

By Matthew Tomiak and William Berliner

The home loan crash has made restructuring mortgage bonds hard enough. The government's HAMP initiative for loan modifications layers on more levels of difficulty.

# The Complex New World of RMBS *Shortfalls*



*The downside of trickle-down structures*

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How to restructure the overwhelming number of troubled loans backing mortgage bonds remains one of the major challenges of the credit crisis. It's not just that virtually no private-label residential mortgage-backed securities (RMBS) were structured with subordination levels sufficient to absorb current losses on their loan collateral, making even senior and super-senior securities subject to potential downgrades and writedowns.

The other major issue is that multiple generations of deals were created and codified without sufficient guidance on how loan modifications should be treated. This frequently pits owners of different bond tranches against each other. Meanwhile, some solutions, including government-mandated programs, can bring bizarre and counterintuitive results for bondholders. Below we'll examine issues arising from loans under consideration for modification under the Obama Administration's Home Affordability and Modification Program (HAMP).

First, let's quickly outline the two primary structures used in RMBS transactions. The shifting interest structure is the simpler of the two. Subordinates provide the only credit support to the senior bonds, the principal balance of the collateral and the bonds are the same, and principal and interest cash flows from the collateral are matched to the principal and interest obligations for the securities. Interest from the underlying loans is used to pay interest to the security holders, and principal cash flows are directed to amortize the bonds.

The overcollateralization (OC) structure is more complex. It was used to build in extra support for products with greater exposure to credit risk, including subprime, second-lien loans and some Alt-A. The principal balance of the loan collateral is greater than that of the bonds being sold, creating the deal's overcollateralization. And the weighted average interest rate generated by the collateral is greater than the weighted average coupon rate for the securities being issued, meaning excess spread is also used to support the senior certificates.

For either structure, an interest shortfall is the inability to pay the aggregate interest owed to the securities from the proceeds collected from the collateral.

These typically result from delinquencies and defaults by borrowers on the loan collateral. Interest shortfalls from a mismatch between the weighted average note rate of the deal's collateral and the weighted average coupon rate of the certificates is basis risk. The treatment of basis risk has important implications for the allocation of resulting shortfalls. A principal shortfall represents the losses realized when the principal balance of the collateral is less than that of the associated bonds.

### Loan Modifications Within Structures

HAMP seeks to reduce a borrower's debt-to-income (DTI) ratio to 31% by a set of iterative calculations: reducing the loan's note rate, extending its term and reducing its principal balance by either forgiving or deferring principal. We shall focus on the first and third points, as the impact of extending loan terms will be limited — we anticipate that it might throw off the

schedules of tranches in the senior sector, mainly impacting PACs, super-stable bonds and corridor floaters.

The initial issue addressed by trustees in handling rate reductions and resulting interest shortfalls is whether the deal contains provisions for a net WAC cap (NWC) which means that the coupon rates of *any* bonds, whether senior or subordinate, cannot exceed the deal's net WAC — the weighted average coupon of the deal after taking costs and expenses into account. If NWC provisions exist in the governing documents, the net WAC cap shortfall is the difference between the rate of

interest the bonds would have received based on their contractual coupon rate and the net WAC.

Whether or not the deal was structured with a net WAC cap will impact how interest shortfalls are treated. With a NWC, all certificates are potentially subject to interest shortfalls, depending on their coupon rate vis-à-vis the transaction's net WAC. Without it, interest shortfalls are treated as an undercollection of interest and

losses are allocated to the certificates in reverse order of seniority.

To illustrate these decisions and their impact, consider a hypothetical OC transaction with one senior and one subordinate tranche.

Assume that the deal's original net WAC is 8%, that Libor is 2%, that the senior bond pays L+150 basis points — giving it a 3.5% coupon — and that the subordinate bond resets at L+300 for a 5% coupon. The excess of the deal's WAC over the weighted average of the bonds' coupons is treated as excess spread, which serves as part of the overall credit support and typically is the first component to absorb losses.

If the net WAC declines sharply and the transaction contains an NWC, neither bond is allowed to pay an interest rate above the net WAC. Therefore, a decline in the deal's net WAC to 4% means that holders of the subordinate bond can receive only 4% on their bonds, forcing them to incur a shortfall of 100 basis points. If the net WAC drops to 3%, both the senior and subordinate bonds incur a net WAC cap shortfall of 50 and 200 basis points, respectively.

