ANDREW DAVIDSON & CO

# GSE Credit Risk Sharing Round-Table Discussion – Summary of Events

**February 7, 2012**

**Introduction**

On Feb 7, 2012, Andrew Davidson & Co. organized a roundtable discussion in Washington, D.C. on the topic of credit risk-sharing by the GSEs. Over 80 people participated, including representatives from the following types of institutions:

- Mortgage originators
- Mortgage credit investors
- GSEs
- Equity analysts
- Mortgage insurance companies
- Rating agencies
- The press
- Academia
- Industry groups
- Regulators
- Congressional staff
- Policy advisors for the executive branch

The focus of the roundtable was idea-sharing, transforming one-on-one dialogs into a group discussion of the many high-level and detailed issues related to transferring GSE credit risk to private markets. The roundtable was organized into 10 topics, with 30 minutes discussion allocated to each topic. A summary of these discussions is provided below.

**Topic 1: Introduction by Andy Davidson[1]**

Andy Davidson opened the roundtable by saying that he had decided to host a round-table because he believes that housing finance is at a critical juncture. House prices may be stabilizing, the Obama administration is considering possible methods of offloading agency credit risk, there are multiple GSE proposals in congress, and the GSEs themselves are evaluating possible risk sharing transactions. He said that the goal for the day would be to exchange ideas, rather than make decisions. He also said the focus of the day should be both mid-term and long-term goals, but that each may require its own solution.

Andy defined a “mortgage” in three separate contexts: As a set of documents (e.g. note, deed), a set of processes (e.g. underwriting, servicing), and as a transfer of financial risks (e.g. interest rate, credit). He said that the focus for the day would be financial risks. The TBA market takes on funding, interest rate and prepayment risk. Origination credit risks are handled by reps and warranties. Systematic credit risks, the majority of which are currently absorbed by the taxpayer, could be sold to the private market. But in order to do so, a significant amount of private capital will be required – approximately 4% of loan balance even for well-underwritten loans. With approximately $10 trillion of mortgages outstanding, that is $400 billion of private capital that would be required. This capital could be in the form of either unfunded (e.g. mortgage insurance, wrap) or funded (e.g. senior/sub, credit linked note) credit protection.

Andy said that many roundtable participants surely attended to further their individual business interests; he also believes that many also came to help revive a market that is important to our economy and to our country. In discussing the various alternatives, participants should keep in mind the goals of reducing risk to the taxpayer, providing market pricing of credit risk, and developing markets that might be useful for GSE reform.

**Topic 2: What Would Agency MBS (TBA) Investors be looking for in a GSE Credit Sharing Solution?**

This discussion gave an overview of the current agency MBS market, focusing on those aspects of it that investors value most. Two agency MBS investors said that the government wrap is critical to the liquidity of the TBA market, as it transforms agency mortgages into purely a ‘rates product’ in which credit risk does not affect pricing. This gives agency MBS the same liquidity as Treasuries. As the credit crisis demonstrated, this liquidity is critical. During the crisis even super-senior non-agency tranches collateralized by prime mortgage pools traded at distressed prices. There was general consensus from investors and securitization industry representatives that the liquidity of the TBA market would be served best by minimal disruption to the current delivery mechanisms and other governing rules.

A member of a bond market industry group said that changing rules relating to TBA eligibility is extremely difficult and time-consuming. Contrary to what some industry participants believe, SIFMA (which administers TBA-eligibility rules) cannot change rules of its own accord. TBA-eligibility rules are driven by the consensus of the investor community. Given the size of this community, reaching consensus on any change is both time-consuming and difficult.

