Testimony of Sandeep Bordia, Barclays, Head of Residential & Commercial Credit Strategy

Before the Senate Committee on Banking, Housing, and Urban Affairs

Hearing on Housing Finance Reform: Fundamentals of Transferring Credit Risk in a Future Housing Finance System

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Good Morning, Chairman Johnson, Ranking Member Crapo, and other Members of the Committee. My name is Sandeep Bordia and I am the head of residential & commercial credit strategy at Barclays in New York. My group covers research on mortgage credit markets in the US and Europe, including research on housing finance. I appreciate the opportunity to discuss the fundamentals of transferring credit risk from the US taxpayer to the private markets.

In my remarks, I will start by describing the STACR and CAS credit-linked deals (Freddie Mac and Fannie Mae risk-transfer deals), including what has worked for these structures and what can be improved going forward. I will also talk about the buyer base, the market's appetite to absorb such issuance and how that would change if the attachment point of the government guarantee is higher. Finally, I will compare and contrast the credit-linked note approach to two other proposed structures: a) the senior-sub structure; and b) the bond guarantor approach.

STACR/CAS deals overview

To begin with, let me talk briefly about the STACR/CAS deals recently sold by the GSEs. So far, three deals have been priced, two from Freddie Mac and one from Fannie Mae (for a total of \$1.8 billion in credit issuance). In each of these deals, the GSEs have retained the risk on a 0.3% first loss position and sold the credit risk on the 0.3% to 3% loss piece. This means that the GSEs will absorb losses on the first 0.3% of notional on the underlying reference pool of loans for these transactions. Further, at the risk of oversimplifying, the buyers of the issued securities will absorb losses to the extent that they range from 0.3% to 3% of the notional. In each case, the GSEs have also retained some small amount of this 0.3% to 3% slice of risk while retaining the right to reduce their ownership to as low as 5% by sales in the secondary market. Appendix A shows a snapshot of the three deals. The 0.3% to 3% risk slice sold is broken into two parts, one more senior than the other to better target the risk appetites of various classes of investors. In all the three deals, the risk of losses above 3% is borne by the GSEs and by extension, the taxpayer.

The structures were very well received by the market with all three deals oversubscribed many times over. The buyer base was fairly broad with several dozen investors participating. Money managers dominated purchases of the more senior of the two tranches on offer. Hedge funds, money managers and REITs invested in the junior of the two tranches. Insurance company involvement was somewhat limited due to uncertainty around capital requirements on these tranches under the National Association of Insurance Commissioners (NAIC) model-based approach. Many investors were comfortable with the credit profiles and also used financial leverage to buy these bonds.

What has worked for the credit-linked note structures so far?

In our past published research, we have argued that to be successful, any solution used to transfer mortgage credit risk to the private market should have certain basic features. The solution should preserve the well-functioning To-be-Announced (TBA) market for disseminating the interest rate risk on mortgages and allow mortgage originators to hedge out their origination pipelines. The solution should also be simple (to the extent possible), use existing financial technology and be programmatic so as to attract a wide range of investors.

In our opinion, the credit-linked note structure satisfies most of these conditions. It allows the preservation of a liquid, well-functioning TBA market, is simple for market participants to understand, uses existing financial technology and is scalable into a standardized program.

What else needs to happen for this program to be successful?

In our view, a few more things need to happen for this program to be successful in the long run.

- One, for GSEs (or any new entity) to be able to access a well-functioning liquid credit market on a regular basis, involvement from a broad range of investors is required. Since there are fixed costs for investors to set up internal systems to analyze and track performance of these deals, broader participation requires a programmatic approach to issuance. In other words, investors need to be confident that the deals are not one-offs and the program is here to stay. We would also caution against excessive experimentation with the structures that may create a more fragmented marketplace and reduce liquidity.
- Two, expanding the type of collateral on which the credit risk is sold is critical. The initial deals covered only the cleanest portion of GSE originations that is not fully representative of the collateral quality that GSEs or any such entity would be expected to guarantee over time.
- Three, in the long run, reducing the time between agency MBS issuance and credit-risk transfer would help. The GSEs are effectively warehousing the credit risk during that time period. As such, shortening the window would reduce potential taxpayer exposure. In addition, a shorter time window would also allow for more timely market-based feedback into guarantee fee pricing for future production. It might make sense to sell even the 0% to 0.3% first loss tranche as the time between agency MBS issuance and credit-risk transfer shrinks.

