 15 year limit was gradually extended to 30 years and then abolished. 74 P.L. 76; 74 Cong. Ch. 150; 49 Stat. 293, 295 (May 28, 1935) (extending term to 20 years); 80 Cong. Ch. 431; 80 P.L. 311; 61 Stat. 714 (Aug. 1, 1947) (extending term to 25 years); 88 P.L. 560; 78 Stat. 769, 805 (Sept. 2, 1964) (extending term to 30 years); 97 P.L. 320; 96 Stat. 1469, 1507 (Oct. 15, 1982) (abolishing term limitation).

[33] Federal Home Loan Bank Act, 72 P.L. 304 §10(a)(1); 72 Cong. Ch. 522; 47 Stat. 725, 731 (July 22, 1932).

[34] Federal Home Loan Bank Act, 72 P.L. 304 §10(a)(1); 72 Cong. Ch. 522; 47 Stat. 725, 731 (July 22, 1932).

[35] Federal Home Loan Bank Act, 72 P.L. 304 §11(f); 72 Cong. Ch. 522; 47 Stat. 725, 734 (July 22, 1932), *codified at* 12 U.S.C. § 1431(b)-(c).

[36] Federal Home Loan Bank Act, 72 P.L. 304 §15; 72 Cong. Ch. 522; 47 Stat. 725, 736 (July 22, 1932), *codified at* 12 U.S.C. § 1435 ("All obligations of Federal Home Loan Banks shall plainly state that such obligations are not obligations of the United States and are not guaranteed by the United States.").

[37] Home Owners' Loan Act of 1933, 73 P.L. 43 § 5(c); 73 Cong. Ch. 64; 48 Stat. 128, 132 (June 13, 1933).

home office and with a property value cap.[38] Federal thrifts were also restricted to making only fixed-rate loans.[39]

B. Federal Deposit Insurance: FDIC and FSLIC

Oversight authority over the federal S&Ls included resolution authority for failed institutions.[40] Resolution authority was bolstered in 1934 with the creation of the Federal Savings and Loan Insurance Corporation (FSLIC).[41] FSLIC provided deposit insurance for savings and loans, just as the Federal Deposit Insurance Corporation (FDIC), created in 1932, provided for commercial banks. Deposit insurance was critical because it helped depositary institutions address the duration mismatch between their assets (often long term) and liabilities (short-term deposits). Deposit insurance helped make deposits less flighty and thereby enabled depositaries to better manage maturities without keeping significant liquid assets on hand.

C. Market Clearing: HOLC

Faced with a growing mortgage default problem, Congress responded in 1933 by authorizing the FHLBB to create the Home Owners' Loan Corporation (HOLC), a U.S. government corporation,[42] authorized to refinance troubled mortgages. HOLC purchased defaulted mortgages from financial institutions in exchange for tax-exempt 4% 18-year bonds.[43] The financial institutions had to take a haircut on the refinancing, as HOLC would loan up to the lesser of 80% of LTV (but using a generous appraisal standard) or $14,000.[44] HOLC then restructured the mortgages into 15-to-20-year, fixed-rate, fully amortized obligations at 5% interest rates. This significantly reduced mortgage

[38] Home Owners' Loan Act of 1933, 73 P.L. 43 § 5; 73 Cong. Ch. 64; 48 Stat. 128, 132-33 (June 13, 1933).

[39] CITE REGS ON THIS.

[40] Home Owners' Loan Act of 1933, 73 P.L. 43 § 5(d); 73 Cong. Ch. 64; 48 Stat. 128, 133 (June 13, 1933).

[41] National Housing Act, Title IV, 73 P.L. 479 § 402; 73 Cong. Ch. 847; 48 Stat. 1246, 1256 (June 27, 1934).

[42] Home Owners' Loan Act of 1933, 73 P.L. 43 § 4(a)-(b); 73 Cong. Ch. 64; 48 Stat. 128, 129 (June 13, 1933).

[43] C. LOWELL HARRISS, *HISTORY AND POLICIES OF THE HOME OWNERS' LOAN CORPORATION* **11** (1951). Home Owners' Loan Act of 1933, 73 P.L. 43 § 4(d); 73 Cong. Ch. 64; 48 Stat. 128, 130 (June 13, 1933).

[44] Snowden, *supra* note 7, at 291; C HARRISS, *SUPRA* note 43, at PIN; Home Owners' Loan Act of 1933, 73 P.L. 43 § 4(d); 73 Cong. Ch. 64; 48 Stat. 128, 130 (June 13, 1933).

payments by allowing borrowers to pay off the mortgages over a long term.[45] HOLC originated and serviced all of its mortgages in-house.

HOLC received applications from 40% (!) of all residential mortgagors in its first year of operation and refinanced half of them.[46] HOLC resulted in a sudden and massive government entrance into the mortgage market, resulting in the government directly holding one in ten mortgages. Nonetheless, "[i]t was well understood that in the H.O.L.C. no permanent socialization of mortgage lending was intended and no attempt to preserve home ownership irrespective of public cost."[47] Therefore, HOLC "did not serve to divide opinion on any fundamental issues. Creditors were relieved of a crushing weight of frozen assets in a time of great stress, and debtors obtained more favorable credit terms than had ever before prevailed in this country."[48] HOLC, then, represented a temporary public option, but the standards it set—long-term, fixed-rate, fully-amortized mortgages—became ingrained in U.S. housing finance.

Because HOLC would not refinance at 100% LTV, HOLC refinancings required consent of the existing mortgagee. At first, the federal government guaranteed only the timely payment of interest on HOLC securities, but not repayment of principal. Lenders were reluctant to accept HOLC refinancing, as they were both taking an instant haircut and assuming the credit risk of HOLC, whose assets were, by definition, a bunch of lemon loans.[49] Therefore, in order to facilitate HOLC refinancings, the federal government began to guarantee the principal on HOLC securities too,[50] and HOLC securities eventually traded at par.[51]

While HOLC resulted in a sudden and massive government entrance into the mortgage market—within a year it owned over 10% of all mortgages—"It was well understood that in the H.O.L.C. no permanent socialization of mortgage lending was intended and no

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[45] HARRISS, *SUPRA* note 43, at ???. Home Owners' Loan Act of 1933, 73 P.L. 43 § 4(d); 73 Cong. Ch. 64; 48 Stat. 128, 130 (June 13, 1933). The interest rate on all HOLC loans was originally 5%, but was reduced in October 1939 to 4.5%. GREBLER *ET AL.*, *SUPRA* note 14, at 257.