In response to a question, one investor noted that as long as the senior piece has a government wrap and is TBA-eligible, investors do not care if a subordinate bond is stripped out. After questioning by several

[1] A background note written by Andy Davidson that was distributed at the roundtable is provided in Appendix A.

skeptical policy analysts about why the corporate bond market functions without a government wrap whereas the agency bond market seems to need a government wrap, an investor noted that in general investors like to separate the interest rate and credit components of their portfolio. Corporate bonds and non-agency RMBS are relatively illiquid credit instruments, so people allocate their "illiquid money" to these sectors. One investor noted that given the experience since the credit crisis, investors are wary of government policy adversely impacting RMBS investors, giving the example of the impending AG settlement. Additionally, most corporate bonds contain covenants that protect investors that are not found in mortgages. In response, a policy analyst responded that based on the investors' comments it seems as if investors think a government guarantee is needed primarily because they need a "rates product" to trade, and that this reason alone would do little to motivate congress to continue to guarantee mortgages. He also said that covenants could be added to mortgages to make them more "corporate bond-like." For example, mortgages could contain covenants that require the permission of the first lien-holder for the borrower to take out a second mortgage. In any case, if an MBS credit market is to continue, it must be 'fed'. One commentator noted that investors will turn to other credit products as the non-agency market shrinks, and the expertise required to support an MBS credit market will be lost.

A member of academia noted that eventually, markets will clear – the question is always at what price? Thus the question here is whether or not the government wrap (which may cost nothing if priced properly in the very long run) is worth the government involvement to lower costs, and for which types of products and what range of borrowers this benefit ought to accrue. In response to questions regarding the impact on the US debt position, and whether politicians would eventually use the money from any guarantee fee income for other expenses, it was noted that what the money is used for is not an issue. Since housing is such a large part of the economy, many participants agreed that the government would always step in; thus participants would always behave as if an implicit guarantee existed and the government might as well make it explicit and charge for it. Additionally, it was noted that instead of worrying about what the revenue stream was used for, the primary issue is whether or not, in the long-run, roughly the right amount is charged.

**Topic 3: What is the Size of the Market for Mortgage Credit Risk?**

For background, an equity analyst re-iterated that given the size of mortgage market (about $10 trillion), at 4% credit support, $400BN of capital in total is required. This compares with $30 billion of GSE equity capital directed to credit under the previous regime, plus whatever equity capital banks have against the credit exposure of their whole loan portfolios. This leaves a need for several hundred billion dollars of equity capital to take the credit risk of MBS, regardless of the form this credit risk takes.

This equity analyst believes that equity markets can bear the risk and put up the capital, but also noted that various transitional issues need to be addressed before equity investors step forward in size. These issues include a stable legal and operating environment (where government policy does not change often and policy risk stops being such a large factor), and the return of an investor-friendly tone. Operating companies with scale, informational advantages, management expertise and quality institutional governance will be preferred by equity investors. The number of firms may start out high initially (20-30) but over time economies of scale would dominate and consolidation would reduce the number. On the topic of expertise required to form such companies, one participant remarked that due to the credit crisis, much broader participation in mortgage credit going forward is possible than in the past, when only the

GSEs had the credit expertise. Not only have many people from the GSEs moved to other places, but there has been learning from the non-agency securities themselves.

REITS were mentioned as natural buyers of agency credit risk, because they are tax-efficient. But it was noted that the REIT structure has trade-offs: They are not double-taxed, but constantly need to go back into the market to raise additional capital, so perhaps some retained capital is better. A broker/dealer also mentioned that securitization structure is important: Credit-linked notes don't work with the REIT structure because it is "bad income" that would have to be limited to 5%, but cash senior/subs work fine. Partnerships are another way to avoid double-taxation but they are not foreign capital friendly.

When the topic of the buyers of credit risk came up, one participant observed that hedge funds are not the ideal buyers of credit tranches, as they are subject to margin-call/withdrawal risks; ideally agency credit investors would have a permanent capital base.

**Topic 4: What are Credit Investors looking for in a GSE Credit Risk Sharing Solution?**

The fourth discussion opened with two potential credit investors listing the issues that would have to be addressed in order to attract their capital. These issues included:

- Ensuring that underwriting guidelines are followed.
- Loan level data, both for issuance and historical for estimation of credit models.
- Rep and warranty enforcement and investor rights.
- Resolving the policy risk associated with servicing, particularly given the fact that the GSEs are involved.
- Addressing the ability of borrowers to take out a second mortgage without receiving the consent of the 1st-lien holder.
- Tax issues related to how the transaction is structured[2]

Following the discussion by the credit investors, representatives from a rating agency discussed the information they would need to rate securities issued by a transaction. They would need to know the transaction structure, as well as all of the transaction's counterparties. They also would need loan-level data for the transaction. An investor asked the representatives if they have the mechanism to rate agency subordinate bonds. The representatives said that many parts of their non-agency process would be applicable to agency deals, but that they would need to calibrate their credit models to agency performance and that they would have to review the GSE oversight process for servicers. In response to a question from a regulator, both the rating agencies and investors said that they would view bonds that reference large, diversified pools as lower credit risks than smaller pools with higher levels of idiosyncratic risk.

