

**EXAMINING THE HOUSING FINANCE SYSTEM: THE
TO-BE-ANNOUNCED MARKET**

HEARING
BEFORE THE
SUBCOMMITTEE ON
SECURITIES, INSURANCE, AND INVESTMENT
OF THE
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BANKING, HOUSING, AND URBAN AFFAIRS
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FIRST SESSION
ON

THE EXAMINATION OF THE SECURITIZATION MARKETS WITH SPECIFIC
FOCUS ON A PART OF THE SECURITIZATION SYSTEM IMPORTANT TO
HOUSING FINANCE—THE TO-BE-ANNOUNCED OR TBA MARKET

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EXAMINING THE HOUSING FINANCE SYSTEM: THE TO-BE-ANNOUNCED MARKET

WEDNESDAY, AUGUST 3, 2011

U.S. SENATE,
SUBCOMMITTEE ON SECURITIES, INSURANCE,
AND INVESTMENT,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The Subcommittee met at 9:33 a.m. in room SD-538, Dirksen Senate Office Building, Hon. Jack Reed, Chairman of the Subcommittee, presiding.

OPENING STATEMENT OF SENATOR JACK REED

Senator REED. I would like to call the hearing to order.

I first want to thank Senator Crapo for joining us today and also for his collaboration over the many, many months as the Ranking Member of this Subcommittee, and thank you very much, Senator, for your excellent work. Let me also welcome our witnesses.

This morning we are examining the housing finance system, specifically the to-be-announced market. In May, the Subcommittee conducted a hearing on the state of the securitization market. This morning's hearing continues the Subcommittee's examination of the securitization markets with particularly focus on a part of the securitization system important to housing finance, and this is the to-be-announced or TBA market.

In the early 1970s, the TBA market began as a trading venue for securities that were issued by Ginnie Mae, and its role expanded as Fannie Mae and Freddie Mac began issuing mortgage-backed securities.

This market has evolved, and today it is one of the deepest and most liquid markets in the United States, with average daily trading volume in excess of \$320 billion—a market second only to the market for United States Treasury securities.

The name of the market, to-be-announced, comes from the way the market functions. Unlike a traditional marketplace, investors do not know the specific collateral or pools of loans they are agreeing to purchase until months later. Accordingly, the collateral is designated to be announced at a date in the future.

Many argue that the TBA market is vital for preserving key products that consumers have come to rely upon in buying a home, such as a 30-year fixed-rate loan, freely prepayable mortgages, and the ability to lock in an interest rate prior to closing a mortgage. Although the only securities traded in the TBA market are agency securities, defined as those securities issued or guaranteed by

Fannie Mae, Freddie Mac, and Ginnie Mae, the TBA also serves as a benchmark for privately issued securities. Privately issued securities are priced relative to the TBA price. In addition, originators use the TBA market to purchase and sell positions to hedge the origination of loans that are not eligible for trading in TBA, for example, adjustable rate loans and jumbo loans.

As we continue to explore different approaches to reforming our housing finance system, it is critically important that we understand how the TBA market works and what impact any reforms will have on this market. How will any changes affect the availability of the standard mortgage products sought by consumers? What characteristics of this market, if any, should be preserved? I look forward to hearing from all of our witnesses this morning on these issues. In fact, this is a very technical but vitally important part of our securitization and our mortgage industry. We have to understand the basics before we move forward. But as with all of our hearings, the point is to accumulate the information and the insight so that we can start dealing with some major issues with respect to housing or with respect to the GSEs.

With that, I would like to introduce the Ranking Member. Senator?

STATEMENT OF SENATOR MIKE CRAPO

Senator CRAPO. Thank you very much, Mr. Chairman, and I appreciate your kind words as well. I enjoy our working relationship, and I appreciate the opportunity for us to have this hearing on the TBA market.

I share your view that the TBA market serves a valuable role in the mortgage finance system, and we need to better understand its mechanics as we move forward with housing finance reform. Today's witnesses all have a deep expertise with respect to the TBA market and will be able to explain how the TBA market allows mortgage originators to hedge the risk of a change in interest rates between the time that the mortgage is locked in and the time that the mortgage is actually closed and securitized.

The main components of the TBA market are the standardization and homogeneity of the securities and their market practices and Government guarantee of timely payments. According to a Federal Reserve staff report on the TBA market, the deep liquidity of agency mortgage-backed securities cannot be attributed solely to the implicit Government guarantee of mortgage-backed securities.

Going forward, the question is how the TBA market might change and develop without a Fannie Mae and Freddie Mac implicit or explicit guarantee. And what are the tradeoffs that we need to consider? To be able to answer that question, we need to understand the feasibility of creating a private TBA market over time and whether it would have the liquidity sufficient for mortgage companies to hedge their interest rate risk.

Again, Mr. Chairman, I appreciate this hearing and look forward to what our witnesses will share with us today.

Senator REED. Thank you very much.

We have been joined by Senator Corker. Senator, would you like to make some opening comments?

Senator CORKER. No. I am looking forward to the witnesses, as usual, and I appreciate you calling the hearing.

Senator REED. Thank you very much, Senator.

Let me now introduce our panel. First is Mr. Thomas Hamilton. Mr. Hamilton is managing director at Barclays Capital. Mr. Hamilton heads securitized product trading at Barclays, including residential and commercial mortgage-based securities, as well as other asset-backed securities. He joined Barclays Capital in 2004 after 15 years with Citigroup, where he was a managing director. Mr. Hamilton is currently the chairman of the Securitized Products Division of SIFMA and has held that position for 7 years.

Paul Van Valkenburg is a principal at Mortgage Industry Advisory Corporation, MIAC, a registered investment adviser which he helped to form. Prior to forming MIAC, he worked in mortgage research with major Wall Street firms, including Goldman Sachs & Company and Drexel Burnham Lambert. He has worked extensively valuing loan portfolios for lending institutions actively restructuring their asset/liability composition; developing pricing models for whole loans, CMOs, and stripped mortgage-backed securities; and analyzing the prepayment risk in mortgage-backed structured products. Selections of his research have been published in the "The Handbook of Mortgage-Backed Securities" and "Interest Rate Risk Models: Theory and Practice."

Andrew Davidson is the president of Andrew Davidson & Company, a New York firm specializing in the development and application of analytical tools for the mortgage-backed securities market that serves over 150 financial institutions. He has written extensively on mortgage-backed securities product development, valuation, and hedging. Prior to the founding of Andrew Davidson & Company in 1992, he worked at Merrill Lynch where he was a managing director in charge of 60 financial and systems analysts.

We will begin with Mr. Hamilton. Gentlemen, your written testimony has been made a part of the record. Please feel free to summarize and make points.

Mr. Hamilton, please.

**STATEMENT OF THOMAS HAMILTON, MANAGING DIRECTOR,
BARCLAYS CAPITAL, ON BEHALF OF THE SECURITIES INDUSTRY AND FINANCIAL MARKETS ASSOCIATION**

Mr. HAMILTON. Good morning, Chairman Reed, Ranking Member Crapo, and Members of the Subcommittee. I am Thomas Hamilton, managing director at Barclays Capital, where I am responsible for the securitized products trading business. I am pleased to testify today on behalf of the Securities Industry and Financial Markets Association.

Housing is a critical component of our economy and is at the center of a virtuous circle: housing begets jobs, which beget housing. Consequently, the U.S. mortgage market is enormous. For example, the home mortgage market is approximately equal in size to the total size of U.S. bank balance sheets. Given that banks engage in activities other than residential mortgage lending, their balance sheets alone cannot meet the country's need for mortgage credit. Ginnie Mae, Fannie Mae, Freddie Mac, and private institutions use the process of securitization to provide capital that allows for the

growth of mortgage lending beyond the capacity of bank balance sheets. Today private securitization and the agencies finance nearly 70 percent of outstanding home mortgages, and it is, therefore, imperative that securitization continue to play a key role in any future mortgage finance system. The market for MBS issued by the agencies is approximately three times the size of the outstanding non-agency private label MBS market. In this agency MBS market, the TBA market is the single largest component. The TBA market is currently the key to funding mortgage lending, and because of this it plays a critical role in housing and the U.S. economy.

The enduring liquidity of the TBA market, in contrast to the lack of issuance in the private label MBS markets, preserved the availability of mortgage credit in the recent crisis. This ability to maintain liquidity during stress periods is a key benefit of the TBA market. Furthermore, the liquidity and resilience of the TBA market attracts a wide range of investors who provide vast capital that is cycled into mortgage lending, including retirement savings vehicles, insurance companies, and foreign investors.

The vast liquidity and forward-trading nature of the TBA market provides key benefits to consumers, such as the broad availability of 30-year fixed-rate mortgages that may be prepaid without penalty, and significant and consistent liquidity in the secondary mortgage market. This results in a stable and attractive funding source for lenders that allows them to provide lower mortgage rates and longer-term "rate locks" for borrowers and efficiently recycles funds back to local lenders to enable another round of mortgage lending.

Of course, the TBA market is facilitated by the guarantees of the agencies and, therefore, the support of the Government that stands behind them. Currently over 90 percent of mortgages are financed through a program of one of these three agencies. This level of support is possible because agency MBS do not expose investors to credit risk, and, therefore, the market is attractive to risk-averse investors that have vast sums of capital available for investment. Without the TBA market, we believe that the majority of this investment capital would be directed elsewhere, reducing the amount of funding for and raising the cost of mortgage lending. Therefore, SIFMA believes strongly that maintaining a liquid and viable TBA market should be considered as Congress addresses housing finance reform.

With that said, the reality is that that this current outsized role of the Government is not sustainable over the long term and should be reduced. The TBA market's role and the Government's role should shrink as the private markets regenerate over time. The means of achieving this rebalancing are very complicated and consequential on a national, financial, and personal level. While SIFMA believes the TBA market should play a role in the future, it should certainly not be 90 percent of the market. There are a number of challenges to the resurrection of the private label non-agency market, including the significant uncertainty faced by non-agency MBS investors and issuers. The rules of the road for both sides are not clear. Until they are, it will be challenging for issuers and investors to see eye to eye on securitization transactions, at least in the volume and frequency that will be necessary to fund mortgage credit demand. Being able to withdraw the Government

from mortgage markets will require a carefully planned and sequenced transition which should take many, many years. It is essential to remember that the necessary volume of non-agency investors will not simply appear because we would like them to. They must be drawn back in and made comfortable with private label securitization and its regulatory environment.

We believe that it is critical that the planning and execution of significant changes to the funding of mortgage loans be done with attention to detail, be based on sound analysis of costs and benefits, be mindful of unintended consequences, and create a long-term beneficial and stable environment. While we cannot predict the future, we can use the past as a guide and apply lessons learned and mistakes made, the good and the bad, to design a system that will stand the test of time.

We hope that the testimony we present today will be helpful in educating policymakers about how mortgage loans are funded in the capital markets, the critical role of the TBA market, and some of the critical issues that must be considered to move forward.

Thank you for this opportunity, and I am happy to take any questions.

Senator REED. Thank you very much, Mr. Hamilton.

Mr. Van Valkenburg.

**STATEMENT OF PAUL T. VAN VALKENBURG, PRINCIPAL,
MORTGAGE INDUSTRY ADVISORY CORPORATION**

Mr. VAN VALKENBURG. Thank you. Good morning, Members of the Subcommittee. Thank you for the opportunity to testify before the Subcommittee today on the current and prospective role of the TBA market in our current housing finance system. In my written testimony, I offer a detailed description of how the current TBA market interacts with the mortgage industry and prospective borrowers. It is a complex process, but hopefully I have made it understandable and useful to the Committee.

The TBA markets provide the exit price for long-term fixed-rate mortgages and enable the borrower to accept capital that otherwise would not be available.

Today the TBA market is the principal mechanism for the flow of capital into the current housing finance system. Any proposed new solution must preserve the TBA market liquidity in order to enable mortgage companies and their borrowers to access this capital efficiently.

Given that the GSEs are currently in conservatorship, the current and prior system is clearly flawed. I would argue that the principal causes of the failure were the underreserved and undercapitalized GSEs against the unanticipated credit events, requiring the GSEs to underwrite U.S. mortgage credit risk and then restricting them to only investing in U.S. residential mortgage investments; a mispricing of their guarantee fees; a loosening of the loan underwriting standards; and the last of independence from political goals.

Moreover, a fully functioning housing system should share the goals of the Administration's Option 1. To quote, "minimize distortions in capital allocation across sectors, reduce moral hazard in

mortgage lending, and drastically reduce direct taxpayer exposure to private lenders' losses."

A stated concern over this option from the Treasury Secretary is that the mortgage credit risk will be transferred to the banking system and, as a result, expose the Deposit Insurance Fund to this risk. I disagree with this conclusion. I believe that the credit risk provides could be a mix of private mortgage insurance companies, credit default swap protection writers, and if necessary, Government guarantors. Some of the risk could be absorbed in the banking system, but not all of it.

The GSEs currently provide 30-year guarantees to investors in MBS pools. This guarantee is a particular case of pool insurance. This guarantee is also a particular case of a credit default swap. When asked what a credit default swap is, I usually answer the GSE guarantee is a classic example because it is the largest credit default protection writer. A mortgage pool or company pays the GSE a guarantee fee in exchange for a guarantee of timely payment of principal and interest by the GSE on the mortgage pool.

A significant difference between the GSE guarantee and an actual CDS is that an actual CDS trades in an active market with real price discovery and real risk transference. The amount of credit risk of mortgages that have a GSE guarantee is enormous, and I believe there is ample room for a private market to develop to price and exchange some or all of this mortgage credit risk. I believe that private financial institutions will be able to price and trade this risk and, as a result, spread this risk across the financial system and reduce the exposure to taxpayers. With such a mechanism to price and trade credit risk, the TBA investor will be protected, the mortgage borrower will be benefited, and our systematic risk will be reduced.

I believe that the preference of the Committee should be to explore how to create a privately guaranteed residential credit market that will either solely private or, if the costs are too high as the market develops, a hybrid of private and Government guarantees. The development of a solely private market would take time and involve continual oversight. The GSEs exist today, and we have time to transition to a private credit market and allow it to fully develop.

I believe the Committee should explore private market or hybrid private-Government solutions to avoid or reduce the problems of Government guarantees.

I believe that should a private market solution be developed, the liquidity of the future TBA market would be sufficient for mortgage companies to hedge their interest rate risk, and the systemic benefits would be substantial.

Thank you.

Senator REED. Thank you very much, Mr. Van Valkenburg.

Mr. Davidson, please.

**STATEMENT OF ANDREW DAVIDSON, PRESIDENT, ANDREW
DAVIDSON & CO., INC.**

Mr. DAVIDSON. Chairman Reed, Ranking Member Crapo, Mr. Corker, as you have heard from the other witnesses and from our written statements, the TBA market plays a central role in the

mortgage market. With monthly trading totaling more than \$5 trillion, it is truly an incredible achievement of our financial system.

The TBA market helps lower mortgage rates, facilitates rate locks for borrowers seeking to buy homes, and made mortgages available through the financial crisis. I appreciate the opportunity to discuss this important market with you. For the next few minutes, I would like to highlight some of the key points of my written statement.

While we can point to features of a market that make it useful, it is not easy to predict which market innovations will succeed. Much of the success depends on the confidence of the participants. A shift in confidence can lead to a rapid change in the viability of a market. Currently the TBA market enjoys a substantial degree of confidence. This confidence, I believe, is not just a result of good institutional design but also a long history of successful adaptation to change.

Whether or not the TBA market will be able to adapt to the proposed changes in the structure of the housing finance market and the GSEs is difficult to predict with complete accuracy. While I cannot provide you with a definitive answer, I can give you my views on several proposed changes based on my 25 years of experience in the mortgage markets.

The most important of the proposed changes would be the elimination of the Government guarantee on conventional loans. While the guarantee was only implicit until the conservatorship of Fannie Mae and Freddie Mac, the guarantee has played an important role in the structure of the TBA market. I do not believe that the TBA market could survive the loss of the Government guarantee.

However, if the TBA does not survive, the market will develop other mechanisms to facilitate hedging and funding of mortgage loans. However, mortgages, especially fixed-rate mortgages, would be more expensive, less available, and more subject to market disruptions.

Other proposals suggest increasing the number of issuers for guaranteed MBS. The idea is that multiple issuers would increase competition and decrease the concentration risk. While such a proposal has other benefits, I believe this would be negative for the TBA market and that multiple issuers will make establishing good delivery rules more complex and less workable. In the end, it is likely that one or two issuers would dominate the market.

Some proposals recognize this problem with multiple issuers and recommend a single Government issuer with multiple insurers. Such a proposal is probably consistent with the survival of the TBA market, as Ginnie Mae already operates in a similar fashion. A single Government program for all mortgages, however, does run the risk that the issuer will be unable to adapt to changing conditions and will be less flexible and adaptable than the GSEs have been.

Many proposals require that any Government guarantee be on MBS and not on other obligations of the guarantor, and this is likely a positive step for the TBA market. If the GSE or its successors are primarily focused on securitization, then they will likely act to continue to maintain and improve the value and liquidity of the MBS and the TBA market.