[46] Snowden, *supra* note 7, at 292; HARRISS, *SUPRA* note 43

[47] David M. French, *The Contest for a National System of Home-Mortgage Finance*, 35 AM. POL. SCI. REV. 53, 54 (1941).

[48] *Id.*

[49] Snowden, *supra* note 7, at 291-92.

[50] Home Owners' Loan Act of 1933, 73 P.L. 43 § 4(c); 73 Cong. Ch. 64; 48 Stat. 128, 129-30 (June 13, 1933) (guaranteed as to interest); Home Owners' Loan Act of 1933, Amendments, 73 P.L. 178; 73 Cong. Ch. 168; 48 Stat. 643 (April 27, 1934) (guarantee as to principal and interest).

[51] *Id.*

attempt to preserve home ownership irrespective of public cost."[52] Therefore, HOLC "did not serve to divide opinion on any fundamental issues. Creditors were relieved of a crushing weight of frozen assets in a time of great stress, and debtors obtained more favorable credit terms than had ever before prevailed in this country."[53] HOLC represented a deliberately temporary public option to help mortgage finance markets clear other than through foreclosure.

HOLC wound down by 1951, but it had changed the facts on the ground in four major ways. First, it had forced a market clearing in the U.S. housing market. Second, it had turned a large pool of mortgages into marketable securities.[54] Third, it had set the long-term, fully amortized, fixed-rate mortgage as the federal government standard and demonstrated its feasibility.[55] The HOLC use of the long-term, fully amortized, fixed-rate mortgage, along with the creation of the FHLB system, marked the government's practice of supporting "the practice of the savings and loan associations of making long-term amortized first mortgage loans with relatively small down payments and modest monthly payments."[56] As Marc A. Weiss has noted, HOLC, along with "other New Deal programs adapted the S&L model and vastly extended it to a large number and wide range of financial institutions, increasing the length of first mortgage loans from 3 to 30 years, decreasing the down payments from 50% to 10% or less, and significantly lowering interest rates."[57] And fourth, HOLC standardized many mortgage lending procedures, including standardized national appraisal methods, mortgage forms, and origination, foreclosure, and REO management processes.[58] The government's entrance into the mortgage market as direct lender via HOLC radically reshaped the U.S. mortgage market.

The HOLC created the template for a national mortgage market out of necessity, not forethought. HOLC rapidly made the federal government the largest single mortgagee in the United States. The federal government did not want to hold the HOLC-modified mortgages

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[52] David M. French, *The Contest for a National System of Home-Mortgage Finance*, 35 AM. POL. SCI. REV. 53, 54 (1941).

[53] *Id.*

[54] *Id.* at 292.

[55] KENNETH T. JACKSON, *CRABGRASS FRONTIER: THE SUBURBANIZATION OF THE UNITED STATES* 196 (1985).

[56] Marc A. Weiss, *Own Your Own Home: Housing Policy and the Real Estate Industry*, paper presented to the Conference on Robert Moses and the Planned Environment, Hofstra University, June 11, 1998, at 5.

[57] *Id.*

[58] Peter M. Carrozzo, *A New Deal for the American Mortgage: The Home Owners' Loan Corporation, the National Housing Act, and the Birth of the National Mortgage Market*, 17 U. MIAMI BUS. L. REV. 1, 23 (2008).

long-term because of the default and interest rate risk, as well as the political liability of the government having to conduct foreclosures on defaulted HOLC loans.[59] Therefore the government hoped to sell the HOLC-modified loans back into the private market.

There was little market appetite for this risk on these new long-term, fixed-rate, fully-amortized products featuring borrowers with recent defaults, especially in the Depression economy. Therefore, to make the mortgages marketable, the federal government had to provide credit enhancement. The government was thus willing to assume the credit risk on these mortgages, if private investors would assume the interest rate risk.

D. Mortgage Insurance: FHA and VA

The vehicle through which the government assumed mortgage credit risk while leaving borrowers with interest rate risk was federal mortgage insurance from the Federal Housing Authority (FHA). The FHA, a government agency created in 1934, was mandated to insure payment of principal and interest on mortgages in exchange for a small insurance premium charged to the originator and passed on to the borrower.

Because of the credit risk assumed by FHA, FHA insurance was only available for loans meeting certain characteristics. The maximum interest rate permitted on FHA-insured mortgages (exclusive of the insurance premium) was originally 5%.[60] FHA also required that mortgages be fixed rate and fully amortized.[61]

FHA was also willing to insure long-term and (for the time) high LTV mortgages. At first, FHA would insure loans with terms up to twenty years and 80% LTV, but after the 1937 recession, terms were liberalized to provide construction stimulus.[62]

FHA underwriting terms were modeled on the terms of HOLC refinanced mortgages, but were later liberalized. Eventually FHA was

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[59] HOLC exercised extreme forbearance on defaults, was slow to foreclose, and rarely took or sought to collect deficiency judgment. HOLC default management was social work-inspired with the aim of rehabilitating the homeowner, rather than maximizing value for HOLC. HARRISS, *SUPRA* note 44, at ???.

[60] GREBLER *ET AL.*, *SUPRA* note 14, at 257. FHA authority to restrict maximum interest rates of FHA-insured loans lapsed in 1983. 12 U.S.C. § 1709–1. Repealed. Pub. L. 98–181, title IV, § 404(a), Nov. 30, 1983, 97 Stat. 1208. It was later reduced to 4.5% and then 4%, and then raised back to 4.5%. GREBLER *ET AL.*, *SUPRA* note 14, at 257.

[61] 12 U.S.C. § 1709(b)(4); 24 C.F.R. § 203.17(c)(2 (amortization). 12 C.F.R. § 203.49 (permitting insurance of adjustable rate mortgages, but only as of June 6, 1984, 49 Fed. Reg. 23584.

[62] French, *supra* note 47, at 63.

willing to insure up to 97% LTV and 30-year terms (and even 40 years on certain property types),[63] thereby creating a market in long-term and high LTV loans.