Market appetite to absorb the risk

While the initial three deals have been heavily oversubscribed, the amount of credit risk sold so far is miniscule in comparison to what the GSEs have on their guarantee books. To put numbers in perspective, a 3% to 4% loss tranche on a \$5 trillion book would translate into \$150-200 billion of credit-linked notes (compared to the \$1.8 billion that was sold this year). We believe that the market can absorb \$5 to \$10 billion next year without much disruption, and even greater numbers in 2015 and later. For the program to get to a stage where it can absorb much of the mortgage credit risk with GSEs, it would realistically take several years of continued ramp up.

One big source of potential demand would be investors in legacy non-agency MBS. There is currently about \$850 billion (face value) outstanding in the non-agency market. This is paying down at the rate of \$60 to \$70 billion annually. Given strong mortgage credit expertise among many of these investors, some of the paydowns they are receiving would likely be reinvested in these securities. We could also see additional interest from money managers and REIT-like entities.

What is the right attachment point for the government entity to absorb losses?

Among other things, the attachment point for the government entity to absorb losses is a function of the policy goal and also the collateral quality on which the credit risk is being sold. The attachment point would be higher if the policy goal is to prevent taxpayer losses even in extreme draconian scenarios. A 3% attachment point might be reasonable for pools where the market expects very low losses but would not be enough where base expectations are close to or even higher than 3%. Generally speaking, a worse quality pool of underlying mortgages would require a higher attachment point and/or higher risk premiums for the credit-risk-transfer securities.

For example, consider loans originated in Q3 2012, with an average loan-to-value of below 80%. Since then, home prices have risen another 10% to 15% around the country. As such, the current loan-to-value ratio makes these mortgages even safer and a 3% attachment point might be reasonable. In contrast, a 3% attachment point on newer production with greater LTVs and no accumulated home price appreciation might not be enough. This is especially so because we learnt through the crisis that in a bad economic environment, poor credit quality loans have losses that are several multiples of the losses of good quality loans.

How do we think about the 10% tranche proposed by S. 1217?

As I mentioned earlier, a constant attachment point for all kinds of collateral might not be reasonable, in our view. In a scenario where we look at a 10% first-loss piece, the first thing to consider is whether all of this would even be considered as a first-loss piece by the market. So, while a 10% slice of a \$5 trillion market would equal \$500 billion in mezzanine/subordinate bonds, not all of it may be considered as deep credit investments and some may even receive high investment-grade credit ratings. In other words, while more credit-linked securities would need to be sold in the market, this should mean that the buyer base could be expanded from what we have seen on the STACR/CAS deals to include more risk-averse money managers and insurance companies.

One number to consider is that, even at its peak, the total amount of subordinate and mezzanine bonds outstanding in the non-agency market in 2005-2007 was slightly below \$400 billion. So, while it is certainly possible for the private market to absorb \$500 billion in supply, it is by no means a done deal and would take a relatively long time to achieve.

Other approaches to credit risk transfer

There are two other approaches that are being considered for transferring credit risk from a government-supported entity. The first is to use a securitization style vehicle in the form of a senior-sub structure. The second is to use well-capitalized bond guarantors to cover losses.

Senior-sub structure less preferable

As we have recommended in the past, we prefer credit-linked notes to senior-sub structure as they allow us to preserve the well functioning TBA market as is. A senior-sub structure could also increase the warehousing costs for originators if they were forced to hold both the interest rate and credit risk until they accumulated enough loans to issue a senior-sub deal. This could be particularly problematic for smaller originators who may have to accumulate loans for months before they could do a reasonably sized deal. In theory, it would be possible to create a new TBA-like market just for the seniors but it might orphan the existing TBA market, would likely be a difficult transition and may have lower liquidity than the current set-up.