Many proposals recommend that the Government guarantee be only a catastrophic guarantee that reduces risk to taxpayer while enhancing the liquidity of MBS. Such an approach is likely to be consistent with the TBA market, provided that investors in TBA-eligible mortgages do not face credit risk. This means that the credit risk must be absorbed by private capital outside the TBA mechanism and the Government guarantee must fully protect investors in the TBA-eligible mortgages.

The approach that I favor is to provide additional private capital in the form of subordinate bonds. Private capital would provide funding for the subordinate bonds while the Government could provide a guarantee on senior bonds. The Government would be protected from loss by private capital but would facilitate liquidity on the senior guaranteed bonds. Such a program could be structured in a way to be consistent with the TBA market.

As important as the direction of reform is the pace of change. Given the weak state of the housing market and the lack of currently viable alternatives to Government-guaranteed MBS, it would be disruptive to move too quickly to eliminate Fannie Mae and Freddie Mac and replace them with an alternative structure, even if that alternative were better designed and more economically sound.

On the other hand, inaction also poses dangers as most of the mortgage loans are still reliant on Government guarantees and conservatorship is not a viable long-term option.

Instead of either wholesale replacement of the GSEs or not taking any action at all, I believe it is possible to transform the existing GSEs step by step to a new system. In particular, I recommend that the GSEs be encouraged or even required to seek forms of private capital to stand in front of the taxpayers. Even while in conservatorship, GSEs can experiment with mortgage insurance, and subordinated bonds structures that could be used as templates for the longer-term restructuring of the housing finance system.

Thank you for your interest in my comments. I look forward to your questions.

Senator REED. Well, thank you all, gentlemen, for very excellent testimony about a very important and very challenging topic.

We are going to do 7-minute rounds, but I would be happy to entertain a second round if there are additional questions. And we have the luxury with the excellent panelists and three—not 33—Senators to take some time. So let me begin with a question to all the panelists.

You have all highlighted the fact that the TBA market does affect the availability of certain mortgage products—30-year fixed mortgage loans, the ability to lock in interest rates, *et cetera*. Changes to this that we are talking about, how would they affect these characteristics? I guess the other way to ask it, too, is: Is this ultimately going to be a tradeoff in terms of what we expect of a mortgage today, fixed rates, locked in, 30 years? How is this all going to interact? I would just like your general comments, starting with Mr. Hamilton and down the row.

Mr. HAMILTON. I think there is definitely a tradeoff. I think one of the large benefits of the TBA sector and of the agency guarantee is that we were able to get 30-year fixed mortgages and keep

monthly payments low. I think the elimination of that will absolutely force us into either a floating rate market or something that is certainly of shorter duration and more volatility for the homeowner in their monthly payments.

Senator REED. Mr. Van Valkenburg.

Mr. VAN VALKENBURG. Yes, I think as it stands now, the Government guarantee is necessary to enable the risk to be absorbed by the investor and transferred from the homeowner. So I think the guarantee is functioning that today.

The mechanism that the borrowers in the market, the TBA serving the mortgage companies, they are basically price takers. They take the information, and if they have an outlet to sell the loans, they will use the mechanics in place. So having a liquid market and having a liquid outlet for 30-year mortgages is the means by which they can execute that transaction.

Senator REED. Thank you.

Mr. Davidson, your comments just in general.

Mr. DAVIDSON. So certainly without some guarantee, we are likely to have far fewer fixed-rate mortgages. Those rates would be higher. But I think probably more importantly than any of those is that the stability of the availability of mortgage credit would be much lower. We have seen the private markets, when you go through a shock to the financial system, just step back for a while, and then it takes a while for them to recover. So during that time period, mortgages would just be much less available.

Senator REED. Let me sort of ask the question again, starting with you, Mr. Davidson, saying that a lot depends in terms of where we come out is what goals we have when we go into it. And if the goal is to maintain that which people assume is the American mortgage—long term, maybe not 30 years but 20, *et cetera*; fixed rates and relatively low monthly payments—can we do that without a guarantee by the Federal Government in some way, shape, or form?

Mr. DAVIDSON. You know, it is hard to say it would not happen. It is certainly much less likely that we would have the same percentage in 30-year fixed-rate mortgages without the Government guarantee.

It turns out there are some investors who want to buy interest rate risk and can take prepayment risk, but do not want to deal in credit risk. They want to be able to engage in transactions where they can buy hundreds of millions or multiple hundreds of millions of dollars worth of securities at one point in time. And without removing the credit risk, it is difficult to see how you could create that kind of market.

Senator REED. Mr. Van Valkenburg.

Mr. VAN VALKENBURG. Yes, I think if we said tomorrow, hey, let us start a market, it would obviously fail to transfer the risk involved in a 30-year mortgage. But if we could develop a process where this credit piece could be transferred into private holders of the risk, everything comes down to a price at what it is worth, and we do not know what the price would be at this point because the Government is basically assuming that risk and subsidizing that risk. So a market would have to take years to develop in order for that risk to be priced and risk takers and markets to develop be-

fore we could understand really what the potential investors would require in a fee in order to absorb that risk.

Senator REED. And, Mr. Hamilton, your comments.

Mr. HAMILTON. I would just say the market will develop for whatever the rules are brought to them, but what I would say is certainly the 30-year mortgage would be less available. Mortgage credit would be less available, and the credit availability that you would be able to access would be at a significantly higher price and would have a significant impact on the housing market.

Senator REED. Let me ask another question which has been alluded to by all your testimony, and that is, right now there is a lot of capital going into this market because of the way it is structured, the guarantee, the credit risk aspects, and the presumption, I think, the conclusion from all your comments is that in some respects that capital will not go there any longer if the guarantee is changed significantly or it is a private system. And it raises a question. One, where does the capital go? You might not know. But is that a bad thing or a good thing and in terms of the overall economic performance of the country? This is very speculative, but feel free.

Mr. HAMILTON. There is a lot of foreign investment, foreign capital, insurance company money management, retirement funds that are putting large amounts of dollars into the U.S. mortgage market, and that is due to the fact that they do not want to take credit risk.

Is there a market for that credit risk? I believe there is. But I think we are talking about a very large transition from a mortgage market that is determined by rates and investors who care about rates to an investor who cares about credit, and that transitioning can take—you know, to do it in an orderly fashion, we are talking about 10 or 15 years. This is not an easy scenario.

Senator REED. Mr. Van Valkenburg and then Mr. Davidson, and then my time is done.

Mr. VAN VALKENBURG. Yes. Anytime you subsidize anything, you get more of it, so I think—and the Government is subsidizing the housing sector in many ways, you know, along the food chain, particularly the guarantee is just one area, but—so we probably get a little more access to consumer credit than we would otherwise. But it is hard to quantify these things without any kind of real price discovery about what things are traded at or what private institutions would pay for that risk.

Senator REED. And part of this transition phase would in a sense be that price discovery process.

Mr. VAN VALKENBURG. Yes, if we could develop credit markets where we could transfer that to the private financial institutions, we could begin to understand what those costs are, what private parties are willing to pay for that risk, and move the credit risk across the world instead of just localizing it and concentrating it on the Government's balance sheet.

Senator REED. Mr. Davidson, your comments, please.

Mr. DAVIDSON. I think it is important to separate the liquidity function of the guarantee from the credit function of the guarantee. On the credit function, I think the credit risk should be moved into

the private market. It was supposed to be there before, just that Fannie and Freddie did not really have enough capital.

The liquidity function is a lot like deposit insurance, and deposit insurance keeps confidence in the banks even when there is uncertainty in the financial system. And so that function I think does serve a valuable purpose. The mortgage market is gigantic. And rather than moving more of the financial system into the banks where we have more deposit insurance, this is really another method of providing a liquidity guarantee to an important financial sector. I believe you can have an economic benefit without having significant cost to the Government.

Senator REED. Thank you very much, gentlemen.

Senator CRAPO.

Senator CRAPO. Thank you very much, Mr. Chairman.

Mr. Davidson, to follow up on that, in your testimony, you indicate that the liquidity of the TBA market combined with the Government guarantee on the MBS serves to lower the rate on agency MBS by about 25 to 50 basis points in relationship to the non-agency alternatives during normal markets. Are you able to isolate and estimate the subsidy of the Government guarantee without the value of the liquidity in the market?

Mr. DAVIDSON. Yes. So right now, the two pieces are combined. But I would say that most of that benefit is liquidity guarantee rather than a credit guarantee. In normal markets, the actual credit risk on what should have been guaranteed by Fannie and Freddie, just the high-quality mortgages, is very small. It is on the order of, you know, five basis points a year, so that most of the advantage that we are seeing for the GSE loans is due to the liquidity guarantee, not due to the credit aspect.

Senator CRAPO. Thank you.

And Mr. Van Valkenburg, could you explain in a little more detail how you feel that a mix of private mortgage insurance companies and credit default swaps and other activities could take on some of the credit risk that the Government guarantees currently provide.

Mr. VAN VALKENBURG. Well, right now, the Government has absorbed a lot of risk, credit risk, as opposed to the mortgage market. The credit default swap market has parties who want to take that risk, and the mechanics of it would be involving possibly a future entity, this new issuer who now lays off their risk through credit default swaps through this intermediation process of that market. And so they can go out and get price discovery on what the wholesale price is, effectively, on where the market is pricing this credit risk and where—if there is no bid for the 30-year guarantee in the private sector, then the Government could decide, well, this is—we are going to subsidize that because we think it has important public policy goals, so we could elect to still have a 30-year guarantee. But at least we would know what it would cost in a private transaction.

So what I am envisioning is that we could develop a system with, you know, obviously with SIFMA's leadership in developing the market practices, but right now, the GSEs cannot really lay off their credit risk. But we could develop structures and markets where that credit could be traded.

Senator CRAPO. For a private residential credit market to develop, it has got to be able to attract capital, and right now, it seems to me that is really difficult, given the overwhelming market share that Fannie, Freddie, and the FHA have. And for any of you, Mr. Van Valkenburg particularly, what are some of the interim steps that can be taken to transfer some of that credit risk, to move it away from Fannie and Freddie? Or, Mr. Davidson, did you want to—

Mr. DAVIDSON. Yes, I would be happy to.

Mr. VAN VALKENBURG. Go ahead.

Mr. DAVIDSON. So I think right now, even within the existing GSE structure, there is no reason why the GSEs cannot work to start set up in these types of markets. There is no reason why they cannot be using more external private capital in the form of insurance, either pool insurance or mortgage insurance. There is no reason they cannot set up a credit default swap market, or the solution I said, which is they set up a subordinate bond market where they sell off some of this credit risk. So as a transition, we can start building private capital markets even within the current GSE structure.

Senator CRAPO. Thank you.

Mr. Hamilton, you wanted to comment?

Mr. HAMILTON. Yes. I would just point out that some of this technology already exists at the U.S. agencies. You know, Freddie Mac for their multi-family lending program already sells off the subordinate and credit tranches of the securitizations that they create. So they are already doing it in other markets, the fact that there is definitely the ability to transfer some of that technology and structure into the residential market.

One of the things the agencies provided to us is homogeneity, information, transparency, and we have spent 40 years and the agency spent 40 years building that up. There is no reason we should not use that same information and that same homogeneity to create a market to disperse the credit risk on the other side and reduce the burden on the taxpayer.

Mr. VAN VALKENBURG. And as the other witnesses point out, these would be ancillary new markets as opposed to disrupting the TBA markets. They could be new ways to trade credit that would not disrupt the current TBA process.

Senator CRAPO. All right. Thank you. I have no further questions, Mr. Chairman.

Senator REED. Senator Corker, please.

Senator CORKER. Again, thank you for having this hearing and I thank all of you for being here. I know everybody has kind of checked out after what has just happened and there are not a lot of folks here, but people certainly care about this issue.

If you look at the TBA market, it is really nothing different than a futures market that exists, right. So why is it that we have to have this Government guarantee there to make that work when it works so well with corn and coffee and everything else? If you all could just briefly tell me why that would not work.

Mr. HAMILTON. I do not think any of us would say that it could not work. I think what I would say is you could create a TBA market out of private mortgages with an industry, maybe SIFMA or

someone else, who is creating a homogeneous market, qualified residential mortgages that exist. But the important thing to note is it will be at a significantly higher rate to the homeowner. It will impact the U.S. housing market in a significant way. And it will take 10 to 15 years to produce a liquidity that we just spent 40 years producing.

Senator CORKER. But it would be fairly priced.

Mr. HAMILTON. It would be—one would hope—

Senator CORKER. It would be fairly priced.

Mr. HAMILTON. Well, I do not—

Senator CORKER. Why would it not be fairly priced?

Mr. HAMILTON. I think the market has proven, the agencies and the private market have proven that doing market risk pricing across the credit spectrum has not been perfect, and if the private market was to take over credit pricing, I would argue that people with good credit would get very good rates and people with mediocre and bad credit would not be able to get a mortgage. Maybe they should be renters. Maybe they should be, but that is certainly how—

Senator CORKER. I thought that was the way credit was supposed to work, but go ahead. If you had bad credit, you cannot get a loan. If you have good credit, you do.

Mr. HAMILTON. I guess—

Senator CORKER. We have gotten away from that.

Mr. HAMILTON. I agree with you, but I think—

Senator CORKER. Well, wait a minute—

Mr. HAMILTON.—if Washington is willing to depoliticize housing, then what you are saying is correct. If there is no interest in home ownership rates or—

Senator CORKER. Well, wait—

Mr. HAMILTON.—having credit available to homeowners, then I think what you are saying is absolutely true and only people who have very good credit and can bring 20 percent down to the table will ever get a mortgage. I think that is right. I am not making a judgment on who should have them, but I think that is the result.

Senator CORKER. I think what you just said is a very telling thing and I appreciate it.

Paul.

Mr. VAN VALKENBURG. I think that the guarantee subsidizes that spectrum of the borrower, and so it enables the 30-year fixed rate—we do not know if there is a market for a 30-year guarantee right now because it does not exist. So could we develop one? It is going to take, as Tom says, 5, 10 years to develop. But so we could probably go out and price it today, but there would be no liquidity in the credit. So we would be fairly priced? Probably not. But we are assuming that the Government guarantee is cheaper than what a fictional market that we do not have any real price discovery on.

So the rationale, historically, to my understanding, is that you subsidize the borrower with this 30-year fixed rate. You are now instilling more benefits public policy-wise because now you have more homeowners—well, it achieves more home ownership or they can buy a larger house, whatever. But I do not know the studies and the reality of the analysis around that, but this is the message

that has been sacrosanct for years, that we subsidize this 30-year mortgage. We create more home ownership and better communities because we have more bigger houses and more involvement in the community.

Senator CORKER. Mr. Davidson.

Mr. DAVIDSON. So while the mortgage TBA market is essentially like a futures market, it does have some important differences. One of them is that, at least under current SEC rules, you cannot sell a private security before it is created, where in the TBA market, you can sell loans that will go into a security that is not yet created. So at least technically, some rules would need to change in order to create a TBA market which would allow physical delivery of loans.

In most futures markets, people actually do not deliver their product. They do not deliver the corn to the exchange or to the counterparty. They usually pair those trades off. In the TBA market, most of the originators actually sell the loans into the short positions that they have created.

In addition, what we found in financial markets is that financial markets that have Government guarantees behind them, so sovereign markets, trade with much greater liquidity than the non-sovereign markets. So I agree that futures markets could work. Many of our clients who hedge mortgages also use futures markets, either Treasury futures or Euro-dollar futures, to hedge their positions. But the TBA market has proven to be the most liquid and most effective hedge for the mortgages.

Senator CORKER. I guess in September, the loan limit will go back to the pre-crisis levels, at least currently, that is what is going to happen. Will that give us an opportunity to see if this is something that will work?

Mr. HAMILTON. Yes. I think the first—

Senator CORKER. And what is the market expecting right now that, going back to your allusion to Washington and depoliticizing, what do they think Washington is going to do right now as it relates to that?

Mr. HAMILTON. Well, I think it is mandated that the loan limit goes down to \$625,000 at this point. I think the market is expecting that to happen. I think the market would hope that it continues to drift down in a meaningful way. I do not think we are going to be able to create a private label mortgage market without product. We cannot compete against the—

Senator CORKER. So that is going to be—and will there be any TBA activity in those upper levels?

Mr. HAMILTON. My belief is, no, it will all go into private label mortgage securitizations, or banks will just keep those loans on their balance sheet.

Senator CORKER. Mm-hmm.

Mr. VAN VALKENBURG. My point on this is that you are being asked, or somebody is being asked, hey, what about—what are the consequences? What are the tradeoffs to lower this lending limit down? What is the price and what are the benefits? And we do not have any real information to make the decision. We do not have any real price discovery as to what that cost as far as—what would willing parties in a private market trade that risk for, and then we

could evaluate what that cost would be as far as the incremental guarantee fee, exposure to our balance sheet, if you will, for the U.S. taxpayer by reducing that loan limit down. And then we could evaluate it with real risk measurements so that we could assess what is the effect, what is the cost, and we do not have any other price discovery mechanisms to do that today because it is all—well, it is this amorphous blob of a Government guarantee.