FHA insurance was only available for institutional lenders, not individuals.[64] The long-term impact of the FHA's exclusion of non-institutional lenders was to almost fully institutionalize the mortgage market. [65]

Because of the credit risk it assumed, FHA had to continue the work of HOLC in developing standard national appraisal and property management procedures. The methods that FHA developed acquired widespread acceptance in the mortgage industry as a whole.[66]

FHA-insured loans were designed to assist in housing affordability. They were not, however, designed to expand homeownership to the poor, but they were designed to be a *middle-class* affordability product. Low down payment requirements and long terms more than offset the monthly payment increase from full amortization, and rate caps further ensured affordability. The government's assumption of credit risk created a cross-subsidy among riskier and less risky borrowers. Although FHA-insured loans were geared toward affordability, they offered benefits to both borrowers and lenders. Borrowers were insulated against mortgage payment risk since rates would not be impacted by market shocks, while lenders were protected against default risk because of the government guarantee. FHA insurance, then reallocated the bundle of risks attendant to a mortgage loan. The government and the borrower split the credit risk, while the lender took the interest rate risk. Of course the taxpayer stood behind the government risk retention.

In order to ensure realization of the affordability benefits of FHA-insured mortgages, it was necessary to free financial institutions from legal restrictions on their lending activities. Thus, FHA-insured loans were exempt from the LTV and maturity restrictions of the National Bank Act.[67] FHA also embarked on a successful campaign to get all 48 state legislatures to amend their banking and insurance

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[63] GREBLER *ET AL.*, *SUPRA* note 14, at 257-58

[64] *ID.* at 246.

[65] *ID.*

[66] Ernest M. Fisher, *Changing Institutional Patterns of Mortgage Lending*, 5 J. FIN. 307, 311 (1950).

[67] GREBLER *ET AL.*, *SUPRA* note 14, at 246-47

regulations to permit state-chartered institutions to originate and hold all FHA-insurable loans.[68]

Notably, the removal of state mortgage lending restrictions was done in concert with the creation of new federal restrictions and standards. Thus, the Home Owners' Loan Act's exemption of federally-chartered thrifts from state usury laws[69] must be seen in the context of the FHA-insurance interest rate cap. The FHA-insurance interest rate cap served as a federal usury law for mortgages. It directly limited rates on FHA-insured loans,[70] and it indirectly limited rates on conventional loans through competition between FHA and conventional products. HOLA preemption was not a policy statement against usury laws, but a harmonization of them to enable a new federal mortgage product that had its own functional usury limit in FHA underwriting terms.

The FHA insurance system was a response to several problems. First, it was a reaction to the government finding itself a major mortgagee as the result of the HOLC refinancings. The government hoped to be able to sell the HOLC refinanced mortgages to private investors, but no investors would take the credit risk on the HOLC mortgages. Offering a credit guarantee of the mortgages was the only way to move them off the governments' books. Second, the government was hoping to attract more capital into the battered mortgage sector. The FHLB system and FSLIC insurance encouraged S&L mortgage lending, but to encourage commercial bank capital deployment in the mortgage sector, more was needed. Commercial banks were reluctant to become deeply committed to mortgages not least because of the illiquidity of mortgage assets.

Standardization via FHA insurance was intended to transform mortgages into more liquid assets. Notably, FHA insurance was not originally intended as a long-term intervention in the housing market—hence the original temporary duration of the Treasury guarantee of FHA debentures. Instead, FHA was intended to deal with the problem of unloading the pool of HOLC mortgages and jump-starting the housing sector. Only when it became apparent that the sector needed longer-term care did FHA evolve into an on-going guarantee program to ensure greater housing affordability going forward.

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[68] Adam Gordon, *Note: The Creation of Homeownership: How New Deal Changes in Banking Regulation Simultaneously Made Homeownership Accessible to Whites and Out of Reach for Blacks*, 115 YALE L.J. 186, 194-95, 224 (2005). The authors know of no parallel situation in which a federal program necessitated the revision of all states' laws.

[69] 12 U.S.C. § 1463(g).

[70] Fees were not covered, however. Verify—See Fahey article...

FHA insurance requirements along with HOLC refinancings played a major role in standardizing mortgage terms. The importance of standardization cannot be overstated because it was the precondition for the development of a secondary mortgage market. Secondary market are built around liquidity, and non-standard instruments are not liquid because each individual instrument must be examined, which adds transaction costs.

FHA insurance also supplied a second necessary precondition for a secondary market—the elimination of credit risk for investors. A secondary mortgage market cannot function unless credit risk is perceived as negligible or monitorable. Elimination, or at least standardization of credit risk, is itself part of standardizing the instruments to trade in a secondary market; as long as there is heterogeneous credit risk among mortgages, secondary market liquidity will be impaired. As economic historian Kenneth Snowden has observed:

> The key to successful securitization is to issue marketable assets only on the default-free cash flow implicit in the underlying mortgage pool—for uninformed investors will be unwilling to share any of the risk associate with default. Broad and thick secondary markets arise for mortgage-backed securities like there, and they trade at yields comparable to government bonds. Secondary markets are much thinner, on the other hand, when the entire cash flow from the underlying mortgage is securitized or when the default insurance component is only partially split off. In the extreme, mortgage-backed securities that carry default risk may not be marketable at all.[71]

Thus, in earlier secondary market experiments, credit risk on the mortgages, which investors could not easily ascertain, was perceived as being eliminated via sureties, as with the mortgage guarantee participation certificates or the single-property real estate bond houses. As early as 1943, Paul Matthew Stoner, the FHA's Assistant Director for Statistics and Research had recognized this. He argued that FHA insurance was necessary to replace the discredited private mortgage guarantee certificate system that had collapsed in scandal with the

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[71] Snowden, *supra* note 7, at 266.

Depression.[72] For capital markets to fund mortgages, credit risk had to be neutralized (or at least perceived as such).