Much of the discussion pertained to due diligence. In light of the systemic breaching of underwriting criteria during the years leading up to the credit crisis, investors view due diligence as a critical part of the investment process. Due diligence is particularly critical when evaluating pools with relatively high levels of credit risk. Both rating agencies and investors plan to rely on third-party due diligence firms to evaluate whether loans conform to stated underwriting standards.

[2] Also see Topic 8: Test Transaction Issues and Ultimate Structure

**Topic 5: What are Mortgage Originators looking for in a GSE Credit Risk Sharing Solution?**

Originators were quite specific about their needs. First and foremost, they want a liquid TBA forward market to hedge pipelines. The current TBA market is reliable both in availability and price. There was concern that a new type of TBA security from the risk-sharing proposals could diminish the existing market. Clearly, the originators would factor in the costs of diminished liquidity. There was little interest in changing good delivery requirements as a result of proposals to bring in private capital ahead of GSEs. Like other market participants, they want dispute resolution in the reps and warrant enforcement process and servicing resolved. Finally, all the various rules/regulations such as QRM, risk- retention, and regulation AB not only need to be finalized, but aligned.

On the topic of market structure, it was noted that originators prefer to face the same small set of counter-parties on a constant basis rather than alternating or rotating counter-parties. This point was related to the operational scale advantage of larger firms discussed in Topic 3. Finally, in a solution where originators take some of the subordinate bonds (e.g. some sort of swap structure), true sale accounting recognition is a big concern.

**Topic 6: What Should the Role of Mortgage Insurance (MI) be in a GSE Credit Risk Sharing Solution?**

Representatives of the MI industry noted that MI can be a cost effective solution. They stated that MI has low overhead, no complex tax/accounting issues, effective due diligence, and is already functioning with forward pricing. Additionally, MI allows capital to protect the tax-payer without disrupting the TBA market. In response to a query of how market participants could be assured that MI companies have enough capital to support future credit losses, an MI representative responded that one of the few good outcomes of the recent credit crisis is that it supplied a wealth of data on what happens to losses when the housing market experiences a large shock. Another representative said that it is also important that MIs be involved in the origination in the loan, and that an agreed-on defect resolution between the originator and MI company must be embedded in the MI process. Clarity of coverage at loan origination is critical.

A mortgage policy analyst suggested that because originators know more than other industry participants, it is difficult to separate origination, servicing, and the first-loss piece. He said that if MI is included, all claims should be paid (no rescission) and that MI should re-underwrite all loans. He also suggested that two insurance industry participants that could be included in a discussion of mortgage credit risk are re-insurers (who are good at pricing fat-tail events) and A.M. Best, the rating agency who rates insurance companies. Andy Davidson agreed that the investors think that the rescission issue needs to be resolved, and suggested that MI contracts should be unified with originator reps and warrants in a way such that they are aligned. Investors should not be subject to rescission “loopholes.”

There was some discussion of whether MI ought to be regulated at the state or federal level. MI industry representatives argued there because of the federal regulation of the GSEs, and their central role in MI, there is already de facto federal regulation in place in addition to existing state-level regulation; furthermore the MI industry is comfortable with this arrangement. Finally, it was noted that the crisis has demonstrated that MI worked fairly well to limit GSE losses. However, some texted comments questioned both how much of the required capital could ultimately be supplied purely by the MI industry and the objective nature of MI claims-payment.