So I am suggesting that we can create private markets that trade and price credit. This price information will help the economy allocate capital more effectively and price this risk and help us make better public policy as part of the process.

Mr. DAVIDSON. Yes. I believe it is a good step to lower the loan limits. The private market used to support a trillion to two trillion dollars worth of our mortgage loans. There is no reason it cannot support a substantially larger portion than it is right now.

Senator CORKER. Mr. Chairman, again, thank you. I thank all of you. And, Mr. Hamilton, I was in no way critical. I appreciate the observation that we in Washington have created a mechanism where those people with good credit pay more for their mortgages and those people with bad credit pay less for their mortgages. The question is, will we ever depoliticize and cause the market to work in a normal way, where people who have bad credit pay more for their rates and people with good credit pay less. So I appreciate you bringing that out so clearly and thank all of you for your testimony and look forward to seeing you individually in our offices over the course of time. Thank you.

Senator REED. Well, thank you very much, Senator Corker.

I have got a few additional questions, but I think the line of questioning both Senator Crapo and Senator Corker have developed has been excellent. It exposes the real policy choices we have. We have collectively for generations, both Republicans and Democrats and everyone else has said putting people in homes is key to America and it has resonated. It has resonated, and as a result, a lot of these programs were begun to do that.

And now we are at the point where we are looking at, how do we make a transition and how do we do it in an effective way? How do we price it correctly? How do we maintain a market? And this hearing, despite the esoteric title, is absolutely essential to what we are going to do going forward for all the reasons that Senator Corker and Senator Crapo indicated. Can the private market step in? Will they step in?

So let me just add a few other questions, but I will also join Senator Corker in inviting you to come by the office, because we are not going to settle this this morning. It is going to be a dialog going forward.

But beginning with Mr. Davidson, and a question is that—and again, if my understanding is not correct, please correct it—but the TBA market is not subject to the securities laws. It is exempt because of the participation of the GSEs, the agencies. If we move to a private market where these activities have to be performed by exclusively private firms, would that induce SEC registration requirements and other forums? And if so, would that complicate things further, or how should we think about that? Maybe that is a more general question.

Mr. DAVIDSON. Currently, loans that are delivered into the TBA market are exempt from SEC registration, so that allows you to essentially sell them before the securities are created.

Senator REED. Right.

Mr. DAVIDSON. In the private market, an issuer cannot do that. They cannot say, I am planning on securitizing next month. Please buy this security in advance. And that just eliminates the possibility for physical delivery into a forward sale. Other mechanisms could be developed, but they are just not going to be as efficient, or maybe there could be some exception created for some type of mortgage issues. But SEC is going in the other direction right now and sort of requiring more disclosure, more detailed disclosure about loans and longer time periods between when you announce a deal and when you sell it. The SEC's direction is contrary to what you need to create a TBA-type market for non-agencies.

Senator REED. So one of the aspects of creating this new—and we all understand this is not going to happen next year, this is a phased adaptation going forward—would be to provide investor protections, but perhaps not in the same way that is done presently by the SEC and private labels, but to work both of those features in, the rapidity, the liquidity, the ease, the uniformity with the investor protections. So we would have to deal with that, I guess.

Mr. DAVIDSON. That is correct.

Senator REED. There is a—one of the proposals, and this was, again, Mr. Van Valkenburg proposed that we ensure liquidity in market—a single issuer with uniform capital markets, accepted practices necessary, essentially separating the guarantee function from the insurance function—the issuance function, rather. And, Mr. Hamilton, can you comment on that approach, of separating the guarantee function from the issuing function.

Mr. HAMILTON. Are you saying separate the Government guaranteeing it or someone private guaranteeing it?

Senator REED. I was—

Mr. VAN VALKENBURG. Just the function itself. Do we need to have multiple issuers. I guess you are reading from my testimony.

Senator REED. Yes, I am. Go ahead.

Mr. VAN VALKENBURG. I was just suggesting the issuance should be a single issuer so that investors are not confused if it is ABC issuer, XYZ issuer. It is always done by the same issuance. And then the guarantee function could be priced independently, or the role can be determined independently.

Senator REED. And I will not put words in your mouth, but if it is a single issuer, that likely could be a Government entity.

Mr. VAN VALKENBURG. Yes, it could be.

Mr. HAMILTON. I think these are all—they are all saying the same thing, I think, that separating out the guarantee function is what we are talking about—

Senator REED. Right.

Mr. HAMILTON. When we discuss selling—when Mr. Davidson says selling subordinate tranches off of agencies or selling credit risk in a CDS or credit default swap off of a certain pool of residential mortgages, it is all accomplishing the same thing. We are trying to separate the guarantee function and mitigate and sell that credit risk so the taxpayer is not on the hook, yet at the same time

maintaining one issuer or a couple of issuers and maintaining that liquidity. So I think it is all saying the same thing in a different way.

Senator REED. Mr. Davidson, it is your thoughts. Do you want to elaborate?

Mr. VAN VALKENBURG. He is Mr. Davidson.

Senator REED. Oh, I am sorry—

[Laughter.]

Mr. VAN VALKENBURG. I am not as good looking as he is.

[Laughter.]

Senator REED. Mr. Van Valkenburg.

Mr. VAN VALKENBURG. Thank you. Yes. I was basically—in the current TBA market, there is a perception of if Fannie Mae has a better liquidity than Freddie Mac, it is minor, two or three ticks. I do not know, Tom knows better than I. So an issuer name is significant as far as liquidity, so that was basically it. I think if we get into too many issuers, it is going to confuse the investors, which is going to affect the level of liquidity. So a single name issuer is what I was advocating and the guarantee function separated. I think it costs us in liquidity if we have multiple issuers.

Senator REED. Right. But, I mean, in just thinking back, I think that is a way we sort of walked ourselves into the GSEs, which is basically if you are going to give a monopoly, then it has got to be quasi-governmental, at least. Otherwise, the monopoly profits go to someone. That is not our tradition. So this approach, I think, would imply the issuer would be some type of entity, either very closely regulated by the Government or some quasi-governmental entity, and then the guarantees would be subject to market pricing and market activity.

Mr. VAN VALKENBURG. Exactly, and we are not going to get a credit market established quickly, but we could develop that over time. The current infrastructure with a 30-year guarantee is not going to go away tomorrow and it is going to take time for that to develop, but—

Senator REED. Mr. Davidson, your comments. You are Mr. Davidson—

Mr. DAVIDSON. Yes, I am Mr. Davidson.

[Laughter.]

Senator REED. Forgive me. It is vision as well as—

[Laughter.]

Mr. DAVIDSON. One idea is that if you are going to have this single issuer or a few issuers to avoid this monopoly situation is that you can allow that to exist only as a cooperative, so some sort of industry cooperative like the DTCC, and so that if there is monopoly profits, they have to go back into the chain where it is competitive, either above or below that cooperative.

But I do think that having one or two issuers is good. Trying to get as many participants to take the credit risk is good. But you do have to find a way of standardizing the mortgage products. So let us say we had 20 different mortgage originators, all of who would go through this one guarantor, but they all had 20 different, like, loan documents, 20 different types of disclosure. Then we would have 20 different markets and that is not going to promote

the liquidity we need. So it is just a careful balancing act between spreading the risks and standardizing.

Senator REED. Let me ask this as a final question to all of the panelists, but I will begin with you, Mr. Davidson, which is you have proposed this subordinated debt approach. But I think it implicates a bigger issue, which is recognizing that we should probably begin to take steps now to begin a transition, that legislative steps, because it takes a long time to get legislation through and because of the potential it is not likely going to happen today or even next year, *et cetera*. But as you suggest, and I think everyone on the panel has suggested, there are things today that should be considered to begin this process, maybe even experiments which do not work out and save us the trouble of trying them in the future on a larger scale, or adopting them as an exclusive remedy.

So if you can comment on your subordinated approach, how it might work and is it feasible to begin to adopt it today, and then I would like to ask the other panelists to think of either what other steps that you would suggest, again, outside of legislative but within the purview of the agencies today and, as you understand, the legal framework.

So let us begin with Mr. Davidson.

Mr. DAVIDSON. So the subordinated approach is something that the GSEs have done in the past—

Senator REED. Mr. Hamilton pointed that out.

Mr. DAVIDSON. Right, sort of in the multi-family area—

Senator REED. Yes.

Mr. DAVIDSON.—and I believe it is something that the GSEs are exploring currently, different ways of adding private capital. And so it is certainly doable with the existing structure, but they probably do need the approval of FHFA. I do not know if they need the approval of Treasury. I think they can move in that direction. I think they should try several things. So I like subordinated bond approach. Other people might think we should use more private mortgage insurance.

I think the key factor there is sending the message to FHFA that experimentation is good, you know, that is what you want to see, and you do not need to have sort of a sole focus on conservatism of every dollar today, and I think finding the right solution actually adds value to the GSEs over time.

And the other important component is to try to move the dialog away from let us destroy the—you know, eliminate the GSEs tomorrow because they were bad before. The managements who did that are all gone. So are there pieces of the GSEs that we would like to preserve over time. So, anyway, I think it is doable.

Senator REED. Thank you.

Mr. Van Valkenburg, please.

Mr. VAN VALKENBURG. Yes. I proposed one idea, but there is no single monolithic solution, and all these markets are complex and they price risk differently and there are a different audience of investors. So the subordinated bond solution may be the best solution. We do not know until we actually go out and try to execute and see what the price and cost of that credit is. So I proposed the CDS market just as one avenue as exploratory thought. So I do not have a particular single solution, but I think you have to price it,

find out what the costs are, and find out what is the best execution for the Government's balance sheet.

Senator REED. Thank you.

And Mr. Hamilton.

Mr. HAMILTON. I think we end up with a portfolio of things we need to work on in the interim, given the likelihood of legislation in the near term is low. The FHFA can obviously play a large part in this. Lowering of the loan limits is one step. We could lower them further on a gradual basis over the next 18 months would be the next step. It would enable the private market to open up. I think the FHFA could—you could limit the amount of borrowings that banks can do from the Home Loan Bank System. You could encourage the covered bond legislation and market to open up to be another funding vehicle.

I think there is a portfolio of approaches that are going to attack the U.S. housing system and be the solution for mortgage finance, and I think there are quite a few of these we can do in the next 18 months without legislation, and I think those are just a few of the things we should work toward, and then I think we will find the answer. We will rise to the top quickly.

Senator REED. Well, thank you very much, gentlemen. This has been very, very helpful to the Subcommittee. As Senator Corker suggested, please do not be surprised if you are called again to get your views and your advice because it is extraordinarily helpful, and thank you very much for your testimony and your appearance today.

Some of my colleagues might have additional questions. We will ask that these questions be submitted before the end of the week. It is Wednesday, and so by Friday, I think that is fair. We will get those to you and ask you to return them as promptly as possible if there are any written questions.

Again, thank you very much. The hearing is adjourned.

[Whereupon, at 10:32 a.m., the hearing was adjourned.]

[Prepared statements supplied for the record follow:]

PREPARED STATEMENT OF THOMAS HAMILTONMANAGING DIRECTOR, BARCLAYS CAPITAL, ON BEHALF OF THE SECURITIES INDUSTRY
AND FINANCIAL MARKETS ASSOCIATION

AUGUST 3, 2011

Good morning Chairman Reed, Ranking Member Crapo, and Members of the Subcommittee. I am Thomas Hamilton, Managing Director, at Barclays Capital, where I am responsible for securitized products. I am pleased to testify today on behalf of the Securities Industry and Financial Markets Association (“SIFMA”).¹

We appreciate the opportunity to discuss the most liquid secondary markets for mortgage loans and mortgage-backed securities (MBS) in the world—the “To-Be-Announced” (TBA) markets. These are critically important markets which help consumers purchase homes, and we would like to discuss in detail how they work, the benefits they confer on consumers and the economy, and their important role in mortgage finance.

Summary

Housing is a critical component of our economy, and is the center of a virtuous circle: housing begets jobs, which beget housing. Consequently, the U.S. mortgage market is enormous; for example the home mortgage market is approximately equal in size to the total size of U.S. bank balance sheets. Given that banks engage in activities other than residential mortgage lending, their balance sheets alone cannot meet the country’s need for mortgage credit. Ginnie Mae, Fannie Mae, Freddie Mac (together, “the Agencies”) and private institutions use the process of securitization to provide capital that allows for the growth of mortgage lending beyond the capacity of bank balance sheets. Today, private securitization and the Agencies finance nearly 70 percent of outstanding home mortgages and it is therefore imperative that securitization continue to play a key role in any future mortgage finance system. The market for MBS issued by the Agencies is approximately three times the size of the outstanding non-agency MBS market. In this Agency MBS market, the TBA market is the single largest component. The TBA market is currently the key to funding mortgage lending, and because of this it plays a critical role in housing and the U.S. economy.

The enduring liquidity of the TBA market, in contrast to the lack of issuance in the private MBS markets, preserved the availability of mortgage credit in the recent crisis. This ability to maintain liquidity during stress periods is a key benefit of the TBA markets. Furthermore, the liquidity and resilience of the TBA market attracts a wide range of investors who provide vast capital that is cycled into mortgage lending, including retirement savings vehicles, insurance companies, and foreign investors.

The vast liquidity and forward-trading nature of the TBA market provides key benefits to consumers, such as the broad availability of 30-year fixed rate mortgages that may be prepaid without penalty, and significant and consistent liquidity in the secondary mortgage market. This results in a stable and attractive funding source for lenders that allows them to provide lower mortgage rates and longer-term “rate locks” for borrowers, and efficiently recycles funds back to local lenders to enable another round of mortgage lending.

Of course, the TBA market is facilitated by the guarantees of the Agencies, and therefore the support of the Government that stands behind them. Currently over 90 percent of mortgages are financed through a program of one of these three Agencies. This level of support is possible because Agency MBS do not expose investors to credit risk, and therefore the market is attractive to risk-averse investors that have vast sums of capital available for investment. Without the TBA market, we believe that the majority of this investment capital would be directed elsewhere, reducing the amount of funding for and raising the cost of mortgage lending. Therefore, SIFMA believes strongly that maintaining a liquid and viable TBA market should be considered as Congress addresses housing finance reform.

With that said, the reality is that that this current outsized role of the Government is not sustainable over the long term, and should be reduced. The TBA market’s role, and the Government’s role, should shrink as the private markets regenerate over time. The means of achieving this rebalancing are very complicated and

¹The Securities Industry and Financial Markets Association (SIFMA) brings together the shared interests of hundreds of securities firms, banks and asset managers. SIFMA’s mission is to support a strong financial industry, investor opportunity, capital formation, job creation and economic growth, while building trust and confidence in the financial markets. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association (GFMA). For more information, visit www.sifma.org.

consequential on a national, financial, and personal level. While SIFMA believes the TBA market should play a role in the future, it should certainly not be 90 percent of the market. There are a number of challenges to the resurrection of non-agency securitization, including the significant uncertainty faced by non-agency MBS investors and issuers. The rules of the road, for both sides, are not clear. Until they are, it will be challenging for issuers and investors to see eye to eye on securitization transactions, at least in the volume and frequency that is necessary to fund mortgage credit demand. Being able to withdraw the Government from mortgage markets will require a carefully planned and sequenced transition which should take a number of years. It is essential to remember that the necessary volume of non-agency investors will not simply appear because we want them to. They must be drawn back into, and made comfortable with, private label securitization and its regulatory environment.

We believe that it is critical that the planning and execution of significant changes to the funding of mortgage loans be done with attention to detail, be based on sound analysis of costs and benefits, be mindful of unintended consequences, and create a long-term beneficial and stable environment. While we cannot predict the future, we can use the past as a guide and apply lessons learned and mistakes made, the good and the bad, to a design that will stand the test of time.

We hope that the testimony we present today will be helpful in educating policymakers about how mortgage loans are funded in the capital markets, the critical role of the TBA market, and some of the critical issues that must be considered to move forward.

Thank you for this opportunity and I am happy to take any questions.

Discussion

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 Mac, 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 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 into 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

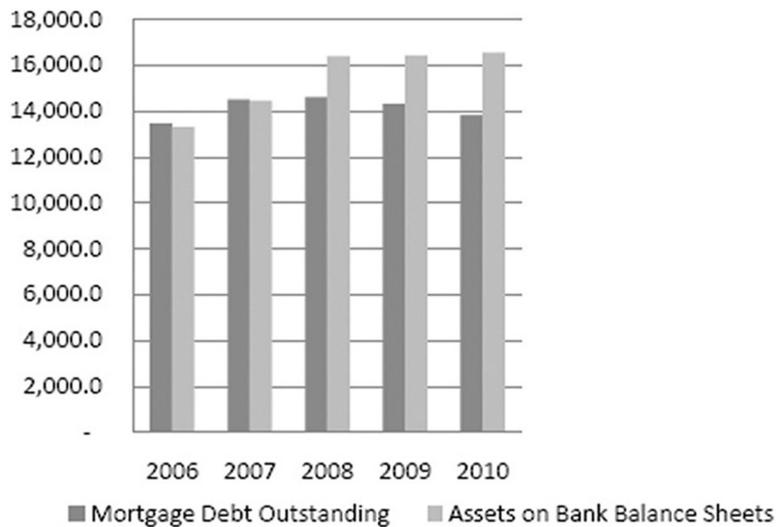
that met certain requirements. These rules are administered by the Internal Revenue Service. Most MBS are issued in compliance with REMIC regulations.