FHA mortgages were sufficiently standardized in their terms and credit risk to allow for an institutional market in them.[73] Thus, as economists Leo Grebler, David Blank, and Louis Winnick have noted:

> Government insurance of residential mortgage loans has created a debt instrument that can be shifted easily from one lender to another. From the lender's point of view, government insurance endows mortgage loans with greater uniformity of quality that has ever been the case before, and it reduces the necessity for detailed examination that usually accompanies the transfer of loans from one mortgagee to another. As a result, an active 'secondary market' for FHA and VA loans has developed, which in turn has widened the geographical scope of the market for mortgage loans and given it some of the characteristics of national capital markets.[74]

FHA insurance alone, however, was not sufficient for a secondary mortgage market to develop. For that, the final New Deal innovation, Fannie Mae, was required.

E. Liquidity Again: FNMA

Investors had little appetite for buying individual mortgages in the secondary market, even if insured, because of the liquidity and interest rate risk involved as well as the transaction costs of diligencing individual mortgages. Therefore, the National Housing Act of 1934 also contained the fifth element of the housing finance overhaul. It provided for a federal charter for national mortgage associations to purchase these insured mortgages at par and thus create a secondary mortgage market.[75] The goal was to create a secondary market that would encourage mortgage originators to make new loans by allowing them to capitalize on future cash flows through a sale of the mortgages to the mortgage associations, which would fund themselves by issuing long-term fixed-rate debt with maturities similar to those of the mortgages.

The federal national mortgage association charter was made available to all comers; the hope was to attract private risk capital to

[72] Stoner, *supra* note 31, at 228.

[73] French, *supra* note 47, at 63.

[74] GREBLER *ET AL.*, *SUPRA* note 14, at 252-53.

[75] National Housing Act of 1934, Title III, 73 P.L. 479 § 402; 73 Cong. Ch. 847; 48 Stat. 1246, 1252 (June 27, 1934).

make a secondary market. There were no applications for the federal national mortgage association charter, however.

Therefore, the Roosevelt administration proceeded to create its own secondary market entity. This was first done through the Reconstruction Finance Corporation (RFC), the so-called "fourth branch" of government during the New Deal, a government corporation that was active in many areas of the market as a financier because of the unwillingness of private institutions to lend. RFC created a subsidiary, the Reconstruction Finance Corporation Mortgage Company (RFCMC), a Maryland state corporation; the RFCMC did not utilize the federal national mortgage association charter created by the National Housing Act. The RFCMC purchased FHA-insured mortgages, but only on existing properties.[76] The reasons for this limitation in activity are not clear.

When still no applications for a federal national mortgage association charter were forthcoming by 1938, the RFC created another subsidiary under the federal charter provisions, the Federal National Mortgage Association of Washington (later the simply the Federal National Mortgage Association, and now Fannie Mae).[77] Fannie's original name indicated the Roosevelt Administration's lingering hope that private capital would emerge to support other federal national mortgage associations. Fannie Mae was originally a wholly-owned subsidiary of the Reconstruction Finance Corporation, itself a U.S. government corporation. Unlike RFCMC, Fannie Mae originally purchased FHA-insured mortgages on new construction.[78]

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[76] JAMES S. OLSON, *SAVING CAPITALISM: THE RECONSTRUCTION FINANCE CORPORATION AND THE NEW DEAL, 1933-1940*, 196 (1988). The RFCMC was intended to make loans against income producing properties, like hotels and apartment complexes, as well as to support a market in FHA-insured loans. *See* CAROL ARONVICL, *CATCHING UP WITH HOUSING* 88 (1936); OFFICE OF WAR INFORMATION, DIVISION OF PUBLIC INQUIRIES, UNITED STATES GOVERNMENT MANUAL 435-36 (1945), *at http://ibiblio.org/hyperwar/ATO/USGM/index.html#contents*.

[77] *See* 12 U.S.C. § 1716, listing purposes of Fannie Mae charter as:

(1) provide stability in the secondary market for residential mortgages;

(2) respond appropriately to the private capital market;

(3) provide ongoing assistance to the secondary market for residential mortgages (including activities relating to mortgages on housing for low- and moderate-income families involving a reasonable economic return that may be less than the return earned on other activities)

by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for residential mortgage financing;

(4) promote access to mortgage credit throughout the Nation (including central cities, rural areas, and underserved areas) by increasing the liquidity of mortgage investments and improving the distribution of investment capital available for residential mortgage financing; and

(5) manage and liquidate federally owned mortgage portfolios in an orderly manner, with a minimum of adverse effect upon the residential mortgage market and minimum loss to the Federal Government

[78] OLSON, *supra* note 76, at 196.

Fannie purchased mortgages from financial institutions in exchange for its debt securities, which were backed (at this time period) by the full faith and credit of the United States government. Fannie would either keep the mortgage loans in its own portfolio, against which it issued bonds, which it used to fund its operations, or resell the loans whole to private investors. This meant that Fannie was able to pass on some of the interest rate risk on the mortgages to its bondholders, as their bonds had fixed-rate coupons. Neither the Fannie bondholders nor the lenders that sold mortgages to Fannie in exchange for its debt securities assumed any credit risk, however, because Fannie was a government corporation.

Fannie's activities before World War II were fairly limited. In 1938, it purchased $38 million of mortgages, compared with $36 million purchased by RFCMC.[79] Its pre-war activity peak was in 1939, when it purchased $88 million in mortgages.[80] Not until a decade later did Fannie surpass this level of activity.[81]

During World War II Fannie Mae largely ceased purchase operations. In 1942, RFCMC and Fannie seem to have assumed the same (limited) activities.[82] The U.S. mortgage market was moribund during the war, and did not need government support because the wartime demand for mortgage finance was extremely limited, and private funds were eager for wartime outlets.[83] Fannie purchased almost no mortgages between 1943 and 1947 (none in 1944), and let its holdings dwindle to almost nothing.[84]

FNMA's pre-war accumulation of mortgages (as well as the RFCMC's) "were expected to decrease as soon as the FHA type mortgage had proved itself."[85] The RFCMC was even dissolved in 1947.[86] Lack of wartime construction created an acute post-war housing shortage, but the immediate post-war period was also flush with lots of pent-up funds that could finance construction and mortgages.[87] By 1948, however, other, more attractive investment outlets had become available, and the mortgage market was strapped for funds.[88]

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[79] OLSON, *supra* note 76, at 196.

[80] R. W. Lindholm, *The Federal National Mortgage Association*, 6 J. FIN. 54, 56 (1951).