**Topic 7: How large should a government guaranteed sector be, how should a minimum credit enhancement be determined and what products should be covered?**

A participant with securitization experience noted that the size of the government guaranteed sector should be however large you want the TBA market to be. Having a single security with multiple issuers as with GNMA is a great solution. A policy analyst suggested that the right mix is 20% government, 80% private and expressed the view that originators should hold much of the risk due to the knowledge argument and the incentive argument. Additionally, he noted that regulatory and accounting (consolidation) rules should be modified to encourage originator credit risk dispersal.

Another participant noted that government's role should be smaller than today, but not too small; it was important to retain a government backstop for all the reasons noted in the TBA session, but have as much private capital in front of taxpayer as possible: Maintaining a reasonably priced long-maturity (e.g. 15 and 30 year) fixed rate mortgage ought to be a key goal. It was noted that there is a real cost to shielding homeowners from macro risks.

A roundtable member then expressed the view that though he would prefer a mostly private market, he thinks that this would not be counter-cyclical or stable. The GSEs had stability, liquidity and affordability as goals. In his view, affordability should purely become an FHA goal while successors to the GSEs should focus just on stability and liquidity. The government role could be 20% in normal times but greatly ramped up in busts/times of stress when private capital flees and markets become illiquid.

In response to the statement about ramping up originator risk-taking, a mortgage originator noted that banks alone do not have enough capital (or deposits – i.e. $6-7 trillion) to fund $10 trillion of mortgages. Clearly, there is a need for a secondary market, even if banks invested 100% in the mortgage sector (which the S&L crisis already showed was a poor design for our mortgage finance system).

In rebuttal, a participant in favor of greater originator risk-taking noted that inflows of foreign money have been a great predictor of bubbles. The government guarantee is what facilitated this influx of foreign money that funded the housing bubble (note: a partial rebuttal of this argument can be found in the topic on systemic risk). A participant who has both been in the business and academia noted that government guarantees of some form have existed on around 90% of the financial system for a long, long time. The form of the guarantee may have shifted from FDIC to the GSEs/FHA, but we should not forget the role that government guarantees play in preventing runs, whatever architecture the financial system has.

**Topic 8: Test Transaction Issues and Ultimate Structure**

In session 8, a broker/dealer gave an overview of possible structures for a test Senior/Sub transaction. The first structure used a credit-linked note (CLN) that mimics a traditional private-label securitization, referencing a portfolio or a cohort of agency-guaranteed mortgage pools. The funds that are provided by the CLN investors are held in a trust to both reimburse the GSE for losses and pay principal to the CLNs. Interest comes from earnings from reinvestment of the funds held in trust plus the credit premium paid by the GSE. Because the CLN transaction is synthetic, it allows the cash/TBA market to continue as it does today.

Depending on how the synthetic CLN transaction is structured and offered, the securitizations could be treated as a Notional Principal Contract, a Financial Guaranty Contract, or as Reinsurance. Additionally, the transaction could be either onshore or offshore. The choice of securitization structure and its resulting tax and GAAP treatment will greatly affect the appeal of the CLNs to potential credit investors, including REITs and foreign investors. In particular, it was noted by an investor that an on-shore structure would significantly limit participation by hedge funds and REITs. Accordingly, there was some question how scalable such a program could be. It was noted that prior risk-sharing transactions were illiquid and do not have follow-through. Achieving REMIC status for CLN structures would greatly enhance the economic efficiency and investor base for these structures.

The second structure discussed was a cash senior/subordinate transaction in which the GSE wraps the senior note in the form of a Re-REMIC. The structure could offer securities using a pro-rata or shifting interest structure. In the former, interest and all principal payments are distributed to senior and subordinate securities in direct proportion. This could possibly allow the senior securities to be TBA-eligible, but would also require more credit support. In the shifting interest structure, the subordinate notes are locked out from receiving unscheduled principal for a period of time, allowing subordination to stay in place to protect senior classes from future credit losses. Even if they were TBA eligible, these bonds would trade differently than the current TBA market and may not be consistent with current pooling mechanisms.