- *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

Chart 1 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.

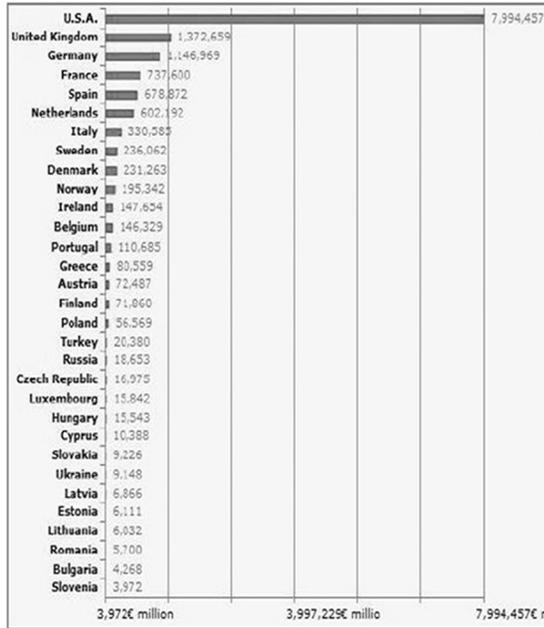
**Mortgage Market and Bank Balance Sheets Comparison
(\$ Trillion)**



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.

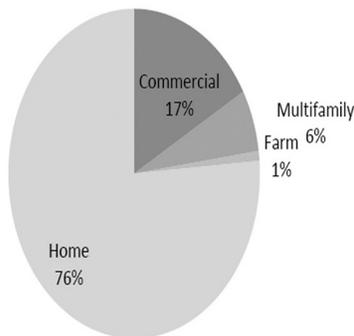
Outstanding Mortgage Debt (In Euros, 2009)



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

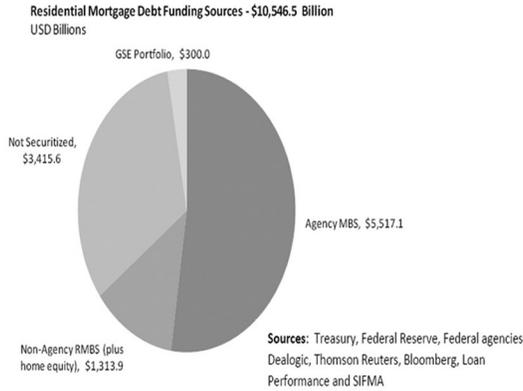


Source: Federal Reserve

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 percent, or \$7.1 trillion, of home mortgages are held in a GSE portfolio or securitized (agency and non-agency). Secondary markets, therefore, are responsible

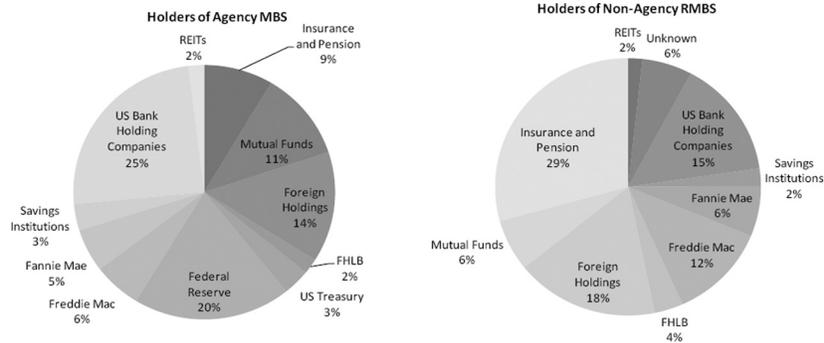
for funding two thirds of residential mortgage lending. The securitized home mortgage market can be split between agency MBS and non-agency MBS, with 81 percent of all MBS in the form of an agency pass-through or agency CMO.



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.



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.



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

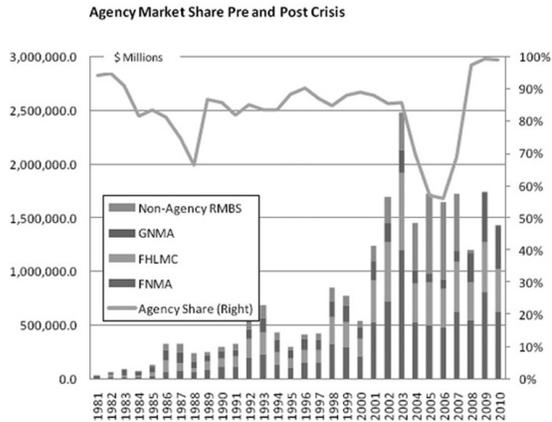
The Agencies have long played a crucial role in the U.S. mortgage finance market. Fannie Mae and Freddie Mac purchase loans, securitize them, and guarantee the timely receipt of principal and interest on their MBS. Ginnie Mae securitizes Government-insured FHA, USDA, and other Government guaranteed loans, 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.

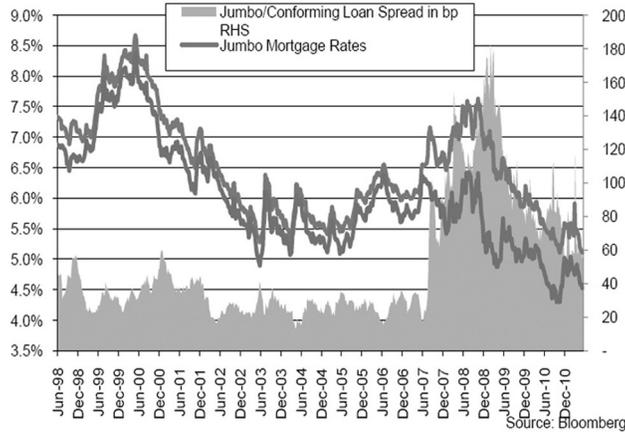
B. Agency Market Share Trends and Performance During the Crisis

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 percent. As the non-agency markets expanded in the mid-2000s, during the housing boom, the Agency share fell to approximately 50 percent. 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.

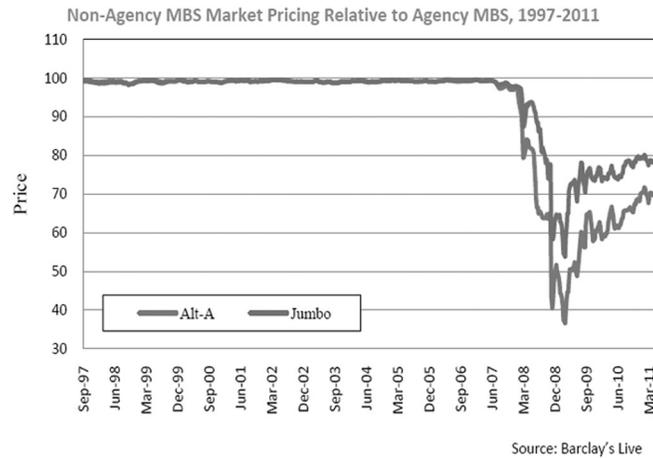


Source: SIFMA, Fannie Mae, Freddie Mac, Ginnie Mae, Federal Reserve

Another issue to review is the cost of a conforming loan (a loan eligible for securitization by a 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



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 percent 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 Association² 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.³ 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

²The Government Securities Dealers Association and the Public Securities Association are predecessor organizations of SIFMA.

³The 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>.

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.

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 1 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 3 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 percent 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, benefiting 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

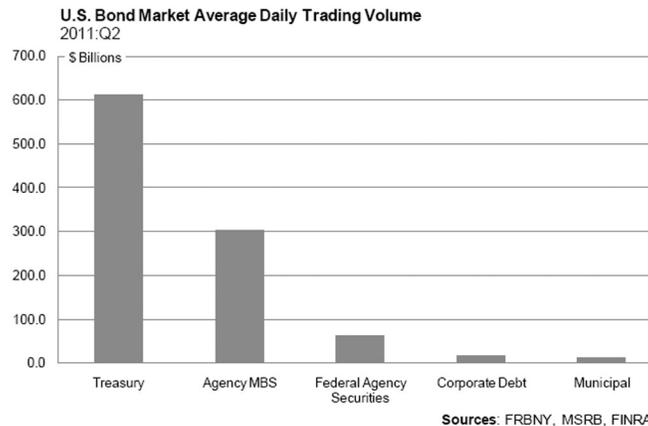
The TBA market is by far the most liquid, and consequently the most important secondary market for mortgage loans. This liquidity is derived from its vast size (\$trillions), homogeneity of collateral, and the forward nature of the trading. This liquidity is due to one factor: homogeneity. TBA trading is based on the assumption that the specific mortgage pools which will be delivered are fungible, and thus do not need to be explicitly known at the time a trade is initiated. At a high level, one pool is considered to be interchangeable with another pool. 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 a currently a scarce commodity for most lenders, and is finite in any case. Furthermore, the ability of borrowers to lock-in rates on mortgage applications would likely be reduced, creating uncertainty for them and likely depressing real estate activity which is an important component of broader economic activity.

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 toward 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 percent 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 uncertainty. 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 revisions⁴ to rules that gov-

⁴ 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>.

ern asset-backed securities, some of which were re-proposed,⁵ and some of which have been finalized,⁶ but the most critical elements are not yet final.

Another issue relates to recently proposed credit risk retention⁷ and mortgage underwriting rules.⁸ 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.⁹

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 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,

⁵ *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>.

⁶ *E.g.*, disclosure related to repurchase demands: <http://www.sec.gov/rules/final/2011/33-9175.pdf>.

⁷ 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>.

⁸ 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>.

⁹ For further discussion of premium capture and its potential impact, see SIFMA letters referenced above.

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.

PREPARED STATEMENT OF PAUL T. VAN VALKENBURG

PRINCIPAL, MORTGAGE INDUSTRY ADVISORY CORPORATION

AUGUST 3, 2011

Members of the Subcommittee:

Thank you for the opportunity to testify before the Subcommittee today. Our firm, the Mortgage Industry Advisory Corporation (“MIAC”) was started in 1989 and we serve mortgage market participants from smaller mortgage companies to the largest banks and MBS investors. In one of our product offerings, we offer loan origination hedge advisory services to mortgage companies who want to mitigate their market and fallout risk of loans and commitments of loans to borrowers. In order to offer this service, we need to capture the most current pricing information from the TBA (To-Be-Announced) securities and from the pool insurance providers (currently only Fannie and Freddie) so that mortgage companies can reflect these terms to prospective borrowers. The TBA market has served to attract trillions of dollars in additional capital to our housing finance system and to enable borrowers to have access to fixed-rate 30-year mortgages. Fixed rate 30-year mortgages enables borrowers to finance more home with a certain cash-flow liability. I hope to offer some additional clarity and detail around how these processes function in today’s mortgage market and how they might work in prospective TBA and mortgage markets.

The Committee has prepared a set of questions. Rather than answer each one individually, I chose to provide a high level description on the process whereby the TBA markets interact with the loan origination process. In doing so, I believe that I will address each of these questions with more clarity. In financial markets so much of what makes a market or a product successful is a marginally better solution, *e.g.*, slightly lower financing costs, slightly better liquidity, incrementally better servicing advance terms, *etc.* It is therefore necessary to have some specific descriptions of the market mechanics in order to fully access their current role of the TBA market and how a prospective housing finance system could be structured successfully.

1. What is the purpose and function of the TBA market?
 - a. What is the role of the TBA market in providing liquidity and facilitating mortgage-backed securities (MBS) trades?
 - b. How does the TBA market affect certain mortgage constructs, including the provision of 30-year fixed rate loans and interest rate locks?
 - c. Does the TBA market allow for greater investor participation and diversity than would exist without the TBA market?
 - d. How does the TBA market impact mortgage rates?

How the TBA market impacts loan terms for borrowers

Mortgage companies want to be in the business of creating mortgages for prospective borrowers and not in the business of speculating on interest rates and credit risk. The mortgage industry has developed so that the price information of mortgage assets in the capital markets and the credit risk insurers can be utilized by mortgage companies to offer loan terms to borrowers reflecting the most current risk pricing. This process is enormously complex on several fronts—the scope of the data collection, the timing of the data collection, the legal underpinning, the market conventions, and how all these players interact and compete.

US	3.0-5.5	3.5-6.0	4.0-6.5	4.5-7.0	Chg	Dir	Coupon	Month	Price	Chg	Dir
TRSY	3.500	Aug	96-17+/19	+0-12	1-	1	5.000	Aug	106-15+/16+	+0-05	5- 4
MBS	3.500	Sep	96-07 /09	+0-11+			5.000	Sep	106-04+/05+	+0-05+	
AGCY	3.500	Oct					5.000	Oct	105-25+/26+	+0-05	
IRS	3.500	Aug/Sep	097/ 10		1-	2	5.000	Aug/Sep	111/ 112		2- 2
CORP	3.500	Sep/Oct					5.000	Sep/Oct	10+/ 106		2- 2
CONV	4.000	Aug	100-21+/22	+0-10	3-	4	5.500	Aug	108-10 /11	+0-04	2- 2
CDS	4.000	Sep	100-10 /11	+0-10			5.500	Sep	108-01+/02+	+0-04+	
CP	4.000	Oct	99-31+/00+	+0-09+			5.500	Oct	107-25+/27	+0-05+	
ADN	4.000	Aug/Sep	111/ 112		1-	1	5.500	Aug/Sep	083/ 08+		1- 2
USRP	4.000	Sep/Oct	103/ 105		1-	1	5.500	Sep/Oct	07+/ 08		2- 2
USCD	4.500	Aug	103-26+/27	+0-07	3-	1	6.000	Aug	110-01 /01+	+0-03+	3- 2
Europe	4.500	Sep	103-15 /16	+0-07			6.000	Sep	109-23 /24	+0-02+	
Canada	4.500	Oct	103-04 /05	+0-07			6.000	Oct	109-15 /16	+0-03	
Asia	4.500	Aug/Sep	113/ 11+		3-	3	6.000	Aug/Sep	09+/ 095		2- 2
JGB	4.500	Sep/Oct	107/ 111		2-	2	6.000	Sep/Oct	08 / 086		1- 1

IRS	TRSY	2 yr	99-31 /312	+0-01+	0.391-387	Roll Analysis	FN	Aug-Sep	Financing@
STP	IRS	3 yr	99-296/30	+0-032	0.649-646	Cpn	Cpr	Drp	B/E Drp
Mkt Data		5 yr	100-032/03+	+0-076	1.478-477	3.5	6.3	0-097	0-085
IFR		7 yr	100-31+/00	+0-10+	2.221-218	4.0	8.1	0-111	0-091
		10 yr	101-14+/15	+0-14	2.953-951	4.5	12.8	0-113	0-091
		30 yr	101-20+/21	+0-22+	4.277-276				0.0 -10.2

The Tradeweb electronic trading screen with the current and executable TBA market prices. See www.tradeweb.com/businesses/rates/tba_mbs for more information.

The image above is a screen shot of the TBA market on July 26th, 2011 at 3:11 PM EDT. The bids and offers of individual broker dealers are consolidated and displayed on the Tradeweb screens. Market participants still execute with their chosen broker/dealer and they can use Tradeweb screens to execute. Smaller mortgage companies can't get approved as counterparties to large broker dealers, so the pricing that they execute at is usually $\frac{1}{64}$ or $\frac{1}{32}$ behind these screen prices. The market is a forward market where securities are created and settled in the future. The mortgage companies are modeling and estimating when their loan commitments will close and how long it will take and the cost to get a MBS pool certificate from Fannie or Freddie.

The TBA pricing on the screen are the most liquid segment of the MBS market. The screen shows the FannieMae 30-year with pass-through rates from 3.5 percent to 6.0 percent for settlement in August, September, or October. The prices are quoted in percentage of notional amount with a somewhat usual convention. For example, the bid side of the October delivery FN4's is 99 ("the handle") and 31 32nds plus one-64th or a plus "+". The number just to the right of "99-31+" is the offer side of the market. The "00+" means that the offer side price is 100-00+ or 100 percent plus $\frac{1}{64}$. The difference between the bid side of a market and the offer side of a market is a common method for measuring the liquidity of a market. Market participants would say that bid/offer spread is $\frac{1}{32}$. However, the depth of the market is measured by the difference between the highest bid and the next highest bid. Because large pools of mortgage are created with very similar loan terms, the cover bids/offers are usually only $\frac{1}{64}$ off highest bid or lowest offer. The TBA market is both liquid and deep. However, only the largest mortgage companies can execute directly with the largest broker/dealers who offer the best pricing. Slightly smaller companies will execute with regional broker/dealers with a $\frac{1}{64}$ or $\frac{1}{32}$ price difference because of their incremental counterparty risk.