[81] *Id.*

[82] OLSON, *supra* note 76, at ???.

[83] Miles L. Colean, *A Review of Federal Mortgage Lending and Insuring Practices*, 8 J. FIN. 249, 252 (1953).

[84] Lindholm, *supra* note 80, at 56.

[85] *Id.* at 56-57.

[86] George W. McKinney, Jr., *Residential Mortgage Lenders*, 7 J. FIN. 28, 42 (1952).

[87] Lindholm, *supra* note 80, at 56-57.

[88] McKinney, Jr., *supra* note 86, at 40.

Fannie Mae was virtually reborn in 1948, when Congressed amended its charter to authorize the purchase of VA-guaranteed mortgages.[89] In 1944, aiming to make housing more affordable to discharged servicemen, Congress had authorized the Veterans Administration to guarantee mortgages for veterans. The VA would originally guaranty up to 50% of the loan, and required no down payment and capped interest rates at a level equal to or below FHA-insurance eligibility caps.[90] VA mortgages were fixed rate, fully amortized loans with terms of as long as 30-years.[91] The increase in the amortization period from 15-20 to 30 years made housing even more affordable to servicemen, and the FHA soon adopted the 30-year fixed as its standard as well. Thus, by the 1950s, most mortgages were 30-year fixed with down payments of 20 percent.[92]

Fannie Mae entered the VA-guaranteed market in force, From June 30, 1948 to June 30, 1949, Fannie Mae's holdings increased 809 percent (!), as Fannie Mae extended purchase commitments in order to stimulate the construction market.[93]

Fannie Mae thus set the ground for three longer term structural features of the mortgage market. First, it provided liquidity for mortgage originators by creating a secondary market that linked capital market investors to mortgage lenders to mortgage borrowers. Thus by 1950 a third of FHA-insured loans and a quarter of VA-guaranteed loans had been acquired by purchase rather than origination, compared with only 11% of conventional loans.[94]

Second, the Fannie Mae secondary market reduced regional discrepancies in interest rates and financing availability.[95] Fannie was able to harness capital of investors from capital-rich regions to purchase or invest in mortgages from capital-poor regions. This helped smooth out the impact of regional economic booms and busts on the housing sector.

[89] Lindholm, *supra* note 80, at 58. VA-guaranteed mortgages originally differed from FHA-insured mortgages in that there is no cost to the borrower for the VA-guaranty, whereas FHA administers a mutual insurance fund, in which the borrowers pay an insurance premium for the insurance on their loans. Since 1982, however, the VA has charged a guaranty fee. *See* P.L. 97-523, 96 Stat. 605, Title IV, § 406(a)(1), Sept. 8, 1982, *codified at* 38 U.S.C. § 3729.

[90] McKinney, Jr., *supra* note 86, at 40.

[91] Servicmen's Readjustment Act of 1944.

[92] Ben S. Bernanke, Housing, Housing Finance, and Monetary Policy, Speech at the Federal Reserve Bank of Kansas City's Economic Symposium, Jackson Hole, Wyoming, August 31, 2007, *at* http://www.federalreserve.gov/newsevents/speech/Bernanke20070831a.htm - fn5.

[93] Lindholm, *supra* note 80, at 56-57.

[94] GREBLER *ET AL.*, *SUPRA* note 14, at 253.

[95] *ID.* at 260.

And fourth, Fannie continued the work of the HOLC in establishing the 20% down, self-amortizing, 30-year fixed-rate mortgage as the national standard; the subsidized cost of funds for the 30-year fixed because of Fannie's government backing helped crowd out other mortgage products; outside of the United States the long-term fixed-rate mortgage remains a rarity.

When the 30-year fixed was first introduced during the Depression, the long-term, fixed-rate, self-amortizing mortgage was an exotic product. The product was introduced at a time of tremendous market uncertainty about future incomes and the economy, and markets were reluctant to take up new, exotic product. Even with FHA insurance many lenders were reluctant to make long-term, fixed-rate loans because of the interest rate and liquidity risk. Fannie relieved the liquidity problem by offering to buy any and all FHA-mortgages at par, and by buying long-term, fixed-rate, self-amortizing mortgages and issuing bonds, Fannie Mae transformed what were then exotic mortgage products into plain vanilla, government-backed corporate bonds, something for which the market had a strong appetite.

The 30-year fixed was a product of a moment when the entire financial system was at risk, but it had advantages which helped give it staying power. The long term of the mortgage made it possible to borrow against their long-term earnings. Indeed, the advent of the 30-year fixed-rate mortgage arguably established the middle class as a class of property owners—and as a class of debtors. While individuals are not able to secure credit by indenturing themselves, the long-term mortgage serves as a proxy for long-term payment commitment. The fixed rate allows families to avoid interest rate shocks against which they have little ability to hedge. Self-amortization protects against overleverage by constantly reducing the loan to value ratio. Self-amortization also serves as the perfect hedge for families who do not want to be exposed to payment shocks, the way they would be as renters.

By stabilizing consumer finances, the 30-year fixed also helped guard against the systemic risk that can result from mass defaults due to payment reset shock on variable rate mortgages. Thus, the 30-year fixed not only stabilized individual consumers' finances, but also communities and the entire economy.

Taking stock of this all, we see a largely unprecedented regulatory response to the failure of the housing market in during the Great Depression. While the creation of the Federal Reserve system, the farm mortgage system, and the U.S. Housing Corporation during WWI had pioneered the *federal* public option model in financial services, the scope of federal intervention in housing finance markets during the New Deal was unparalleled. The federal intervention was somewhat haphazard and uneven, responding to particular problems and building on the splintered nature of U.S. financial regulation, with multiple-chartering options and regulators, rather than effecting a comprehensive overhaul of housing finance. The federal intervention was also largely intended to be temporary in its nature. Nonetheless, by the late 1940s, the U.S. housing finance system was one run through and by public options. Some command-and-control regulations remained, both on the state and federal level, but there was no command-and-control regime that covered the entire market. Instead, public options substituted as a type of market-wide regulatory regime.

