

Testimony of Paul T. Van Valkenburg
United States Senate Banking, Housing, and Urban Affairs Committee
Subcommittee on Securities, Insurance, and Investment
Examining the Housing Finance System: The TBA Market
August 3rd, 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 eg 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-4:45pm	Dir
TRSY	3.500	Aug	96-17+/19	+0-12	1-	1	5.000	Aug	106-15+/16+	+0-05	5-
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-
CORP	3.500	Sep/Oct			-		5.000	Sep/Oct	10+/ 106		2-
CONV	4.000	Aug	100-21+/22	+0-10	3-	4	5.500	Aug	108-10 /11	+0-04	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-
USRP	4.000	Sep/Oct	103/ 105		1-	1	5.500	Sep/Oct	07+/ 08		2-
USCD	4.500	Aug	103-26+/27	+0-07	3-	1	6.000	Aug	110-01 /01+	+0-03+	3-
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-
JGB	4.500	Sep/Oct	107/ 111		2-	2	6.000	Sep/Oct	08 / 086		1-

Roll Analysis	FN	Aug-Sep	Financing@0.730
Cpn	Cpr	Drp	B/E Drp
3.5	6.3	0-097	0-085
4.0	8.1	0-111	0-091
4.5	12.8	0-113	0-091

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 1/64th or 1/32nd 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% to 6.0% 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% plus 1/64th. 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 1/32nd. 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 1/64th 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 1/64th or 1/32nd 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% and 1/64th 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.

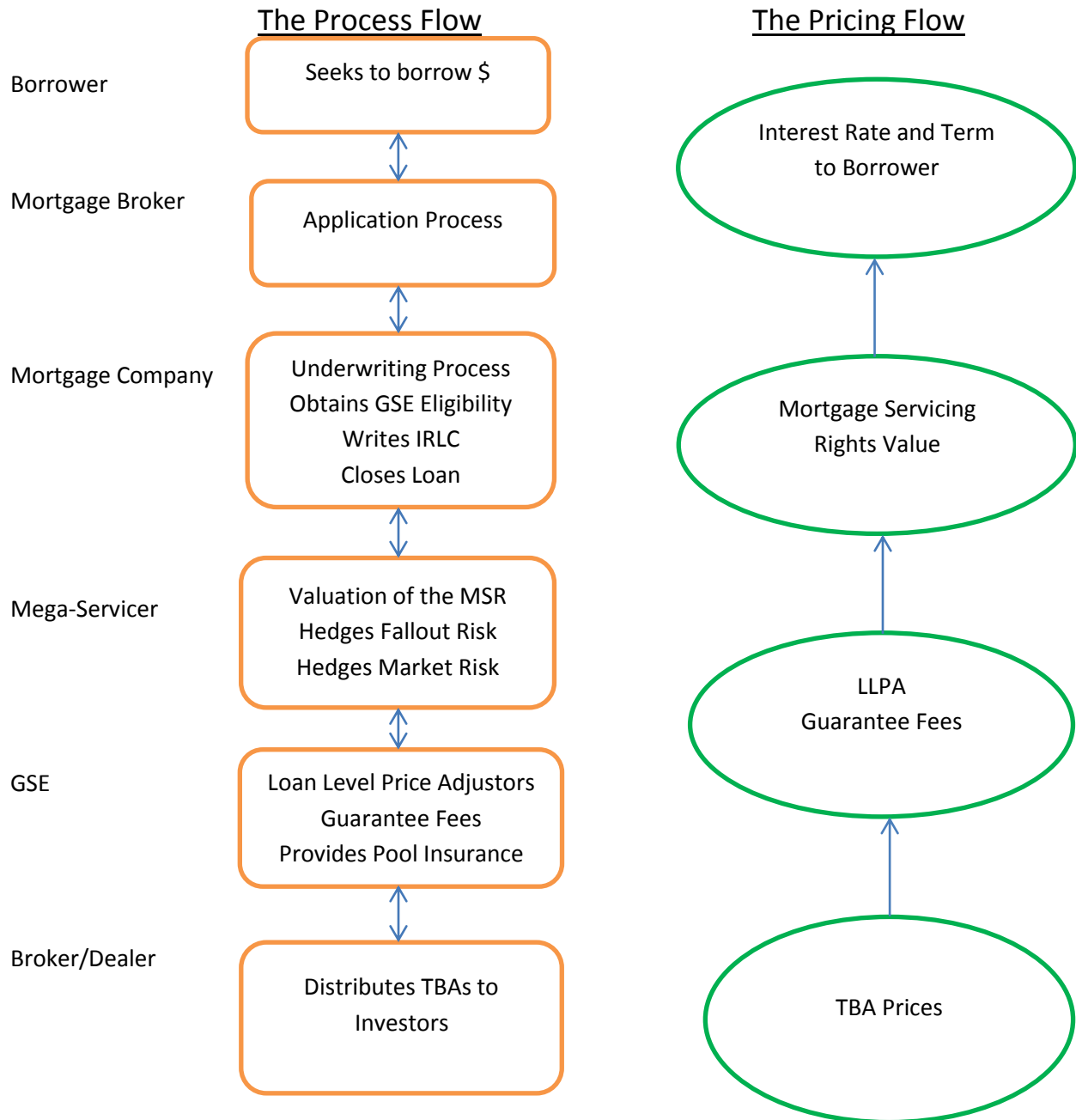
As part of the price discovery process for mortgage companies, the GSEs will charge a guarantee fee to provide pool insurance for the investors in the MBS pool. The guarantee fee for a typical qualifying conventional mortgage is 0.0025 or 0.25%. However, for loans that are still eligible for the GSE 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

Loan Price = TBA Price + Value of MSR – GSE LLPA – 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 US 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 towards 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 scenario where US residential real estate declined approximately 30% 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 probability 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 a 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 US 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 towards 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 US residential real estate industry by restricting their investment portfolios to the purchase to only securities with risk exposure to US 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 US. 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 US 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% 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 US 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.