If a mortgage company anticipates creating a mortgage on July 26th, they are estimating that they will have the loan closed and eligible for delivery into a FN30-4 security for the October month settlement. They could sell the majority of their risk as a FN30-4 TBA for 100 percent and $\frac{1}{64}$ of a percent (100-00+) in the TBA market with a large broker dealer or (100-01) with a regional broker. They would also have to pay for the guarantee fee and some loan level price adjustments to FannieMae. And they would have to decide whether they would prefer to retain the mortgage servicing rights or sell/release the mortgage servicing rights to another mortgage company. Below is a diagram illustrating the basic flow of the pricing information from the TBA market to the borrower.

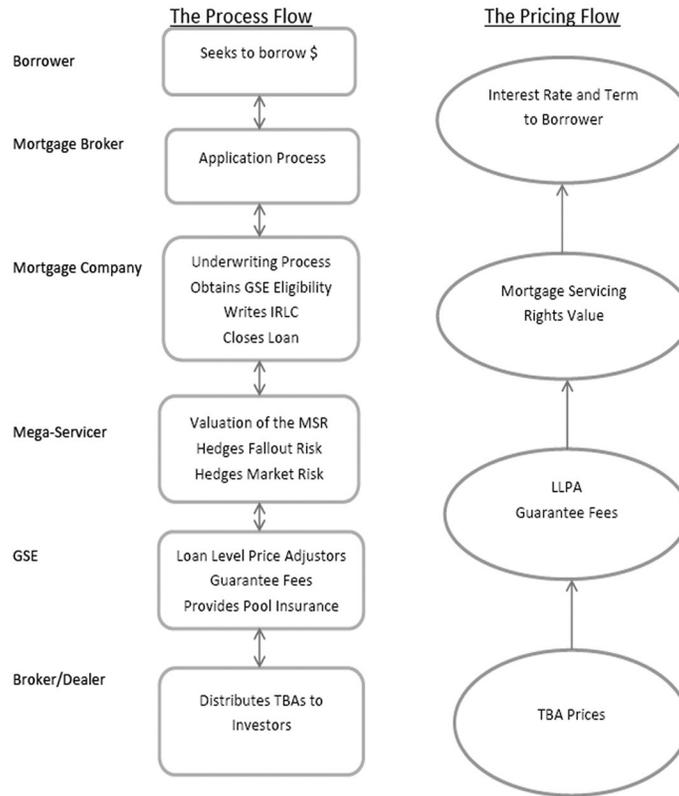
As part of the price discovery process for mortgage companies, the GSEs will charge a guarantee fee to provide pool insurance for the investors in the MBS pool. The guarantee fee for a typical qualifying conventional mortgage is 0.0025 or 0.25 percent. However, for loans that are still eligible for the GSE pool insurance but with a more credit risk, the GSE will charge substantially higher guarantee fees. These guarantee fees are called Loan Level Price Adjustors (“LLPA”) and the industry refers to them as risk-based pricing. For example, loans with higher LTVs, low FICOs, Investment Property, Condo/Coop’s, and Cash-Out Refi’s have LLPA’s. I’ve included FannieMae’s Selling Guide with the most current LLPA’s with this testimony.

Fannie/Freddie Eligible Loan Pricing

$$\text{Loan Price} = \text{TBA Price} + \text{Value of MSR} - \text{GSE LLPA} - \text{GSE Guarantee Fee}$$

:TBA Price – changes with interest rates

:Value of MSRs – changes with interest rates



The Loan Creation Process from Application to TBA

Initial Application—Loan Broker or Retail Loan Officer

(subset of necessary data for full underwriting; data needs to be verified)

Application Approved/Loan Commitment created

(complete set of collateral and credit data for full underwriting; verification of employment; verification of income; appraisal (IRLC could still be subject to subsequent appraisal))

IRLC (Interest Rate Lock Commitment)—Exposes the mortgage company to fall out risk and market risk.

Loan Closes and is subsequently QC'ed and delivered to Fannie for the creation of a TBA security. The mortgage company obtains a pool certificate number from Fannie.

Mortgage Company can sell the IRLC (Best Efforts) to a larger mortgage company and the larger mortgage company can measure and manage the fall out and market risk. Or the mortgage company can retain the IRLC and measure and manage the fall out and market risk with their balance sheet. If they retain the IRLC, they will be selling the future loan with the Mandatory delivery option, meaning they will be required to deliver the loan or pool of loans. The party that sells securities (after the loans have been approved as collateral in TBA pools by FN/FH) into TBA pools is required (mandatory) to deliver the TBA securities on the appropriate settlement dates. If they closed more or less loans than they expected, they have to absorb the market consequences.

The owner of the mortgage servicing rights must be a Fannie approved servicer for Fannie securities. Approval is subject to minimum capital requirements and regular business process performance audits.

- e. Are there any alternatives that would accomplish the same objective and what are the obstacles to the development of such a market?

In the current mortgage origination process with a liquid TBA market, mortgage companies can know with a sufficient clarity and near certainty what the exit value of GSE eligible, fixed-rate loans will be. They can even sell their IRLC's to a larger mortgage company that will measure and manage the fall out risk, pay a competitive price for the MSR component, and handle the data delivery requirements.

Over the past several years, bank balance sheets are constrained as they grow their capital and operate under stricter underwriting guidelines. Mortgages created for bank balance sheets (typically adjusted rate mortgages or jumbos) have represented only a very small percentage of loan origination. Mortgage products that are not eligible for GSE guidelines do not have a liquid TBA market and as a result, mortgage companies have not been originating non-agency eligible mortgages. The vast preponderance has been 30-year fixed rate mortgages that form the collateral of outstanding MBS and currently qualified for new MBS pools. This new housing finance capital was distributed from global investor to U.S. home borrower by means of the TBA market. Even the Fed chose to provide their \$1.2 trillion of capital through the TBA market.

Homogeneity and Standardization

The "Uniform Practices for the Clearance and Settlement of Mortgage-Backed Securities" created and maintained by SIFMA has provided sufficient homogeneity and standardization of the individual MBS pool attributes and the clearing and settlement practices to enable a liquid market to be created. Investors in mortgage-backed securities recognize that each pool is a population of individual mortgages and therefore, their pricing and valuation metrics employ actuarial or statistical assumptions about the payment and prepayment behavior of the population. This valuation paradigm and the homogeneous pool attributes enable market participants to trade in large pools of TBAs as fungible securities. If a privately guaranteed TBA market were to be developed, the market would surely coalesce to an AAA credit rating. And SIFMA settlement practices ensuring market liquidity would only be tweaked slightly. A slightly lower credit rating would make the terms of the mortgage more expensive to borrowers, but the market liquidity could be utilized in same manner as today by mortgage companies to hedge their interest rate risk for creating long term fixed-rate mortgages.

If a solely private TBA market was created today, I believe that the size of this market would be substantially smaller than the current Government supported market. However, the development of a solely privately supported TBA would necessarily involve a longer term transition. We have time to explore developing a solely private market in parallel with the current Government guaranteed market. The

largest buyers of TBAs today are the Wall St dealers gathering collateral for CMO issuance. They could take AAA rated TBA and credit enhance their CMO bonds to distribute the bonds to a wider audience of investors including typical CMO buyers such as mutual funds, insurance companies, and other non-banking investors. The investor acceptance of these new products would be a gradual process.

The principal challenge of a privately capitalized TBA market is who would hold the first loss or mezzanine risk pieces in the privately guaranteed TBAs. In the market right now, there is an enormous amount of this risk that is available for risk takers to purchase. And the dynamics are such that there is a very weak bid for holding this risk. One of the structural problems is that nearly all regulated financial institutions would not be permitted to underwrite this risk without enormous capital charges and regulatory oversight. The current market for holding this residential credit risk is saturated. At this point, a Government guarantee is necessary. However, I believe that going forward consumers, investors, and tax payers are best served with a single TBA issuer, standardized market practices necessary to preserve and enhance market liquidity and investor acceptance, and segregated credit providers either solely private or a hybrid private/Government solution.

Single Issuer—Separate “Government-Backed” Creditor

The GSEs currently offer their guarantee to a number of mortgage products that have failed to become actively traded securities in liquid TBA markets. Although many other GSE loan guarantee program exist, they represent only a tiny minority of loans that are originated. This implies that an explicit Government guarantee alone is not sufficient to create a mechanism to attract capital market participants to invest in federally guaranteed mortgage securities. *The standardization and homogeneity of the securities and their market practices and Government guarantee of timely payments have led to market liquidity.* This liquidity has created marginally better pricing to enable mortgage companies to offer marginally favorable terms to borrowers for those loan products that become the collateral for liquid securities. A single federally approved and regulated securities issuer would serve as a gatekeeper of the investor acceptance of newer guarantee products. Moreover, a single MBS securities issuer would act as an implicit agent of the investors to ensure market acceptance of the newer TBA products.

Pricing the Credit Risk Accurately

Currently the GSEs have migrated toward Loan Level Price Adjustors as mechanism for accurately pricing the incremental credit risk associated with incrementally higher credit risk in the underlying mortgages. Are these LLPA's accurate in measuring the expected and potential credit losses of these underlying loans? Frankly, no one can accurately price this risk because no one can foresee all the future economic scenarios that would result in loan losses. We've recently had one economic scenarios where U.S. residential real estate declined approximately 30 percent and certainly this one scenario would be useful but by no means is it comprehensive in describing all the future economic scenarios and what the direct impact will be on particular mortgage borrowers and their future default behavior. Accurate pricing involves estimating the probably that the future credit event happens. Accurately estimating the probability of a 30-year credit event and its impact on particular mortgages is nearly impossible.

And what's the value of this credit insurance to the investor or to the housing finance system that benefits from this incremental flow of capital? What's the price and value of this credit insurance next month? Or years later? Quantifying the current market price and value of a Government guarantee is daunting challenge without any ongoing market that prices and transfers this risk between two parties. Can we create a market place where this risk can have some price discovery?

The GSE Government guarantee is basically pool insurance. Pool insurance replicates the economics of a credit default swap. The GSEs are currently the largest writers of protection in illiquid CDS. If we take these pool insurance contracts (CDS) and allow these contracts to be bought and sold to other financial institutions, we can distribute the credit risk more broadly throughout the financial system. And we gain valuable price discovery on the cost of this insurance in an actively traded market. This price discovery can be very useful for creating innovation but also have the regulatory role in quantifying the risk and for establishing appropriate capital charges.

Other issues with providing Government guarantees

Using the U.S. Government balance sheet to insure against particular credit events has a long history of over extension and mispricing of these guarantees. Ideally, if we could create a mortgage origination system that allowed for the credit risk to be underwritten and priced in the private capital markets, this would ensure

a more effective allocation of capital and a more effective economic system. I believe we should start from a point of view of attempting to build a solely privately capitalized system and then, if circumstances dictate, migrate toward a solution that utilizes hybrid Government guarantees. I believe a liquid TBA market could be created with solely private capital. The question of whether this purely private market reduces the size of the market materially and thus provides less capital to the housing markets can be managed as the market evolves. And as the fall of 2008 capital market events illustrated, a Government guarantee in times of unparalleled market skepticism was necessary for the capital markets to become restored and operational. The solution should include a mechanism or structure for the Federal Government to intercede to guarantee market liquidity in extreme conditions.

Government Guarantor Competition

Over the past 30 years, we've had two GSEs and GNMA competing for originator acceptance and investor appetite. This competition has led to innovation of the financial products and increased the capital flow into the mortgage market. One of the MBS securities' terms that has evolved most significantly over the years is the servicing remittance terms and the interaction with the guarantee of timely payment of principal and interest. In the current housing finance system servicing remittance terms are again highly controversial and therefore an area where market innovation could be adopted. (MIAC is not an advocate of the alternative minimum servicing fee proposal. MIAC believes having the servicer continue to have a financial incentive in the performance of the loans is crucial.)

Also in the current market place, larger servicers are usually charged a lower guarantee fee by the current GSEs for the same underlying loans than smaller mortgage companies. If the market acceptance of solely privately guaranteed TBAs does not prove sufficient to providing adequate capital to our housing finance needs, a system of multiple Government credit provider would be a preferred approach. Having a larger number of GSE-like competitors to offer Federal Government credit guarantees could allow for more product innovation and help widen the product mix of mortgage products that could have liquid markets. The appropriate location on the spectrum of the credit quality of the underlying mortgages and the appropriate mix and cost of the originator retaining risk versus the GSE-like credit guarantor of timely payment of principal and interest could be competitively determined. Federal housing policy could prescribe that particular borrowers could be priced with more affordable credit guarantee terms.

The FHLBs have successfully weathered the recent mortgage credit crisis and have served as an enormous source of liquidity for mortgage holders, particularly non-agency eligible and illiquid mortgages. Although they have historically operated with a very different model of offering liquidity, they would be natural potential credit providers for newly created mortgages that would qualify for the single new securities issuer's parameters. Having multiple Government credit providers each constructing innovative solutions of creating hybrid private/Government credit enhancements would enable innovation and competition to create better solutions for investors and borrowers. All Government credit providers would have the same regulator and capital requirements.

Mortgage companies could seek outside credit providers such as the current private mortgage insurers or work with broker/dealers to create and price new products for participants interested in taking the credit risk of residential real estate. Over the past 10 years, the corporate bond market has evolved so that credit default swaps provide market participants a liquid market for trading and pricing heterogeneous and complex credit risk. Pool insurance is a particular example of a credit default swap. However, liquidity in pool insurance is non-existence, but credit default swaps can provide active price discovery and liquidity. An active market for residential credit risk would create some level of price discovery for the credit risk in residential real estate and also allow the risk to be more widely shared throughout the financial system. This price discovery would also assist each of the Government guarantors and their regulators in measuring the current price for particular residential credit risk. The GSE-like creditor providers could trade their credit risk between GSE-like institutions to manage their risk exposure. They could trade and manage their credit risk with private market risk takers. Having reference pricing for a long dated residential credit risk would help the regulatory role in helping to determine the appropriate amount of capital required by the small set of approved Government guarantors.

How would Congress distribute the Federal guarantee among the various Federal credit providers each of which would have a different mix of credit risk and amount guaranteed? Each GSE-like should be separately capitalized with each institution's own capital acting as the first line of defense against future claims. One guiding

principle should be that each GSE-like be capitalized to at least the level of capital required for a private market insurance company. In addition, Congress could establish global, system wide limits to the credit risk exposure.

This proposal does not eliminate the moral hazard and distortion in capital allocation that is created by a Government guarantee that has been historically mispriced and credit providers undercapitalized. I merely attempt to outline a structure that in many ways mitigates these risks and addresses the fundamental challenges with pricing this risk.

I believe that going forward the flow of capital to housing finance will be best served if we can create a system that continues to have competition in the particular guarantee programs. However, in order to ensure liquidity and market acceptance, a single issuer with uniform and capital market accepted practices is necessary. I believe we should segregate the guarantee function from the issuance function.

2. How will proposed housing finance reforms impact the TBA market? Please consider:
 - a. Proposals that change (or impact) the Government-sponsored enterprises (GSEs) role or any Government guarantee;
 - b. Proposals that increase the number of GSEs or other MBS issuers; and
 - c. Other proposals that affect the structure of the housing finance system.

Regarding recent proposals, I only have passing knowledge of other proposals at this time. Constructing a successful solution involves a detailed and careful analysis of the risks and these complex tradeoffs.

3. What, if any, changes or improvement can or should be made to improve the functioning of this MBS marketplace?

One principal lesson from the recent failures of the GSEs is that it isn't prudent to mitigate the risk of writing insurance on the U.S. residential real estate industry by restricting their investment portfolios to the purchase to only securities with risk exposure to U.S. residential real estate. In my view, the Federal guarantee providers of the future should be restricted from purchasing MBS. The goal of the guarantee is to subsidize housing by creating more capital to the residential housing market and the risk is absorbed as general obligation of the United States. Having the mortgage insurance capital pool invest in mortgage investments is a structural failure for the current GSEs.

In the past the GSEs have also played a role in using a small portion of their investment portfolios to support the prices and liquidity of their MBS securities. Many market observers believe these temporary price supports, in modest magnitude, have led to greater private capital involvement in the TBA market. This may be the case but I believe that this role can be served by the Fed in the future. The Fed currently plays a similar role in the U.S. Treasury markets and could play this role of supporting the price of mortgage assets in the capital markets in the future.