III. The Decline of the Public Option

Coming out of the New Deal, the primary mode of regulation of the U.S. housing finance system was through public options in the secondary market. There were still a variety of regulatory cobwebs on the state and federal regulation for particular types of lenders. Federal thrifts, for example, were prohibited from making adjustable rate loans, and some state prohibited all lenders from making adjustable rate loans, but by-and-large mortgage regulation was a matter of what the GSEs would buy and what FHA would insure. Even if other loan products could formally be made, there was no secondary market for them and lenders were generally unwilling to assume the risk themselves. Thus, through the domination of the secondary market by public options, the federal government was able to effectively regulate the mortgage market.

Between the late 1960s and the 2000s, however, the housing finance underwent a series of further changes that undermined the effectiveness of the public option approach.[96] Nonetheless, regulation via public options remained the mode of regulation.

A. Privatization of Public Options

First, in 1968, the Johnson administration, eager to clear room in the federal budget for Great Society spending and the Vietnam War, split up Fannie Mae into two entities. One entity was privatized as Fannie Mae. The other remained government owned and was christened Ginnie Mae. Ginnie Mae's mission was restricted to the securitization of FHA-insured and VA-guaranteed mortgages. Fannie Mae, under a revised charter, became privately capitalized, but under government regulation.

[96] The rebirth of the private mortgage industry in the late 1950s due to changes in Wisconsin insurance regulation also contributed to the undermining of the public option mode of regulation. Because of space constraints, we do not explore this issue in this Chapter.

The privatization of Fannie Mae meant that its management would be subject to pressure from shareholders, who were not particularly concerned with the policy goals embodied in Fannie Mae. The privatized Fannie Mae was subject to some command-and-control regulation. It was required to maintain minimum capital levels 2.5% for on-balance sheet and .45% for off-balance sheet obligations.[97] Fannie's loan purchases were also subject to single exposure limitations (conforming loan limits) and LTV limitations absent mortgage insurance. Otherwise, however, underwriting was left up to Fannie Mae. The potential menu of loans that Fannie Mae could purchase was determined by what was possible in the loan origination market, so Fannie was in effect constrained by state and federal regulation of the primary market. The privatization of Fannie Mae had the effect of creating a secondary market for non-FHA/VA mortgages and thereby significantly loosening regulatory control over housing finance.

B. Creation of Private Public Option: FHLMC

In 1971, the federal government chartered another GSE, the Federal Home Loan Mortgage Corporation or Freddie Mac. Freddie Mac was originally a subsidiary of the FHLB system, designed to enable the securitization of mortgages originated by the S&Ls that belonged to the FHLBs, but Freddie was soon privatized.

Initially Freddie Mac operated differently from Fannie Mae. Freddie engaged in securitization via pass-thru certificates issued against dedicated pools of mortgages, whereas Fannie funded the mortgages it purchased through the issuance of corporate debt. By the 1980s, however, Fannie had begun to engage in securitization and Freddie was issuing corporate debt, so the two models converged.

The critical move presented by both GSEs was the division of credit risk from interest rate risk. Investors in the GSEs' MBS assumed interest rate risk on the securitized mortgages, but not credit risk on them. Instead, they assumed the GSEs' credit risk, which was implicitly backed by the federal government. Similarly investors in GSE debt were really investing in interest rate risk plus an implied government security.

The emergence of Freddie Mac exacerbated the problems caused by privatizing the public option of Fannie Mae without ensuring the existence of another market-wide regulatory system. Freddie competed against Fannie, which put pressure on the GSEs to loosen their underwriting standards to gain market share. Into the late 1980s,

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[97] Verify that these were original levels in 1968.

however, the GSEs still had fairly small market share; most mortgages were still held in portfolio, particularly by savings and loans. It was only with the collapse of the S&L industry in the 1980s that the GSEs truly emerged as market giants.

C. The S&Ls

From the 1950s to the 1970s, the savings and loan was the institution that dominated U.S. housing finance.

The S&Ls were unequipped to handle rising interest rates in the 1970s. As rates rose, depositors sought rates of return that kept pace with inflation. The advent of money market funds resulted in a tremendous disintermediation from the depositary system into the securities system. In order to retain their deposit base in the face of disintermediation, the S&Ls were forced to offer ever higher interest rates. The S&Ls' assets, however, were long-term, fixed-rate mortgage loans. The result of paying higher interest rates on liabilities than those received on assets was the decapitalization of the S&Ls.

Congress and federal regulators responded to this problem through S&L deregulation. Prior to the 1980s, the S&Ls were still subject to a battery of command-and-control regulations. State chartered S&Ls were subject to state regulations; the HOLA had preempted state regulations for federal thrifts, but the FHLBB had its own set of command-and-control regulations that limited the type of products S&Ls could originate.

In 1980, as part of the Depository Institutions Deregulation and Monetary Control Act,[98] Congress abolished all interest rate ceilings as well as limitations on points, brokers and closing fees, and other closing costs, for first-lien mortgages on residences and mobile homes.[99] Congress also extended national banks' "most favored lender" status to other depository institutions, enabling them to select between a federal and a state maximum applicable rate for their transactions,[100] which, when combined with the Supreme Court's 1978 *Marquette* decision and follow-up state parity laws for state-chartered institutions, functionally ended meaningful interest rate regulation in the United States. The

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[98] Pub. L. No. 96-221, tit. v, 95 Stat. 164. Prior to 1980, Congress preempted state usury caps for FHA and VA loans. Cathy Lesser Mansfield, *The Road to Subprime "HEL" Was Paved with Good Congressional Intentions: Usury Deregulation and the Subprime Home Equity Market*, 51 S. CAR. L. Rev. 473, 484-92 (2000). Also discuss the Reagan-era removal of FHA 5% limit.

[99] 12 U.S.C. § 1735f-7a. NOTE STATE OPT-OUT POSSIBILITY.

[100] 12 U.S.C. § 1463(g) (federal savings and loan associations); § 1785(g) (federal credit unions); § 1831d(a) (state-chartered banks and savings banks). Under federal law, states still have the ability to opt out of the most favored lender preemption.

Marquette decision, based on a plain language reading of the 1863 National Bank Act, permitted national banks export interest rate limitations (or lack thereof) from their home state to other states.[101] States responded by enacting parity laws to protect their state-chartered institutions by giving them the right to charge whatever rate a national bank could charge.[102] The result of this regulatory race was the evisceration of usury laws.