If the deal does not contain NWC provisions, both bonds accrue interest at

their full coupon rate, irrespective of the deal's net WAC. Interest shortfalls resulting from a decline in the deal's net WAC are instead treated as an undercollection of interest and impact the last bonds in the capital structure scheduled to receive payments. In this case, the senior bond is only impacted once the subordinate's interest — and in certain transactions, principal — distribution is reduced to zero.

HAMP modifications attempt to reach a 31% DTI by first reducing a loan's note rate. Done in large enough numbers within a transaction, modification activity could reduce that deal's

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*Mortgage holders are learning a thing or two about butting heads*

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net WAC. It is unlikely that senior bonds in a structure will experience shortfalls due to NWCs, given the excess spread built into the deals at issuance and the relatively low coupon rates associated with senior tranches. However, the senior securities do have some exposure to shortfalls in deals where an NWC is present, were the deal's net WAC to decline sufficiently. More importantly, higher-rated subordinates have exposure to NWC-related shortfalls. This suggests that large-scale modifications could cause interest shortfalls in more senior bonds than is commonly believed.

*Trustees, servicers and securities administrators do not want to act unless they are certain that they are free from all liability.*

Other classification issues affect whether an interest shortfall is treated as a net WAC cap shortfall or simply passed on as a loss to the most junior certificate. When loans are modified within a deal, the servicer must decide whether to consider the new, modified rates as the official rates for the loans or use the original rates. If the former is chosen and an NWC is present, the result is a reduction in the deal's net WAC, creating shortfall risk for the transaction's more senior bonds. If the latter is taken, shortfalls are not considered to result from basis risk but treated as an undercollection, with shortfalls allocated as losses to the subordinates in reverse order of seniority.

Whether the bond has an OC or a shifting interest structure doesn't change matters much. An OC deal may still have enough excess interest to cover any shortfalls, since the overcollateralization itself creates excess interest. By contrast, a shifting interest structure has no mechanism except a subsequent recovery to pay back interest shortfalls. However, the treatment of shortfalls resulting from interest rate modifications can vary. An excess IO — in other words, an IO tranche created from the difference between a deal's net WAC and the bond coupons — may bear all net WAC reductions resulting from rate modifications before they are allocated to the other certificates. In a fixed-rate deal with a single coupon created by dividing the collateral into discount and premium groups — which would create WAC IOs and POs — rate reductions down to the deal coupon rate are allocated to the IO. Any further rate reductions are treated as undercollections and allocated to the certificates in reverse order of seniority.

Further complicating the determination of the correct mortgage rate is how to treat subsidies received by investors under HAMP. The amounts involved are small, so the economic impact is limited. But it does create the potential for bizarre outcomes. The Treasury will reimburse investors for half the costs of reducing monthly payments from a 38% DTI ratio to 31%. The current rate can be viewed as either the actual note rate being paid by borrowers, which would result in an arti-

cially low net WAC, or an adjusted rate that reflects the Treasury payments.

In either case, this can cause unintended results. Using the subsidy to gross up a loan's coupon and thereby the deal's WAC means deciding how to treat with delays in receiving the reimbursements. Any delay between the loan's due date and receipt of the subsidy would create a shortfall in interest collections that would be passed on to the most junior certificate. To avoid such a shortfall, the servicer could advance, and later recover, the delayed payments; alternatively, they can be accrued only upon receipt. The latter could, however, create problems, since it would be the only cash flow within the structure with such a lag.

If the current rate remains the one paid by the borrower, the subsidy must be classified as either a principal or interest collection. If classified as principal, the bond balances would be artificially reduced by the payments; combined with the reduced WAC, this creates potential shortfalls in entitlements. In an OC structure, if classified as interest the subsidy effectively creates additional credit support. In instances where it is not needed, the payments would be released to the residual holders. In a shifting interest structure, the subsidy would probably simply flow to the residual as such structures typically do not contemplate interest in excess of the bond-to-loan parity.

Certain servicers say they will not use the subsidy to gross up deals' WACs, but will treat it as excess interest. This would create unintended and counterintuitive results. For example, most OC structures use excess interest to first build or restore OC. This means that excess interest could be directed to pay down the balances of senior bonds even when they are absorbing an interest shortfall in the same period.