A future TBA market

The current mortgage origination market has been providing new capital to borrowers as the result of an active and robust TBA market. This liquid TBA market allows mortgage companies an effective means to price and sell/hedge their mortgage loans. The TBA market with a Government guarantee enables 30-year fixed rate consumers to transfer their interest rate risk to the investors and provide them with a fixed liability stream for 30 years. This liquid market has been the source of approximately 90 percent of mortgage capital in the past few years. At a time of tremendous contraction in private capital into the housing markets, the TBA market has been the sole beacon of success. However going forward, I believe that we can create a TBA product that reduces the risk exposure of the Government guarantee and provides a role for private capital risk takers. This won't be a simple task, but introducing mechanisms to enable risk to be priced and traded will enrich our housing finance system. The future U.S. Housing finance system must protect the strength's of the TBA market and the pocket books of the taxpayer, because an effective and stable housing finance system is essential to our collective prosperity.

Loan-Level Price Adjustment (LLPA) Matrix and Adverse Market Delivery Charge (AMDC) Information

This document provides the LLPA applicable to loans delivered to Fannie Mae and provides details of the AMDC. LLPAs are assessed based upon certain eligibility or other loan features, such as credit score, loan purpose, occupancy, number of units, product type, etc. Special feature codes (SFCs) that are required when delivering loans with these features are listed next to the applicable LLPAs. Not all loans will be eligible for the features described in this Matrix and unless otherwise noted, FHA, VA, Rural Development (RD), Section 502 Mortgages, HUD 184 Native American Mortgages, matured balloon mortgages (refinanced or modified, per *Servicing Guide* requirements) redelivered as fixed-rate mortgages (FRMs) (effective June 1, 2010), and reverse mortgages are excluded from these LLPAs. Refer to the *Selling Guide* and your contracts with Fannie Mae to determine loan eligibility.

Pricing Guidelines for LLPAs and AMDC (AMDCs are drafted in the same way as LLPAs):

- All LLPAs and AMDC are cumulative. The LLPAs apply to all loans that meet the stated criteria for the LLPA, unless otherwise noted or excluded. The AMDC applies to all loans.
- Credit score requirements are based on the "representative" score as defined in the *Selling Guide*. Loans delivered without a credit score will be charged under the lowest credit score range shown in each of the applicable LLPA tables (however, Fannie Mae does not waive any rights by accepting such loans and charging the applicable LLPA).
- All applicable LLPAs and the AMDC for MBS transactions will be drafted from the lender's account. All applicable LLPAs and the AMDC for whole loan transactions will be deducted from the loan net proceeds, as set forth in the *Selling Guide*. For certain whole loan deliveries, including interest-only loans and loans with 40-year terms, the product-specific LLPAs are reflected in the commitment price available via eCommitting™ and eCommitOne™; any additional LLPAs applicable to loan features will be deducted from purchase proceeds.
- Footnotes and expiration/effective dates are important guides to the correct application and accumulation of LLPAs.
- Mortgages are subject to all applicable SFCs, in addition to any that may be indicated below.
- For loans with financed mortgage insurance, applicable LLPAs are applied based on gross LTV, which is calculated after the inclusion of financed mortgage insurance.

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Table 1: Adverse Market Delivery Charge *

	0.250%
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* Applicable to all mortgages delivered to Fannie Mae, including FHA, VA, Rural Development 502 Mortgages, HUD 184 Native American Mortgages, matured balloon mortgages (refinanced or modified, per *Servicing Guide* requirements) redelivered as FRMs, and Reverse Mortgages.

Table 2: All Eligible Mortgages (Excluding MCM): LLPA by Credit Score/LTV

PRODUCT FEATURE	LLPAs by LTV Range										SFC
	≤ 60.00%	60.01 – 70.00%	70.01 – 75.00%	75.01 – 80.00%	80.01 – 85.00%	85.01 – 90.00%	90.01 – 95.00%	95.01 – 97.00%			
Representative Credit Score	Applicable for all mortgages with greater than 15 year terms										
	For whole loans purchased on or before March 31, 2011, or loans delivered into MBS pools with issue dates of March 1, 2011 or earlier										
≥ 740	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	N/A
720 – 739	0.000%	0.000%	0.000%	0.250%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	N/A
700 – 719	0.000%	0.500%	0.500%	0.750%	0.500%	0.500%	0.500%	0.500%	0.500%	0.500%	N/A
680 – 699	0.000%	0.500%	1.000%	1.500%	1.000%	1.000%	0.750%	0.750%	0.750%	0.500%	N/A
660 – 679	0.000%	1.000%	2.000%	2.500%	2.500%	2.500%	1.750%	1.750%	1.750%	1.250%	N/A
640 – 659	0.500%	1.250%	2.500%	3.000%	2.750%	2.750%	2.250%	2.250%	2.250%	1.750%	N/A
620 – 639	0.500%	1.500%	3.000%	3.000%	3.000%	3.000%	2.750%	2.750%	2.750%	2.500%	N/A
< 620 ⁽¹⁾	0.500%	1.500%	3.000%	3.000%	3.000%	3.000%	3.000%	3.000%	3.000%	3.000%	N/A
Representative Credit Score	Applicable for all mortgages with greater than 15-year terms										
	For whole loans purchased on or after April 1, 2011, and loans delivered into MBS with issue dates on or after April 1, 2011.										
	(LLPA changes highlighted in bold)										
≥ 740	-0.250%	0.000%	0.000%	0.250%	0.250%	0.250%	0.250%	0.250%	0.250%	0.250%	N/A
720 – 739	-0.250%	0.000%	0.250%	0.500%	0.500%	0.500%	0.500%	0.500%	0.500%	0.500%	N/A
700 – 719	-0.250%	0.500%	0.750%	1.000%	1.000%	1.000%	1.000%	1.000%	1.000%	1.000%	N/A
680 – 699	0.000%	0.500%	1.250%	1.750%	1.500%	1.500%	1.250%	1.250%	1.250%	1.000%	N/A
660 – 679	0.000%	1.000%	2.000%	2.500%	2.500%	2.500%	2.250%	2.250%	2.250%	1.750%	N/A
640 – 659	0.500%	1.250%	2.500%	3.000%	3.000%	3.000%	2.750%	2.750%	2.750%	2.250%	N/A
620 – 639	0.500%	1.500%	3.000%	3.000%	3.000%	3.000%	3.250%	3.250%	3.250%	3.000%	N/A
< 620 ⁽¹⁾	0.500%	1.500%	3.000%	3.000%	3.000%	3.000%	3.250%	3.250%	3.250%	3.250%	N/A

(1) A minimum required credit score of 620 applies to all mortgage loans delivered to Fannie Mae in accordance with the *Selling Guide*; exceptions to this requirement are limited to loans in which any borrower has nontraditional credit and those originated in accordance with Refi Plus™ or DU Refi Plus (see the Refi Plus Pricing Matrix).

Table 3 (cont'd): All Eligible Mortgages (Excluding MCM unless otherwise noted): LLPA by Product Feature

PRODUCT FEATURE	LTV Range										SFC
	≤ 60.00%	60.01 – 70.00%	70.01 – 75.00%	75.01 – 80.00%	80.01 – 85.00%	85.01 – 90.00%	90.01 – 95.00%	95.01 – 97.00%			
High-balance mortgage loans ⁽⁴⁾											
ARM (pricing based on higher of LTV/CLTV)	0.750%	0.750%	0.750%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	808
Cash-out refinance	1.000%	N/A	N/A	N/A	808						
Multiple-Unit Properties											
2-unit property	1.000%	1.000%	1.000%	1.000%	1.000%	N/A	N/A	N/A	N/A	N/A	N/A
3-4 unit property	1.000%	1.000%	1.000%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Condominiums (excluding cooperatives; excluding detached condominium loans delivered with SFC 588)											
Applicable for all mortgages with greater than 15-year terms											
	0.000%	0.000%	0.000%	0.000%	0.750%	0.750%	0.750%	0.750%	0.750%	0.750%	N/A

⁽⁴⁾ LLPAs for general loan limits per this Matrix also apply. High-balance mortgage loans delivered as MCM are subject to these LLPAs, in addition to the MCM LLPAs per Table 7 below.

Table 4: Mortgages with Subordinate Financing ⁽⁵⁾ (Excluding MCM)

LTV Range	CLTV Range	Non Interest-Only LLPA			SFC
		Credit Score <720	Credit Score ≥ 720	Credit Score ≥ 720	
For whole loans purchased on or before March 31, 2011, or loans delivered into MBS pools with issue dates of March 1, 2011 or earlier					
65.01% – 75.00%	90.01% – 95.00%	0.500%		0.250%	339
75.01% – 95.00%	90.01% – 95.00%	0.500%		0.250%	338
75.01% – 90.00%	76.01% – 90.00%	0.250%		0.000%	187
≤ 95.00%	95.01 – 97%	1.50%			
For whole loans purchased on or after April 1, 2011, and loans delivered into MBS with issue dates on or after April 1, 2011. (LLPA changes highlighted in bold)					
≤ 65.00%	80.01% – 95.00%	0.500%		0.250%	N/A
65.01% – 75.00%	80.01% – 95.00%	0.750%		0.500%	339
75.01% – 95.00%	90.01% – 95.00%	1.000%		0.750%	338
75.01% – 90.00%	76.01% – 90.00%	1.000%		0.750%	187
≤ 95.00%	95.01 – 97%	1.50%			

⁽⁵⁾ If the subordinate financing is a Community Seconds loan, these LLPAs do not apply and the lender must use SFC 118. Refer to the Selling Guide for maximum CLTVs for loans with Community Seconds.

Table 5: Minimum Mortgage Insurance Coverage Option (Excluding MCM)

Credit Score	Amortization terms > 20 years			All amortization terms		
	LTV Range	LTV Range	LTV Range	LTV Range	LTV Range	LTV Range
> 740	80.01 – 85.00%	85.01 – 90.00%	90.01 – 95.00%	95.01 – 97.00%	97.01 – 99.00%	99.01 – 100.00%
720 - 739	0.125%	0.375%	0.625%	0.875%	1.125%	1.375%
700 - 719	0.125%	0.625%	0.750%	0.875%	1.125%	1.250%
680 - 699	0.125%	0.750%	0.875%	1.125%	1.375%	1.500%
660 - 679	0.750%	1.250%	1.750%	2.000%	2.250%	2.500%
640 - 659	1.250%	1.750%	2.000%	2.250%	2.500%	2.750%
620 - 639	1.750%	2.000%	2.250%	2.500%	2.750%	3.000%
< 620 ⁽¹⁾	2.000%	2.250%	2.500%	2.750%	3.000%	3.000%

Table 6: Flexible Mortgages

Effective for whole loans purchased before December 1, 2010, or loans delivered into MBS pools with issue dates before December 1, 2010, the Flexible mortgage LLPAs will be discontinued and the high-LTV LLPA will incorporate Flexible LLPAs (see Table 3 for details).

Product Feature	LTV	LLPAs	SFC
Flexible 97*	95.01 – 97.00%	0.500%	206
Flex 90-95	90.00 – 95.00%	0.500%	206

Table 7: MyCommunityMortgage (MCM) (AMDC under Table 1 and High-Balance Mortgage Loans under Table 3 also apply to MCM and are cumulative to the LLPAs in this table)

Product Feature	LLPAs	SFC (as applicable)
All MCM loans; or manually underwritten loans	0.750%	460
Subordinate-financing (non-Community Seconds)	0.500% ⁽⁶⁾	
5/1 ARM with LTV > 90.00%	0.250%	
40-year term (MBS only)	0.125%	

Applicable SFC is still required when using these features in conjunction with MCM SFC 460

Examples of Loan Transactions Showing Total LLPAs and AMDC

The examples below are for illustrative purposes only and are not intended to imply actual DJ recommendations (assumes one-unit, primary residence)

(applies to whole loans purchased on or after April 1, 2011, and loans delivered into MBS with issue dates on or after April 1, 2011)

Example 1a: 30-YR FRM, COR, Credit Score = 680, LTV = 85% **Example 1b:** 30-YR FRM, COR, Credit Score = 680, LTV = 85%, Minimum MI

- From Table 1: AMDC = 0.250%
- From Table 2: Representative Credit Score LLPA = 1.500%
- From Table 3: COR LLPA = 2.500%
- Total: 4.250%**

- From Table 1: AMDC = 0.250%
- From Table 2: Representative Credit Score LLPA = 1.500%
- From Table 3: COR LLPA = 2.500%
- From Table 5b: Minimum Mortgage Insurance = 0.125%
- Total: 4.375%**

Example 2: 30-YR FRM, Purchase, Subordinate Financing, Credit Score = 670, LTV = 80%, CLTV = 95%

- From Table 1: AMDC = 0.250%
- From Table 2: Representative Credit Score LLPA = 2.500%
- From Table 4: Mortgage with Subordinate Financing = 1.000%
- Total: 3.750%**

Example 3: Matured balloon mortgages (refinanced or modified, per *Servicing Guide* requirements) redelivered as FRM, Credit Score = 690, LTV = 80%, Investment Property

- From Table 1: AMDC = 0.250%
- From Table 3: Investment property - matured balloon mortgages (refinanced or modified) redelivered as FRM = 1.750%
- Total: 2.000%**

Example 4: 10/1 ARM, COR, High-Balance Mortgage Loans, Credit Score = 690, LTV = 60%

- From Table 1: AMDC = 0.250%
- From Table 2: Representative Credit Score LLPA = 0.000%
- From Table 3: COR LLPA = 0.750%
- From Table 3: High-Bal Mig ARM LTV/CLTV = 0.750%
- From Table 3: High-Bal Mig COR LLPA = 1.000%
- Total: 2.750%**

LLPA Matrix and AMDC Information Change Tracking Log

The information in the table below summarizes major changes only, and may not represent a comprehensive description of all changes made to the Matrix. In addition, the information below is provided as a convenience only, and should not be relied on for the purposes of obtaining actual LLPA values. Always refer to the related Announcement or Lender Letter for the explanation and details of the particular change.

Summary of Changes		
Date	Announcement/ Lender Letter	Changes Made
01/07/10	Formatting/Correction Announcement 09-29	<ul style="list-style-type: none"> Added clarification to high-balance mortgage loan pricing for ARMs in Table 3 to indicate pricing is based on LTV, CLTV or HCLTV, whichever is higher. Added information about the application of LLPAs for loans with financed mortgage insurance (Introduction). Deleted "Table 5a, "Lower-Cost MI Coverage Option for Loans Underwritten with DU," and related Footnotes 4 and 5, due to retirement of this mortgage insurance option. Removed Flexible mortgage options, and related Footnotes 6 and 7, based on different mortgage insurance coverage levels which are no longer offered (Table 6). Removed EA specific LLPAs that were retired effective with the implementation of DU Version 8.0 (Table 7). Removed MCM SECs applicable to deliveries prior to January 1, 2010 (Table 6).
4/30/10	Announcement SVC- 2010-05 Announcement SEL- 2010-06 Formatting	<ul style="list-style-type: none"> Added conditional refinanced or conditional modified balloon mortgages reclassified as FRM to list of products that are excluded from LLPAs unless otherwise noted (Introduction, Table 1, Table 3). Added conditional refinanced or conditional modified balloon mortgages reclassified as FRM Investor LLPA (Table 3). Changed Example 3 due to IO eligibility changes to a conditional refinanced balloon reclassified as FRM (Examples section). Added eligibility changes effective September 1, 2010 to 7-year balloons and IO products (Table 3, Table 6). Added N/A LTV buckets to ARM high-balance mortgage loans, 2- to 3-unit properties, and investment property (Table 3). Renumbered Table of Contents. Renumbered footnotes throughout Matrix based on the addition of Footnote 1 and the deletion of other various footnotes. Removed remaining information on EA based on the elimination of any EA-specific LLPAs (Deleted Table 7 "Expanded Approval" and Footnote 5).
9/20/10	Announcement SVC- 2010-05 Announcement SEL- 2010-06 Announcement SEL- 2010-13 Formatting/ Clarification	<ul style="list-style-type: none"> Removed note relating to pricing effective date for investment property – matured balloon mortgages (refinanced or modified), reclassified as FRMs (Table 3). Removed notes concerning interest-only purchase requirements (Table 3, Table 7). Added "N/A" buckets for certain IO LLPAs (Table 3). Removed interest-only price point (Table 7). Removed 7-year balloon pricing based on removal of balloons as standard product (Table of Contents, Table 2, Table 3). Added high-LTV pricing (Table 3). Removed reference to Flexible mortgages in the ≤ 95.00% LTV bucket (Table 4). Added language to describe the discontinuance of the Flexible mortgage product (Table 6). Renumbered Table of Contents. Renumbered footnotes throughout Matrix based on the addition of Footnote 2 (added for clarification purposes) and the deletion of Footnote 5. Renumbered "MyCommunityMortgage (MCM)" as Table 7 (due to deletion of former Table 7 "Expanded Approval"). Removed information in Change Tracking Log pertaining to 2009.