Bond guarantors as providers of first loss

Alternatives to selling credit risk in transactions like STACR/CAS include using bond guarantors as providers of first loss. On the positive side, this exit solution will likely provide more stable funding for mortgage credit than securitization options (credit-linked and senior-sub structures). The securitization option is likely to be more pro-cyclical, especially because of the availability of leverage to investors in buying those securities. However, the bond-guarantor structure also has two major drawbacks compared to the STACR/CAS structures, in our view.

First, this form of insurance may result in some counterparty credit risk. The STACR/CAS deals provide the GSEs with cash equal to the face value of the first loss piece sold. This cash can be set aside to provide the GSEs with an actual cash capital cushion in case losses exceed the threshold that the GSEs have chosen. In the insurance/bond guarantee transaction, the insurer does not have to pay this cash up front but only if losses exceed a certain level. While S. 1217 requires bond guarantors to hold capital equal to at least 10% of the guaranteed balance, this only works as a safeguard if the bond guarantors' only business is to provide insurance on these MBS. If the guarantor is involved in other lines of business, unless the capital is held in a separate account for the benefit of the enterprises or their successor, the taxpayer still takes on some counterparty credit risk to the guarantor. For example, if in certain extreme situations, the losses on the guarantors' other lines of business exceed the capital set aside for those business lines, there is some risk that the insurers have to pay out using the capital otherwise required to be held to cover mortgage losses. This could potentially lead to a situation where some part of the 10% is not covered and the taxpayer is exposed to the risk. Stronger oversight and regulations separating the capital held for guaranteeing MBS could potentially mitigate this risk, but would not eliminate it completely.

Second, the bond guarantee structures would not be as transparent in pricing as the STACR/CAS deals since there would be no secondary market to provide liquidity/pricing information on an ongoing basis. The secondary market would provide more immediate feedback to guarantee fee pricing than an insurance/bond guarantee transaction could. A fully functional secondary market in these credit tranches also provides useful information that could allow a fully private market to price credit risk in a more transparent manner and could help in fostering a fully private market.

Conclusion

Overall, while we favor the credit-linked structure, given the size of credit risk transfer required over the long run, it might be preferable to have multiple exit options including through bond guarantors. While I believe that there are various paths to achieve the goal of transferring credit risk to the private market, I would caution policymakers to closely watch the pace of any such transition. The availability of mortgage credit remains extremely important to the housing market and the economy as a whole and any sudden shocks to the system that reduce this availability could have far-reaching consequences.

Chairman Johnson, Ranking Member Crapo, and other Members of the Committee, I thank you for your time and attention and the opportunity to testify before the Committee.

Appendix A – Details of STACR/CAS Deals

Deal	Month Issued	Reference Collateral Balance	Collateral vintage	Bond	Rating	Attach ment	Detach ment	Tranche Sold	Tranche size	% Retained
STACR 2013- DN1	Jul-13	\$22.6bn	Q3 2012	M1	-	1.65%	3%	\$250mn	\$305mn	18%
				M2	-	0.3%	1.65%	\$250mn	\$305mn	18%
				В	-	0%	0.3%	-	\$68mn	100%
CAS 2013- C01	Oct-13	\$26.8bn	Q3 2012	M1	BBB- Fitch	1.65%	3%	\$338mn	\$361mn	6.6%
				M2	-	0.3%	1.65%	\$338mn	\$361mn	6.6%
				В	-	0%	0.3%	-	\$80mn	100%
STACR 2013- DN2	Nov-13	\$35.3bn	Q1 2013	M1	Baa1 Moodys / BBB- Fitch	1.95%	3%	\$245mn	\$371mn	34%
				M2	-	0.3%	1.95%	\$385mn	\$583mn	34%
				В	-	0%	0.3%	-	\$106mn	100%

Note: Attachment point shows the minimum level of losses required before the tranche takes any principal writedowns/losses. Detachment point signifies the approximate level of losses at which the tranche is completely written down. Source: Barclays Research