The presentation also addressed various strategic issues that a test CLN transaction would have to address. The 'credit event' would have to be defined. Claims could be paid using either a formulaic severity or actual realized loss. Credit investors would likely require more loan-level disclosures than the GSEs currently supply. The choice of whether to get the subordinate securities rated could affect the breadth of the investor base. Finally, if claims are paid based on actual loss severities, credit investors will want some control over servicing and loss mitigation decisions.

**Topic 9: Avoiding Systemic Risk Associated with Mortgage Credit**

This discussion was led by members of two regulatory institutions. They provided interesting research and insight on this topic. The first regulator stated that managing systemic credit risk is about managing externalities. The parties who benefit to the upside often cannot pay the costs when extreme bad outcomes occur; history suggests that eventually the government has to step in. The traditional solution to manage financial systemic risk (which primarily rested in commercial banking) has two elements: (1) regulations, restrictions and standards and (2) actions to minimize the impact of busts. This often includes a government backstop such as a lender of last resort and deposit insurance.

The first regulator also stated that housing finance poses large and complicated externalities, in part because of the size and scope of housing and mortgages in the economy. Housing is the largest asset of most households, and the home mortgage is the largest liability for most households as well. In addition, housing finance and credit impacts a large part of the U.S. financial system. One reflection of this is that the ex post government support for the housing sector during the crisis was very broad and extended well beyond support for the housing GSEs. While the financial crisis was housing related, the systemic spillovers were broader, and in the government backstops were extended to many financial markets that no one would have previously imagined: CP, money markets funds, repo, financial institution short-term debt, and the non-mortgage securitization market.

This regulator concluded by stating that in order to be more robust, housing finance needs more consistent and righter regulations, standards and activity restrictions. This is likely to increase the cost of mortgages in the future. Many of this regulator's suggested changes were discussed early in the conference and include:

- Solidify the legal/operational infrastructure, particularly foreclosure procedures, lender covenants and servicing.
- Focus on consistent reporting including data, standards and disclosure.
- Limit leverage associated with mortgage credit across all participants: Households, originators, investors, and security structures themselves.
- Limit funding risk and maturity transformation of mortgage credit.
- Structure securities to better align incentives between participants in a securitization.

Any government guarantee associated with such an approach should be explicit, remote and priced.

There was a particularly noteworthy regulator presentation on the primary culprit(s) in the housing crisis. While all participants from borrowers to investors bore some responsibility, it was argued that the overriding factor was distortions caused by the CDO market. The research showed that senior/sub RMBS themselves were quite resilient, as most senior bonds are still performing. The GSEs non-prime portfolio was not sufficient to explain the systemic nature of the crisis. The rating agencies were facilitators of the crisis, but not the primary agents. Rather, it was asserted that the CDO market was the primary culprit. Specifically, AAA-rated CDO tranches created out of BBB-rated RMBS/CDO tranches have produced over $400 billion of losses, magnified by synthetic re-leveraging. These positions were concentrated in a few highly-leveraged institutions, and this is what primarily created the systemic crisis. Without CDOs, the damage would have been limited. In the discussion that followed, it was noted that risk retention would not have provided any buffer. However, removing reliance on ratings and seeking alternatives would represent a net positive to the system. More independent eyes with analytical approaches are needed.

**Topic 10: Reaction from Congressional Staff, Administration, and the Press**

A member of the press said that public outreach will be an important part of the process, and that the press could use input on how best to inform the public. There is a large gulf between what both the public and some members of the press know and what they think they know about the government's role in the mortgage market. He welcomes any and all input about issues that the press should be thinking about and communicating to the public.

With respect to leverage, a congressional staff member pointed out that one institution that needs to be deleveraged is the government. He pointed out that FHA is highly leveraged, but it is difficult for congress to change any FHA requirements. He also mentioned that he was interested to hear investors discuss the fact that they don't like taking on credit risk, and that the government wrap allows them to ignore it. He pointed to Europe as a cautionary tale in which a government guarantee did not, in fact, remove credit risk. These same investors should be wary of an increasingly leveraged United States government.

A senior policy maker and regulator said that the session was very useful. He said that the administration is very interested in risk transfer, and that there is no reason they should wait on congress before taking some action to reduce the portion of credit risk that is absorbed by the GSEs. He also agreed with the regulators from Session 9 that any solution should prevent concentration of the credit risk in leveraged institutions.