12/1/10	Announcement SEL-2010-15 Formatting/Correction	<ul style="list-style-type: none"> Added Energy Improvement Feature (to Table 3). Added N/A to HBL cash-out to reflect a maximum allowable 60% LTV (Table 3) Announcement 09-08R. Removed IO Subordinate Financing LLPA's to reflect a maximum allowable 70% LTV/CLT (Table 4) Announcement SEL-2010-06. Removed Footnote 6 to reflect IO ineligibility for MCM Announcement SE-2010-06 Added revised pricing to Table 2: All Eligible Mortgages (Excluding MCM): LLPA by Credit Score/LTV. Added revised pricing to Table 4: Mortgages with Subordinate Financing. Revised table of contents. Added revised pricing to Table 2: All Eligible Mortgages (Excluding MCM): LLPA by Credit Score/LTV. Added revised pricing to Table 4: Mortgages with Subordinate Financing. Moved positions of Energy Improvement Feature and Condominiums terms for clarity in Table 3. Revised Examples of Loan Transactions showing Total LLPA's and AMDC. Corrected formatting errors. In Table 3, restored missing footnote (4) reference to "High-balance mortgage loans" section.
12/23/10	Announcement SEL-2010-17 Formatting/Correction	<ul style="list-style-type: none"> Removed HCLTV from Table 3, High-balance mortgage loans ARM product feature.
12/23/10 (1/5/11)	Formatting/Correction (Note: Date of matrix did not change as a result of these corrections)	<ul style="list-style-type: none"> Removed HCLTV from Table 3, High-balance mortgage loans ARM product feature.
3/24/11	Formatting/Correction	<ul style="list-style-type: none"> Removed HCLTV from Table 3, High-balance mortgage loans ARM product feature.

PREPARED STATEMENT OF ANDREW DAVIDSON

PRESIDENT, ANDREW DAVIDSON & CO., INC.

AUGUST 3, 2011

Mr. Chairman and Members of the Subcommittee:

I appreciate the opportunity to testify before you today about the TBA or "To-Be-Announced Market." Despite its prosaic name, the TBA market is a crucial component of the housing finance system. I believe it is one of the greatest financial innovations of the last 50 years; another colleague has called it a "national treasure." The TBA market helps lower mortgage rates, facilitates rate locks for borrowers seeking to buy homes and has helped the make mortgages available through the financial crisis. Policy alternatives to the GSEs may enhance or disrupt this market. It is my hope that my testimony today might give you a better understanding of the functioning of this market.

I have been involved with Mortgage-Backed Securities (MBS) since 1985. I was a managing director at Merrill Lynch responsible for MBS research and risk management for their mortgage trading desk. In 1992, I founded Andrew Davidson & Co., a New York based firm, specializing in the development and application of analytical tools for the MBS market that serves over 150 financial institutions. I have a broad view of housing finance as our clients include originators, servicers, mortgage insurers, GSEs, investors, dealers and regulators.

Today's TBA market represents a more than 40-year evolution of a voluntary system of trading mortgage-backed securities that provides for efficient, transparent risk-transfer and funding for most of the fixed-rate mortgages originated in the United States. The market serves two primary purposes: First it allows originators of fixed-rate mortgages to hedge the price risk associated with changing interest rates from the time that the originator makes a commitment to a borrower to lend at certain rate, until the loan is sold to an investor in the form of a mortgage-backed security (MBS). Second, it allows investors to engage in extremely large transactions to buy or sell MBS at very low costs of execution. In addition to its primary purposes, the TBA market also provides a mechanism for investors to efficiently finance their holdings of MBS and provide liquidity to the market, through a mechanism called "dollar rolls" or "rolls."

I have divided my testimony into three parts. Part I is a general discussion of the TBA Market. Part II is a discussion of how proposed housing reforms might affect the TBA market. Part III contains some recommendations.

Part I. The TBA Market

To better understand the value of the TBA market, it might be instructive to see how the TBA market is used to reduce risk in the mortgage origination process. This is in Section 1. In Section 2 we discuss features of the TBA market that make it effective. Section 3, is a discussion of why the TBA market is able to achieve these benefits. Section 4 provides estimates of the cost benefit to borrowers associated with the TBA market.

Section 1. The Role of the TBA Market in Origination: Hedging Interest Rate Risk

In this section we examine the role of the TBA market in the origination process via an example that shows how the interest rate risk of originators looks with and without TBA hedging. Before launching into the assumptions and looking at originator profit and loss, we review the links between the origination of loans to borrowers to the TBA market of MBS.

Process Summary

The largest broker-dealers maintain an actively traded TBA market and the prices from this market can be seen by originators and investors in real time on electronic screens. The prices of TBA securities, together with the loan-level pricing adjustments (LLPAs), base guarantee-fees of Fannie Mae (FNMA) and Freddie Mac (FHLMC), and the required servicing fee help originators determine the mortgage rate for any loan which is eligible for securitization through the GSEs. For example if the par security (the one priced closest to 100) in the TBA market has a 4.5 percent net coupon. The originator would add on a servicing fee of 25 basis points and a guarantee fee of 20 basis points to produce a mortgage coupon of 4.95 percent.

Suppose a borrower applies for a loan and locks in their rate in August, and the originator hopes to complete underwriting and close the loan in late September. Then the loan would be delivered into an October TBA security (suppose FNMA for our example). Between August and October, the LLPAs and servicing fee going into the borrower's rate would not change; however, interest rates can change, and any

change in the level of prevailing mortgage rates affects the value of TBAs. Because borrower rates are locked, the risk of a mismatch between the rate given to the borrower and prevailing rates at closing is borne by originators.

If the mortgage loan is a product that is eligible for delivery into TBAs however, the originator can estimate how many loans they will be delivering into the October security based on their application pipeline, approval rate, and historical “fall-out” rates (the rate at which approved borrowers fall out of the application process for various reasons). The originator can then short (or sell) the appropriate quantities of Fannie TBA securities to hedge their interest-rate risk. When the settlement of that TBA security occurs, they will deliver loans to FNMA and receive a FNMA pool which they can deliver to cover their short position with the broker-dealer. The originator is fully protected from changes in interest rates because they have already locked in the price for sale of the pool.

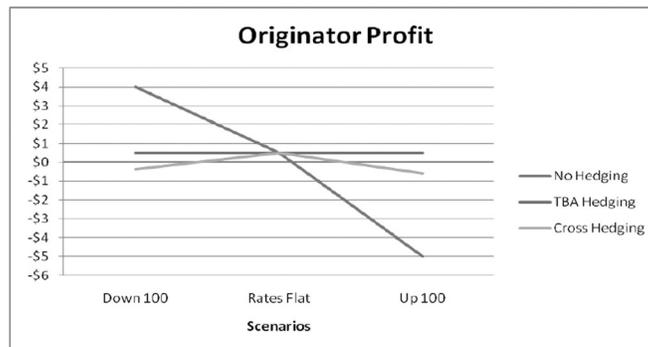
A Hedging Example

For this example, we make the following assumptions: as above, the net coupon in the TBA market is 4.5 percent and the coupon to the borrower is 4.95 percent and originator profits are \$0.50 for every \$100 of loan balance originated in the absence of any interest rate changes (relative to forward rates). We examine three scenarios: (1) where interest rates do not change from the time that the borrower locks in their rate until the time that the loans are delivered into a security, (2) interest rates fall 100 basis points, and (3) interest rates rise 100 basis points. Since the time that elapses between a borrower’s lock to loan closing can range from 30 to 90 days, this range of interest rate changes often occurs.

If interest rates fall the par net coupon in the TBA market will be 3.5 percent. The 4.95 percent loan to the borrower will be more valuable since it carries an above market coupon. However if interest rates rise, the new par net coupon in the TBA market will be 5.5 percent. The 4.95 percent loan to the borrower will be at a below market rate and will have fallen in value.

Figure 1 shows originator net profit taking into account the \$0.50 in fee income as well as the impact of interest rate changes. The three lines demonstrate originator profit assuming three different actions by originators: no interest rate hedging, hedging using TBA markets in the same loan type as the originated loan, and hedging using a different instrument (labeled “Cross Hedging”).

Figure 1: Use of the TBA market to reduce risk



In the middle scenario, where rates are flat, we can see that all three types of behavior result in the same \$0.50 net profit; that is, interest rate risk has no role, and originators earn their desired \$0.50 of each \$100 originated. However, we can see that without any hedging, if interest rates fall, profit swings up to \$4. If interest rates rise, the originator takes a loss of \$5. (The asymmetry results from a characteristic of mortgages called negative convexity, caused by the right of borrowers to prepay when rates fall.)

The red line, with TBA hedging, shows that these swings in originator profit are completely flattened with the use of a TBA hedge in the same category as the originated loan. The TBA market allowed the originator to lock in a sales price.

The green line shows that using a different instrument to hedge could result in losses of \$0.40 and \$0.60 in the changed rate scenarios. An example of a cross-hedge would be originating 7/1 hybrid ARMs and hedging them using 15-year fixed-rate TBA markets (because ARMs do not have TBA markets). When it is time to sell the pool of ARMs, the originator will not be able to deliver the pool to satisfy the

short position. Instead the originator will need to buy back the short position in the TBA market and enter into a separate transaction to sell the ARM pool. There is no assurance that the price change on the TBA and the price change on the ARM pool will match. The difference between these price changes is called "basis risk." The losses in this third case stem from having an imperfect hedge, and the numbers we show reflect potential errors occurring in both directions. The amount of gain or loss is uncertain because the hedge does not lock in the sale price.

Cross hedging cannot reduce risk as effectively as a direct hedge in the market of the product. The effectiveness of cross hedging depends on the similarity between the product and the hedge and the cost of execution in the hedge market. Because of its liquidity and close relationship to other mortgage markets, the TBA market is widely used to hedge many non-TBA eligible mortgage products including hybrid ARMs and non-agency mortgages.

Alternatives

Originators prefer to focus on the underwriting and credit decisionmaking process and would like predictable profits. If the TBA market did not exist, some alternatives might be:

- (a) *Originators take the interest rate risk or use other, more imperfect hedges.* This would most likely result in an increase in mortgage rates to compensate the originator for taking this risk.
- (b) *Offer mortgages that do not have a rate-lock feature, leaving the interest rate risk with borrowers.* This makes the mortgage qualification process somewhat difficult, especially for borrowers that are near qualification limits. For example if their debt-to-income ratio is near a lending limit and rates rise, the borrower would no longer afford the subject property, and the purchase could not go through. This option would raise the overall volatility of the real estate transaction process.

It is possible that both would occur, with rate-lock loans offered at higher rates, giving borrowers the option to take the risk in exchange for a lower rate (which could end up higher or lower at closing). Borrowers with economic flexibility might prefer to take their chances, whereas first-time buyers who are near their purchase price limits would likely be forced to pay the higher rates.

Section 2. Benefits of the TBA Market

The TBA market delivers benefits to its participants due to several important features.

Physical Delivery. The TBA market allows mortgage originators to complete the sale of newly originated mortgages directly into the TBA market. As described above, the TBA market establishes the pricing for mortgages, and originators are assured of achieving their expected profitability if they successfully close and deliver the loan. Other forms of hedging are generally cash settled or do not allow the delivery of the mortgage loan. In these cases, the originating firm must separate the hedging process from the ultimate sale of the mortgage loan. This creates basis risk, as described above.

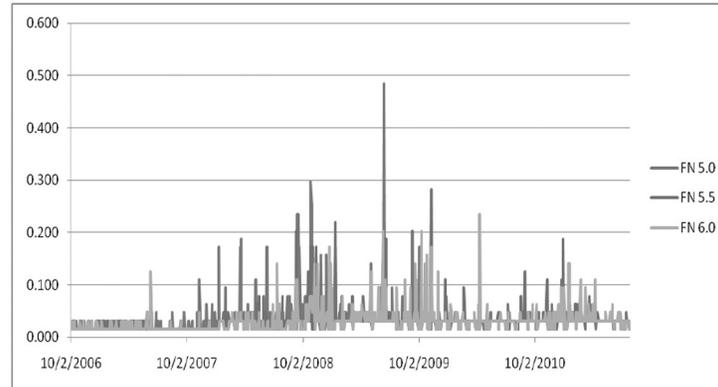
Limited Delivery Option. The TBA market operates with sufficient clarity as to the nature of the loans that will be delivered to the TBA market. This means that investors are confident of the value of the securities they will receive, and therefore do not substantially discount their purchase price to accommodate adverse delivery by the sellers. (These markets operate under a principle called "cheapest to deliver," which means that the seller will find the lowest value instruments to sell to the buyers.) Some loans do have greater value than average, primarily due to desirable prepayment characteristics. The TBA market has found a way to accommodate loans which might have greater value through the use of pool specific and stipulated trades, without overly degrading the value of the vanilla TBA trades.

Low bid-ask spread. The size and scope of the TBA market means that it can deliver extremely low transaction costs to buyers and sellers with typical bid-ask spreads in the range of $\frac{1}{64}$ of a percent to $\frac{1}{32}$ of a percent. This is comparable to the bid-ask spread on the most liquid Treasury securities. The TBA market allows investors to make very large commitments of capital in very short periods of time, with little or no impact on pricing in the market, making it one of the key markets used by investors to express interest rate exposure objectives.

Even during the financial crisis bid ask spreads in the TBA market remained in check. As shown in Figure 2, bid-ask spreads at the worst of the crisis may have approached $\frac{1}{2}$ point, but during this period many other markets were not trading at all. Even today, non-TBA trades in the mortgage market might have a 1 point

or greater bid-ask spread while the TBA market has returned to a $\frac{1}{32}$ of a point or less bid-ask spread.

Figure 2: Bid-ask spread of the TBA market (Source: Bloomberg)



Built in financing market/liquidity provision. Another important component of the TBA market is that it provides a mechanism for financing ownership of mortgage-backed securities, much like a repo (repurchase) market. Owners of MBS can sell their positions into the TBA market in a near delivery month (say August) and re-purchase that position in the next month (say September). Since they receive cash for their sale in August and then pay cash to reacquire the position in September, the investors have effectively borrowed money from the TBA market. The sale of mortgages for one period and purchase in a later period is called a “roll,” as investors have “rolled” their position to a later month.

This mechanism also provides a way for investors to get compensation for providing liquidity to the market. If there is a great demand for MBS in the current month relative to a future month the price paid for current delivery rises relative to the forward price. This serves to effectively lower the financing cost for holders of mortgages. MBS holders can take advantage of this financing benefit and provide additional liquidity to the market while maintaining their investment in MBS.

Transparency. Participants in the TBA market have access to current pricing information from a variety of sources. For example, Bloomberg and Tradeweb post current prices.

Analytical Tools. Investors and Originators using the TBA market have access to a wide range of historical data and analytical tools that help them assess value and risk in this market. While there is substantial volatility in MBS prices, there is no shortage of information and tools to help market participants assess the risks of TBA eligible MBS.

Cross hedging. The TBA market also serves as a primary hedging tool for non-TBA eligible agency loans and for non-agency mortgages. That is, even loan products that are not eligible for physical delivery into the TBA market make use of the TBA market for price risk reduction, but with greater risk to the originator. Without the TBA market it would be more difficult to hedge and manage the risk of non-agency fixed-rate mortgages as much of the hedging for non-agency fixed-rate mortgages, as well as many hybrid ARM products, utilizes the TBA market. Much of the efficiency of these products is derived from the TBA market for fixed-rate mortgages.

Section 3. Sources of Value of the TBA Market

As policy options for the GSEs are considered, policymakers may want to consider what structural features allow the TBA market to be so successful and consider whether proposed changes might impact the functioning of the TBA market. The functioning of the TBA market is the result of a combination of features. The success of a market is largely determined by the confidence of the market participants. That confidence creates liquidity, which is further self reinforcing. A loss of confidence can lead to a rapid decline in liquidity and the collapse of a market. I believe that participant confidence in the TBA market arises from four key features. Changes to these four features might not destroy the TBA market, but would likely reduce investor confidence.

The Government guarantee is a central feature of the TBA market. GNMA securities have traded with the explicit guarantee of the U.S. Government, and GSE securities traded with an implicit guarantee until the conservatorship of the GSEs and now are backed by funding from Treasury. The Government guarantee serves to eliminate the need for credit analysis when evaluating TBA transactions. Investors do not need to consider the credit worthiness of the borrowers, the adequacy of credit enhancement, or the financial strength of the issuer when investing in TBA eligible mortgages. Furthermore, due to the Federal guarantee, GSE mortgages are exempt from SEC registration. This exemption facilitates the TBA market because firms can sell securities prior to issuance. For registered securities there is a prohibition on sale prior to registration so originators are not able to sell pools of loans that have not yet closed.

The underwriting requirements of the GSEs and the limitations on the type, nature, and documentation of mortgages allowed in various types of mortgage pools provides investors with confidence that the mortgages in the pools that they buy will be sufficiently similar so as to make forecasts of cash-flows reasonably certain. The GSEs have served to standardize the entire mortgage origination and servicing process. Without such standardization, investors would be less willing to engage in TBA trades or would demand a greater premium for the risk that they would receive non-standard loans and pools in TBA delivery.

The Securities Industry and Financial Markets Association (SIFMA) also serves an important function by setting the rules on good delivery for TBA trades. SIFMA standardizes delivery dates and notification rules and limits which agency pools qualify for delivery into TBA pools. This role protects investors from sellers including pools which might have adverse performance characteristics in TBA pools.