### Principal Forbearance

Under HAMP, reducing a loan's principal balance is advised if lowering the loan's interest rate and extending its term still do not yield the savings necessary to reduce the DTI to 31%. In most cases, principal is not considered permanently forgiven but forborne — basically deferred — with a permanent resolution expected at some point.

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Given that most deals do not have specific terms addressing the issue, it was unclear whether forborne principal should be treated as a current loss subject to an immediate writedown. If so, such a loss would flow through the deal's waterfall, resulting in a writedown for the most junior outstanding subordinate tranche. Alternatively, the amount of forborne principal would



be held in abeyance as an open item until the loan is either fully liquidated, at which time the entire principal balance is written down, or the forbore principal is paid by the obligor.

An immediate writedown of forbore principal would benefit the senior bondholders at the expense of the subordinates. They support their position by arguing that an immediate writedown is a better reflection of reality, and avoids a mismatch between the interest accrued on the certificates versus the loan collateral, since the deferred principal does not accrue interest. By contrast, subordinate holders would benefit by deferring the writedown, as they would continue to receive interest payments on the principal balance in question. These bondholders argue that the forbore principal is still due and payable; it is also inconsistent with the notion that losses should be taken only when a loan is liquidated.

The Obama Administration believes that forbore principal should be written down immediately. The HAMP FAQs dated November 12, 2009 state: "...servicers, securities administrators and other transaction parties should treat HAMP principal forbearance amounts as realized losses...under any applicable securitization pooling or trust agreement" unless the deal documents "explicitly and affirmatively" require an alternative treatment.

This should have the force of law and fall under the safe harbor for servicers and trustees. But it remains a polarizing topic, since one category of bondholders will benefit at the expense of another in every instance. Trustees, servicers and securities administrators do not want to act unless they are certain that they are free from all liability. They are seeking further Treasury guidance. In December, ASF sent a letter to the U.S. Treasury recommending measures that would enable participants to allocate principal forbore as a realized loss under HAMP. The letter can be found at <http://www.americansecuritization.com/story.aspx?id=3825>.

### Loss Allocation Once Subordinates Are Exhausted

In all RMBS deals, losses are applied to a deal's subordinate securities in reverse order of seniority, irrespective of whether they represent principal or interest shortfalls. However, there are various combinations of cash flow and loss allocation mechanisms for the senior certificates once the related subordinate certificates have been completely eroded due to losses, including those resulting from modifications.

For shifting-interest structures, almost all transactions provide that once the subordinate certificates have been eroded, the remaining senior certificates will take losses and receive principal payments pro rata regardless of their principal payment pri-

ority before such event. OC structures are more complicated. In some deals, mainly those before mid-2005, the senior bonds are not written down when losses are realized after the subordinate balances have been reduced to zero. These seniors' principal balances are only reduced through payments made by the obligors, not by the allocation of losses. The senior certificates allow for negative overcollateralization, and the losses are considered implied. In these deals, losses are realized only when all the collateral pays off and the trust terminates with some bond balances remaining unpaid.

When negative overcollateralization occurs, principal can continue to be paid according to the deal's senior pay rules, or shift to a pro rata payment structure. Where the transaction

remains in a sequential principal payment structure, with shorter bonds receiving principal before longer ones, the longer bonds have a greater exposure to losses, since losses are only allocated once the loan collateral is completely paid off.

In later deals, the structures mandate that principal losses are allocated to the senior bonds as they are realized, once the principal value of the subordinates is reduced to zero. Losses in this case are

typically allocated pro rata, since the ratings agencies' position was that no senior bond can be ranked above another. Without a pro rata treatment, some senior bonds in the structure are subordinate to others, disqualifying them from being rated triple-A. This view evolved to allow the creation of super-senior and senior mezzanine bonds with explicit prioritization within the senior bonds in the structure.

One conclusion to be drawn is that almost every non-agency RMBS tranche now has potential exposure to shortfalls. Even bonds at the top of the credit stack can be exposed to credit-related losses. This means that all private-label investors have to be prepared and able to dive into the minutiae of deal documents. Also, the controversies over principal forbearance show how the lack of an understanding of the ripple effects of loan modifications has hampered efforts to deal with the foreclosure crisis. This has complicated an already tricky situation and slowed the process of cleaning up the housing mess. ▼

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*Will his administration add some clarity to HAMP?*

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