**Conclusion**

Andy Davidson concluded the session expressing the hope that there would be risk sharing transactions in the near future and that the next similar gathering would be to review the merits and shortcomings of those actual transactions.

**Appendix A – Background Discussion Memo by Andy Davidson**

There are currently about $10 trillion dollars of mortgages outstanding. Fannie Mae and Freddie Mac currently bear the credit risk of almost 50% of those loans and about $1 trillion of new mortgage commitments each year have credit guarantees from the GSEs. If these loans were held by insured depositories risk based capital would be about 4%. The current portfolio of loans would require capital of about $200 billion. On an annual basis, the GSE guarantees would be generating about $40 billion of capital requirement at the 4% level. Prior to conservatorship, equity capital to bear this credit risk was provided by the GSEs shareholders. However, the GSEs were only required to hold 45 basis points or 0.45% minimum capital for their off balance sheet credit exposure. Currently the equity capital is essentially provided by the US taxpayers via the preferred stock agreement with Treasury.

Over short-term and intermediate term horizons it is unlikely that the role of the GSEs in the mortgage market will be substantially reduced. It is also unlikely that the GSEs could be recapitalized. Over longer term horizons it is possible, and I believe likely, that some form government guaranteed mortgage- backed securities will remain a significant portion of the mortgage finance system.

While the government could continue to bear the credit risk of these loans, I believe that, it would be beneficial to transfer much of this risk to the private sector. Private sector funding of credit risk would reduce the risk to the tax payers of changes in macroeconomic factors such as unemployment and home prices. I also believe that private capital would provide more disciplined pricing of credit risk (despite the recent experience of the capital markets during the period leading up to financial crisis.

Therefore, it would be valuable to develop and implement methods to transfer credit risk from the GSEs to private capital both for the intermediate term and possibly for the long term as component of GSE reform. In addition some form of credit risk enhancement would likely be necessary even if Congress chose not to continue providing a government guaranty on MBS, as some investors would likely prefer MBS with very low levels of credit risk.

Edward J. DeMarco, Acting Director of Federal Housing Finance Agency spoke at the American Mortgage Conference in Raleigh, North Carolina on September 19, 2011 about "The Conservatorships of Fannie Mae and Freddie Mac: Current and Future Operations." On the subject of risk sharing he said:

> Another way to meet the dual goals of reducing the Enterprises' long-term risk exposure and placing them in a more stable and sound financial condition in line with private market disciplines is to consider methods of sharing risk. FHFA will be considering a number of alternatives, such as expanded use of mortgage insurance and securities structures that allow for private sector risk sharing.
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> A traditional way that the Enterprises shared risk with the private sector was through the use of private mortgage insurance. The law has long required that the Enterprises obtain some form of credit enhancement on mortgages with loan-to-value ratios greater than 80 percent. Most often the Enterprises meet this requirement through private mortgage insurance, and the Enterprises often require deeper mortgage insurance coverage than strictly required by law. Consideration could be given to requiring greater mortgage insurance coverage, but doing so would need to be weighed against the financial condition of individual mortgage insurers.

> Another way to allow for greater private sector risk sharing is to develop security structures that allow for a portion of the credit risk currently undertaken by the Enterprises to be sold off. There are numerous securities structures that could be considered in this space, and we will be evaluating some of those in the coming months.
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> Considering these types of risk sharing alternatives has an added benefit of providing feedback into the Enterprises' guarantee fee pricing decisions. If the market price to absorb a portion of the Enterprises' risk exposure is greater than the charged guarantee fee, that would be a signal of how much prices would have to rise to attract private capital and move the Enterprises' guarantee fee pricing more in line with private markets.

Credit risk is the risk that the investor will not receive full and timely payment of principal and interest, generally due to the inability or unwillingness of the borrower to make payments and the inadequacy of collateral to cover the debt. The general goal of credit enhancement, is to separate the functions of funding mortgages from credit risk. In our economy we have many methods of providing funding and credit enhancement for mortgages. For example in the banking sector, funding for mortgages is provided by insured deposits and Home Loan Bank advances; credit enhancement is provided by bank capital for deposits and overcollateralization for advances.