1982, Congress passed legislation that enabled the underwriting of second mortgages[103] and that preempted state laws that prohibited adjustable rate mortgages, balloon payments and negative amortization.[104] The FHLBB also rewrote its regulations for federal thrifts, allowing them to underwrite adjustable-rate mortgages. Congress also expanded the range of assets in which S&Ls could invest ("direct investment rules"), which enabled S&Ls to invest in assets with *potentially* higher yields than home mortgages, thereby relieving their borrowing-return mismatch.[105]

The result was that the decapitalized S&Ls doubled down on their bets and expanded into markets in which they lacked experience—commercial real estate, junk bonds, race horses, etc. This plus a regulatory environment in which both Congress and the FHLBB engaged in playing ostrich significantly increased the damage done to the S&Ls.

The lesson from the S&L crisis was that depositories were poorly suited for making long-term fixed-rate loans. Instead, they could either make adjustable-rate loans or they needed to sell their loans into the secondary market. While adjustable-rate lending grew, consumers have evinced a strong taste for fixed-rate loans, around which they can budget. The result, then, was the rapid growth of the secondary market, which, in the 1980s consisted primarily of the GSEs.

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[101] Marquette National Bank of Minneapolis v. First of Omaha Service Corp., 439 U.S. 299 (1978).

[102] ELIZABETH RENUART & KATHLEEN E. KEEST, THE COST OF CREDIT: REGULATION, PREEMPTION, AND INDUSTRY ABUSES 120-21 (2005). Almost every state has enacted some form of parity provision. John J. Schroeder, *"Duel" Banking System? State Bank Parity Laws: An Examination of Regulatory Practice, Constitutional Issues, and Philosophical Questions*, 36 INDIANA L. REV. pin, 202 (2003).

[103] Limitations on due on sale clauses in 1982.

[104] Alternative Mortgage Parity Transactions Act of 1982, 12 U.S.C. § 3801 et seq. Five states—Maine, Massachusetts, New York, South Carolina, and Wisconsin—timely opted out of AMPTA preemption. RENUART & KEEST, *SUPRA* note 102, at §§ 3.10.1, 3.10.2 at n. 679.

[105] The FHLBB disastrously widened this expansion by permitting the S&Ls to invest up to 11% of their assets in junk bonds, rather than the 1% permitted by statute, by allowing junk bonds to be counted as both "corporate loans" and non-investment grade securities.

D. *Emergence of Private Secondary Market: PLS*

While the GSEs dominated the secondary market until 2003-2006, a completely private, unregulated secondary mortgage market emerged starting in 1977. This was the private-label securitization (PLS) market. The PLS market began with the securitization of ultra-high quality mortgages that were too large to meet the GSEs' conforming loan limits. While the PLS market remained quite small for many years it began to take off in the mid-1990s as a result of the S&L crisis and to experiment in the securitization of loans to ever riskier borrowers, with rapid growth starting in the early 2000s, so that by 2006, almost one-half of all mortgage originations were nontraditional products and private label securitization had grown to 56% of the securitization market.

E. *Reregulation and Deregulation via Preemption*

The early growth, albeit limited, in subprime lending lead to a national legislative response, the Home Ownership and Equity Protection Act of 1994, which prohibited certain predatory lending practices for "high-cost" refinancing loans.[106] HOEPA regulated balloon payments, negative amortization, post-default interest rates, prepayment penalties, due-on-demand clauses, lending without regard to the borrower's ability to repay, and payments to home improvement contractors.[107] It also required special additional Truth in Lending disclosures and imposed assignee liability that trumps state Uniform Commercial Code Article 3 holder-in-due-course status,[108] enabling, among other things, rescission of loans made in violation of TILA requirements.[109] Finally, HOEPA directed that the Federal Reserve Board:

> shall prohibit acts or practices in connection with—
>
> > (A) mortgage loans that the Board finds to be unfair, deceptive, or designed to evade the provisions of this section; and
> >
> > (B) refinancing of mortgage loans that the Board finds to be associated with abusive lending practices, or that are otherwise not in the interest of the borrower.[110]

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106 15 U.S.C. § 1639.

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108 15 U.S.C. § 1640(a); 12 C.F.R. §§ 226.32, 226.34. Holders of HOEPA loans are "subject to all claims and defenses . . . that could be raised against the original lender." 15 U.S.C. § 1641(d)(1).

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110 15 U.S.C. § 1639(l).

HOEPA's narrow scope limited its effectiveness as lenders easily avoided its application by pricing loans just under the HOEPA cost thresholds. Moreover, the Federal Reserve, under Alan Greenspan's chairmanship, engaged in a studious policy of inaction or "nonfeasance," refusing to engage in HOEPA rulemakings despite repeated requests from consumer groups and in derogation of its statutory duty. Many states, however, passed their own "mini-HOEPA" statutes.[111] Yet between 1996 and 2007, federal banking regulator pursued a single-minded campaign of deregulation via preemption, unraveling both state consumer protection laws and state attempts to enforce federal laws. This included both preemption via regulation (arguably exceeding the federal agency's statutory authority) and via litigation, culminating in the Supreme Court's 2007 ruling in *Watters v. Wachovia*, which upheld the Office of the Comptroller of the Currency's preemption of Michigan's attempt to regulate a subprime lender that was an unregulated operating subsidiary of a national bank.[112]

Unlike with HOLA preemption to enable FHA-insured lending, with national standards, federal preemption was not coupled with substitute federal regulation. Instead, a regulatory vacuum was substituted for disparate state regulation. Thus, at the very time the market-wide regulation system of public options was being undermined, Congress, in an effort to protect the S&L industry from the problems created by rising interest rates, dismantled significant parts of federal and state command-and-control regulation. Federal regulators then followed-up by undercutting the remaining state command-and-control regulatory systems through preemption and by refusing to vigorously implement the new (albeit limited in scope) federal command-and-control regulatory system of HOEPA. The result, by 2000 was a multi-trillion dollar national mortgage market with little remaining regulation.