While these structural features and the roles played by the GSEs and SIFMA have been crucial to the success of the TBA, another significant, but more elusive feature of the market is also important. As this market has developed over the past 40 years, it has adapted to changing market conditions. The ability of this market to adapt enhances participant confidence. Examples of adaptations are: the growth of the dollar roll market (described above), the on-going evolution of settlement and clearing operations through DTCC and its predecessor organizations, updated and evolving good delivery guidelines from SIFMA and its predecessor organizations, the evolution of the stipulated trade market as the GSEs produced enhanced data disclosures, and the development of electronic trading platforms such as Tradeweb.

These features enabled the MBS TBA market to withstand the recent financial crisis with virtually no disruption. For example, the DTCC risk management and clearing operations were able to shield key market participants (its clearing members) from the failure of Lehman Brothers.

The success of this market is a reflection of the confidence of the participants to engage in tens of trillions of dollars of transactions each year. Market participants estimate monthly trading volumes of about \$5 trillion split between dealer-to-dealer and dealer-to-customer business. Average daily volumes are estimated at \$300 billion and are substantially higher around settlement days.

Section 4. Impact on Mortgage Rates

The TBA market has a significant effect on the availability and cost of fixed-rate mortgages. It contributes in three important ways.

First, the extremely low bid-ask spread and high liquidity lower the transaction costs for originators to sell mortgages. During normal markets, the TBA market has a bid-ask spread that is $\frac{1}{4}$ to $\frac{1}{2}$ points lower in price (5–10 basis points in mortgage rate) than alternatives. During the crisis period there were times when it was nearly impossible to execute in non-TBA markets. Even several years after the crisis, the bid-ask spread for many senior non-agency mortgages is more than one point.

Second, the ability to hedge origination risk with an instrument that allows physical delivery of the loans lowers the cost of hedging. During normal time periods this probably lowers the cost of mortgages by about $\frac{1}{2}$ point in price (about 10 basis points in mortgage rate). It is important to note that the TBA market also lowers the cost of non-TBA mortgages as it provides a good vehicle for cross hedging. Due to the unique characteristics of mortgages, particularly prepayment risk, other instruments are generally not close substitutes.

Third, the liquidity of the TBA market, combined with the Government guarantee on the MBS serves to lower the rate on agency MBS by about 25–50 basis points in rate relative to non-agency alternatives during normal markets. As shown in Figures 3 and 4, during the financial crisis that spread rose to more than 400 basis points and still remain at much higher levels.

Figure 3: History of Secondary Market Mortgage Rates (source: Bloomberg)

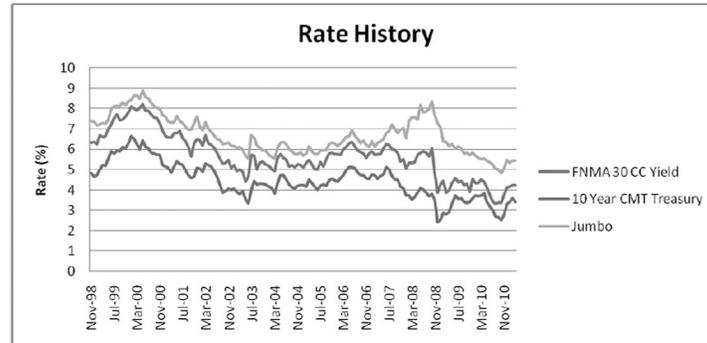
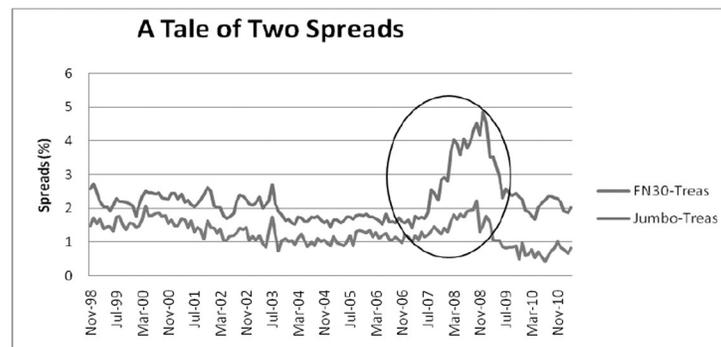


Figure 4: Comparison of Agency and non-Agency MBS spreads



Overall the TBA market lowers mortgage rates for both TBA eligible and non-eligible mortgages by about 30–70 basis points in normal markets and facilitates lending that might otherwise be prohibitively expensive during crisis periods.

Part II. Housing Finance Reform and the TBA Market

The process of reforming the housing finance system following the financial crisis is not yet complete. The GSEs, Fannie Mae and Freddie Mac still operate under Federal conservatorship and the private label securitization market has not yet recovered. Over the past 3 years, there have been many proposals to reform the housing finance system. Due to the importance of the TBA market to the functioning of the housing finance system, it is important to assess the impact of these proposals on this market. Rather than assess each individual proposal for the GSEs and their possible successors, for the purpose of this analysis common features of those proposals will be addressed.

1. Retain or eliminate a Federal guarantee on the MBS.
2. Reduce or increase the number of entities that can issue guaranteed MBS.
3. Guarantee MBS, not GSE obligations.
4. Provide only a catastrophic guarantee.
5. Utilize covered bonds.

Analysis of these points is difficult in that there are no objective criteria to say what is required to maintain a successful market. The success or failure of a market is largely a result of investor need and investor confidence. The TBA market has proven itself to be resilient to many changes in the mortgage market over the past 40 years. This resilience derives at least in part from the efforts of the participants in the market to address problems as they arise. The fundamental (unanswerable) question about a proposed change in the structure of the GSEs is whether the market can adapt to the change.

Eliminate the Federal Guarantee

Eliminating the Federal guarantee on conventional MBS would be a major blow to the TBA market. The Federal guarantee serves to insulate investors from credit risk. As a result, investors do not need to consider the credit worthiness of the borrowers or the issuers. If the underlying MBS had a wide range of credit risk exposure, only the riskiest, least valuable mortgages would be delivered into the TBA forwards. This would rapidly degrade the value and liquidity of the market. Issuers producing high quality loans would be unable to use the market as a hedging and delivery vehicle. Tradeweb, the electronic trading platform which handles about 65 percent of all dealer-to-customer trading in TBAs and is involved in many other markets, does not currently handle any markets that do not have Government guarantees. This provides a strong indication of the importance of a sovereign guarantee in promoting liquidity.

Eliminating the Federal guarantee would also, presumably, eliminate the SEC exemption for conventional MBS. Without this exemption, firms would be unable to sell MBS prior to issuance, thus would lose the ability to hedge as they do currently. All hedges would need to be "paired off" and would result in additional basis risk and cost.

Finally, eliminating the Federal guarantee would also remove a substantial portion of the investor base from the TBA market. Many large investors utilize the mortgage-backed securities market to execute trades driven by macroeconomic views and would not utilize a market which combines credit risk with interest rate risk. With a smaller investor base, liquidity would be dramatically reduced. It is likely that the proportion of fixed-rate loans would be substantially and permanently reduced and mortgage rates would be higher without the twin benefits of the Government guarantee and the TBA market.

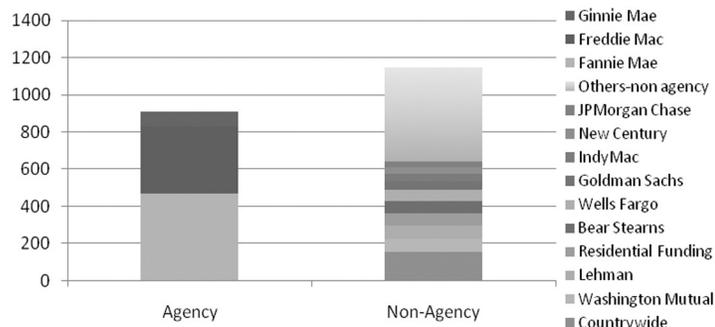
While it is unlikely that the TBA market, in its current form, could survive the loss of the guarantee, it is likely that other mechanisms to hedge and trade mortgage-backed securities would be created by market participants. Such mechanisms, including futures contracts on treasuries, interest-rate swaps, and credit-default swaps, already exist. These vehicles as well as new vehicles would likely pick up market share if the TBA market was not viable. The GNMA TBA market could also continue to function separately if the FHA continues to guarantee loans. There would likely be a long adjustment period before any of these could match the liquidity, cost effectiveness, operational efficiency, and stability of the TBA market. The loss of the TBA market would likely lead to further disruptions in the housing finance as the market shifts away from fixed-rate mortgages and markets slowly develop.

Increasing the number of GSEs

Many proposals require the creation of numerous GSEs to decrease concentration risk and increase competition. My view is that this is a slippery slope for the TBA market. The TBA market has benefited from the close cooperation between SIFMA and the GSEs. While they do not always agree, they recognize the importance of maintaining the TBA market. With more issuers such cooperation would be more difficult. In addition, it is unlikely that securities issued by different issuers would all be accepted as good delivery for a single TBA by market participants. Even now Ginnie Mae, Fannie Mae, and Freddie Mac securities all trade in separate markets. Even with additional issuers, market participants would likely concentrate their trading in one or two issuers. These issuers would then have a competitive advantage over the other issuers leading once again to a concentrated market.

A large number of competitive issuers is not necessarily a good thing for the market. The non-agency mortgage market had a large number of issuers. (See Figure 5.) This led to a race to the bottom and ever more complex securitization structures as issuers initiated changes to their securitization programs to boost profits through product differentiation or to subtly shift value from investors to issuers. Note that most of the top 10 issuers of non-agency mortgage-backed securities are gone and the non-agency mortgage market has not recovered from the crisis. In addition, a substantial difficulty in resolving the housing crisis is a result of the wide range of contractual features created by numerous issuers.

Figure 5: MBS by Issuer in 2006 (Source: Mortgage Statistical Annual)



Some proposals attempt to address the problem of multiple issuers by having all MBS issued by a single Government entity, essentially like GNMA. This proposal would help the TBA market provided that the loans from the different originators had substantially similar risk characteristics. If each originator had different underwriting, documentation, or servicing standards, the market would fragment even if they shared a common issuer and guarantor. Maintaining sufficiently similar programs across multiple issuers may not be possible.

A single Government issuer, enforcing strict guidelines, might also be detrimental to the TBA market as one of the hallmarks of the TBA market is that it has been able to balance the needs of many conflicting parties. A Government-run guarantor might not have the flexibility to adjust to changing conditions. The long, difficult road to eliminate seller-financed down-payments for FHA loans is an example. SIFMA has been successful because it has been able to recognize and address investor concerns as they arose. If a problem that arose in the Government securitization program was not addressed expeditiously, it could lead to a loss of confidence in the market.

Only Guarantee MBS

Many proposals would only allow a Government guarantee on mortgage-backed securities, and not on debt issued by the GSEs. Such proposals would likely have a positive effect on the TBA market. Investors would retain confidence in the guaranteed MBS, and without a guarantee on their debt, the GSEs would be less willing to grow large portfolios of mortgages and mortgage-backed securities. In fact, many proposals explicitly prohibit the GSEs from retaining a mortgage portfolio. These proposals would likely have a positive impact on the TBA market, because they would remove a conflict within the GSEs. The large portfolios at times might have motivated the GSEs to encourage higher spreads and less liquidity in the market. In addition they were competing with investors to purchase the best loans. That competition at times led to lower values and less confidence in the TBA market. If the competing portfolio incentive is reduced or eliminated, the GSEs would focus more directly on enhancing the value of TBA eligible pools.

Reducing the GSE portfolios could have the effect of increasing mortgage rates as a large investor is taken out of the market. It would be important for this process to be gradual and transparent, so the market had time to adjust to the change in investor base.

Catastrophic Guarantee

Some proposals have suggested that the Government only provide a catastrophic guarantee to mortgage-backed securities. If structured appropriately, such an approach could allow the TBA market to continue substantially unchanged, while protecting tax payers from significant risk. The important component of such a guarantee is that the investors in the TBA-eligible MBS do not need to assess whether or not the Government guarantee will protect them. That is, the investors want to know that they have the full assurance of the Government that they will be paid regardless of the credit performance of the borrowers, issuers, or guarantors. Approaches where the investors retain risk for the failure of the issuer or guarantor are less likely to be consistent with the continuation of the TBA market.

A catastrophic guarantee can be created at the issuer level or at the MBS level. At the issuer level the guarantee would require that the issuer maintain sufficient capital to cover potential losses. The Government guarantee would cover losses once

the issuer failed. Provided that the Government guarantee covered the full obligation of the issuer whether or not the issuer was properly capitalized, much like deposit insurance, investors would not need to focus on the credit worthiness of the issuer. The Government would need to actively regulate the issuers and guarantors to assure that they had sufficient capital.

A catastrophic guarantee could also be provided at the MBS level. In this case a portion of the MBS would be guaranteed by the Government; the remainder would be subject to credit risk. In this solution, the senior guaranteed bonds could trade in the TBA market, while the non-guaranteed portion would trade in a separate market. I favor such an approach as it can minimize taxpayer exposure while maintaining the liquidity of the market. Freddie Mac has issued securities with a guarantee only on senior bonds in the multi-family market, demonstrating the viability of this approach.

Covered Bonds

Covered bonds generally are not a solution for fixed-rate mortgages as they do not transfer interest rate risk and prepayment risk to investors and would not be consistent with the TBA market. The Danish covered bond market is an exception in that Danish Covered Bonds are essentially mortgage pass-throughs with a guarantee from the originator/issuer. A similar system in the United States could provide alternative methods for hedging and funding of fixed-rate mortgage loans but would probably take some time to develop sufficient liquidity and institutional support to be a viable substitute to the TBA market.

Part III. Recommendation

Given the importance of the TBA market, the best strategy for reforming the housing finance system may be to make a series of transformational changes to the current structure of the GSEs rather than scrapping the existing system and starting anew. By building off the current structure of the GSEs, it may be possible to preserve or even enhance the TBA market while addressing flaws in the existing structure that contributed to the financial crisis. Given the weak state of the housing market and the economy, completely eliminating the GSEs or completely replacing them with an alternative structure would likely be severely disruptive. Gradual transformation of the GSEs would also allow the private MBS market and other alternatives to develop.

One such step that is possible without a complete dissolution of the GSEs is to increase the amount of private capital ahead of the GSE guarantee, thereby decreasing risk to the taxpayers. It is unlikely that the GSEs could raise additional equity capital until their future role and structure is determined. Moreover it will probably be better not to reconstitute the GSEs as shareholder-owned companies which can deliver a Federal guarantee. Thus capital would need to be provided in a different form.

I believe that private capital can be put in front of the GSE guarantee through the use of commonly used credit enhancement structures. Mortgage insurance, either at the loan level or the pool level, could be used to reduce risk to the GSEs. As some proposals favor the use of this type of structure for the future of the housing finance system, this would be a good opportunity to test these ideas. Greater use of mortgage insurance would require that the insurers had adequate capital to back up their obligations.

An even better approach, in my opinion, would be to encourage, or require the GSEs to utilize a senior subordinated structure to attract capital that would stand in the first lost position, either side by side with the GSEs or ahead of the GSEs for some of their MBS issuance. Such an approach would reduce risk to the taxpayers and help the GSEs and regulators determine the cost and availability of private capital. If properly executed, senior securities created under this structure and guaranteed by the GSEs would remain eligible for TBA delivery, while the junior classes, which would not have a GSE guarantee, would trade separately. If such a program were successful, it could be expanded, and if not, policymakers would better understand the obstacles to replacing the GSEs.

Utilizing the current capabilities and infrastructure of the GSE to implement housing finance reform offers the best chance to improve our economy without the risk of severe disruptions.

Summary

The TBA market is an important component of the housing finance system. It is currently central to the pricing and hedging of fixed-rate mortgages. The TBA market helps lower mortgage rates, facilitates rate locks for borrowers seeking to buy homes and has helped the make mortgages available through the financial crisis.

The TBA market has evolved over a 40-year period and has proven to be resilient. It functioned extremely well during the financial crisis.

The continued success of the TBA market depends upon the confidence in traders, and confidence is difficult to measure or forecast. Therefore, it is difficult to determine in advance what changes to the market would be detrimental. It is likely that elimination of the Government guarantee would severely disrupt the TBA market and permanently reduce the availability of fixed-rate mortgages. Other changes to the structure of the housing finance system may have positive or detrimental impact on the TBA market, but those effects are harder to predict. While it is likely that other mechanisms could replace the TBA market over time, it is unlikely that new market mechanisms would have the same efficiency as the TBA market.

While it is tempting to start from scratch, it is probably better to preserve those aspects of the existing housing finance system that have worked well and correct the flaws that contributed to the crisis. Step-by-step transformation of the GSEs may be a less disruptive path to reform. Adding private capital in front of the Government guarantee through the use of subordinate bonds would be a good first step.