In the GSE market funding was provided by agency debt and by MBS. In the case of MBS, funding was also bundled with prepayment risk. Credit enhancement was provided by the (inadequate) capital of the GSEs and the implied (now more explicit) guaranty of the US government. In the now moribund private label securitization market, funding was provided by AAA investors, while credit enhancement was provided through subordination.

Covered Bonds, which are not used extensively in the US, are a source of funding, with credit enhancement provided by a combination overcollateralization and issuer obligations. Covered bonds are in many ways similar to the structures used for credit card and auto loan securitizations in the US.

Generally credit enhancement can be provided as a corporate guarantee based on the capital of the entity providing the guarantee: GSE, bank and insurance or on a funded basis: overcollateralization and subordination. Unfunded guarantees depend more on the capacity of the insurer, while funded credit enhancement requires greater focus on the performance of the collateral relative to the amount of funded credit enhancement.

The amount of credit enhancement required can be managed through underwriting. There are two important aspects to underwriting. The first is determining the credit box, that is what range of borrower, collateral and loan terms will be allowed. The second is determining that the borrower and collateral information is accurate. Disciplined underwriting processes are particularly important in securitization where the origination and underwriting processes are separated from the investment function.

I believe that the credit risk of mortgage pools can be limited through the creation of a well-constructed credit box and through contractual mechanisms to ensure that the underwriters have properly assessed the quality of the underwriting information. I believe that the current representation and warranty process is flawed both in concept and in execution. In general, it would be better to move from a process that leads to rep and warrant enforcement at default to one that focuses on validation at the inception of

the loan. I believe a set of penalties for delivering flawed loans would be more effective than the current method of repurchase requests.

There are generally two methods to provide funded credit enhancement for the GSEs currently under discussion: subordination and credit linked notes. From a broad economic perspective the two are very similar; however they are substantially different in the roles of various parties in the transactions and also differ substantially in their regulatory treatment. For GSE risk transfer, subordination based transactions would be largely outside of their current operations for single family mortgages, but would provide a clear transfer of risk on a particular set of loans. Credit linked notes would allow the GSEs current operation of their MBS programs, and hence the TBA market, to continue with little or no change. The GSEs would retain credit risks not fully transferred by the notes. Subordination based solutions are likely to lead to less standardization of mortgage backed securities relative to credit linked note solutions. Credit linked note solutions require greater reliance on the GSEs or some successor entity.

Even with the use of funded credit enhancement it may make sense to continue the use of mortgage insurance. It appears to me that loan by loan mortgage insurance can reduce the risk of default and mortgage insurance can reduce the amount of required funded credit enhancement. However, I would recommend that mortgage insurance become non-rescindable, that is combine an element of a surety bond with the credit guaranty and that mortgage insurers should be provided by more diversified entities and have additional sources of capital.

Capital markets solutions would generally be most effective if they allowed the broadest range of investors for both the senior guaranteed securities and for the junior credit sensitive securities. Protection from double taxation, exemption from securities registration especially for the senior notes (to facilitate the TBA market), allowing REIT investment from both SEC and tax perspectives and conforming risk retention rules are necessary components for an effective risk sharing program.

At the same time investors would need appropriate loan level disclosure and assurances as to underwriting quality and servicing practices including loss mitigation and enforcement of violations of representations and warranties. It is possible that investors would require less direct involvement with a well-run standardized process from the GSEs than they would from other private issuers.

Our analysis of recently originated mortgage loans (provide by a major originator) indicates that life of loan base case credit losses are likely to be about 25 basis points or less. In stress environments (worse than the recent experience) those losses could reach 3 to 4% of the loan balances. Based on this analysis, it appears that funded credit enhancement of about 4% would substantially reduce the risk to the GSEs and tax payers from the credit risk of those mortgages.

GSE credit risk transfer transactions using funded securitization structures represent a viable approach to reduce risk to the GSEs and hence taxpayers and could provide a path forward for GSE reform. The time for these transactions is now.

Andrew Davidson
February 2012