E. Return of the Bullet Loans and the Debacle

Freed of its post-Depression regulations, the U.S. mortgage market quickly reverted to Depression-era "bullet" loans, shifting interest

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[111] McCoy & Renuart, http://www.jchs.harvard.edu/publications/finance/understanding_consumer_credit/papers/ucc08-5_mccoy_renuart.pdf21 states +DC. By 2007, only six states — Arizona, Delaware, Montana, North Dakota, Oregon, and South Dakota – did not regulate any of the most troublesome subprime loan terms: prepayment penalties, balloon clauses, or mandatory arbitration clauses. Raphael W. Bostic, Kathleen C. Engel, Patricia A. McCoy, Anthony Pennington-Cross and Susan M. Wachter, *State and Local Anti-Predatory Lending Laws: The Effect of Legal Enforcement Mechanisms*, 60 J. ECON. & BUS. 47, 49, 55-58 (2008).

[112] Watters v. Wachovia Bank, N.A., 550 U.S. 1 (2007). Cite to Wilmarth and McCoy/Renuart on history of preemption campaigns.

rate and refinancing risk back to borrowers: non-amortizing and even negatively amortizing loans proliferated in the private-label market, as did loans like 2/28s and 3/27s, which had short-term fixed-rate teaser periods before resetting to much higher adjustable rate. These mortgages were designed to be refinanced upon the expiration of the teaser period, just like bullet loans, and they carried the risk that the borrower would not be able to refinance either because of a change in the borrower's finances, a decline in the value of the property, or a market freeze. As these new bullet loans were at high LTVs, only a small decline in property values was necessary to inhibit refinancing.

The new bullet loans were also tied into a global financing system that amplified their performance but lessened market discipline on underwriting, as securitization separated economic ownership from underwriting, which created agency and information problems that encouraged riskier underwriting and underpricing for risk.[113] The result was disaster.

The post-New Deal U.S. mortgage market was built around regulation by public option, not command-and-control regulation. The public option was eroded through privatization and market developments, while the existing pieces of command-and-control regulation were removed by Congress and then federal regulators. The end result was that no regulator exercised complete power over the market and agency and information problems encouraged a rapid and unsustainable race to the bottom in lending standards.

IV. LOOKING FORWARD

As of 2008, the U.S. housing finance system had returned to a public option model. The private-label securitization market was dead. Fannie and Freddie were in federal conservatorship. The remaining public entities, FHA/VA, Ginnie Mae, and the FHLBs continued to function, but the mortgage market had become almost an entirely government-supported market. Public option regulation once again maps with a public option market. And once again, the public option is an inadvertent, reactionary approach adopted in response to a crisis, rather than a deliberate, methodical approach.

Going forward, however, it is not clear that public option regulation will continue to be the order of the day. The Dodd-Frank Wall Street Reform and Consumer Protection Act, the major legislative

[113] Adam J. Levitin & Susan M. Wachter, *Explaining the Housing Bubble*, 100 GEORGETOWN L.J. (2011).

response to the financial crisis, signaled a different regulatory approach, namely that of command-and-control regulation. The Dodd-Frank Act creates a new set of command-and-control rules for both mortgage origination and mortgage securitization. For mortgage origination, the Dodd-Frank Act prohibits residential mortgage loans if the lender has verified the borrower's ability to repay.[114] Failure to do so is a defense against foreclosure.[115] The Dodd-Frank Act provides a safe-harbor for lenders to the ability to repay requirement, which does not apply to "qualified mortgages" (QMs),[116] as defined by yet-to-be-enacted Federal Reserve Board regulations. Non-QMs do not benefit from a presumption that the borrower was able to repay,[117] and are also prohibited from bearing prepayment penalties.[118]

Dodd-Frank also undertakes a reform of the securitization market by requiring that securitizers have "skin-in-the-game," meaning that they retain some risk exposure to their securitized assets.[119] Under regulations promulgated by a consortium of federal financial regulators, securitizers must retain a certain portion of credit risk on assets securitizations (or retain near identical deals) unless the securitized assets fall into certain exempt categories. The most important of those exemptions is for "qualified residential mortgages" (QRMs), again a term left to definition by the federal financial regulatory consortium.

The Dodd-Frank Act also creates a new Bureau of Consumer Financial Protection, which has broad powers to regulate all mortgage origination and insurance markets. If and when the CFPB does regulate, it will be either through command-and-control regulation or regulation via litigation.

The Dodd-Frank Act's reforms aside, it remains to be seen what will happen to the public options that today *are* the mortgage market. Will Fannie and Freddie be nationalized, privatized, or recapitalized as hybrid entities? What role, if any, will government guarantees have? Will the market segment to a public option (like FHA/VA) for the poor and private for others? Or will the temporary measures taken in 2008-2010 end up lasting for decades, just like those of the New Deal.

A consideration of the options for housing finance reform is far beyond the scope of this chapter, but it seems patent that the regulatory

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[114] Dodd-Frank Act, §1411, codified at 15 U.S.C. § 1693c(a).
[115] Dodd-Frank Act, §1413, codified at 15 U.S.C. § 1640
[116] Dodd-Frank Act, § 1412, *codified at* 15 U.S.C. § 1693c(b).
[117] Dodd-Frank Act, § 1412, *codified at* 15 U.S.C. § 1693c(b).
[118] Dodd-Frank Act, § 1414, *codified at* 15 U.S.C. § 1693c(c).
[119] Dodd-Frank Act, § 941, *codified at* 15 U.S.C. § 78o-11.

paradigm should track the market. If the market is to be privatized, command-and-control and Pigouvian taxation makes sense as the regulatory approach. If the market is to be nationalized, then the public option model makes sense. And if we end up with a combination, where public options coexist and compete with private actors, then the lesson to be learned from the collapse of 2008 is that command-and-control and Pigouvian taxation need to be combined with public option regulation. A public option is only effective at shaping competition in the market if all parties in the market have to compete on the same rules and standards. Otherwise, the result is merely market segmentation. Moreover, without basic standards applicable to all parties, the result can quickly become a race-to-the-bottom that can damage not only private parties, but also public entities.

The public option has been associated with long-standing structural changes that transformed the shape of American homeownership and mortgages. It created the long-term, fixed-rate, fully-amortized mortgage as the standard American housing finance product. In so doing, it made possible sustainable homeownership for American households and the economy.[120] But for public options to succeed as policy tools and not turn into liabilities, they need to function in a market that has standards for all.

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[120] Kenneth Jackson, Crabgrass Frontier.