

Innovation Series
GLOBAL CORPORATE TRUST

Shelter from the Subprime Storm

U.S. mortgage issuers, underwriters, and investors may be turning to a 200-year-old financial tool to survive today's global credit crunch and liquidity squeeze.



THE BANK OF NEW YORK MELLON.



Many experts have been predicting development of a robust U.S. covered bond market for a decade, but securitization's advantages tended to outweigh those of covered bonds. Now the covered bond tipping point may be at hand.



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The U.S. subprime market contagion continued to spread during the second half of 2007. A global credit crunch and liquidity squeeze brought trading in collateralized debt obligations (CDOs), collateralized loan obligations (CLOs), and residential mortgage-backed securities (RMBS) to a standstill. The knock-on effect led to collapse of the leveraged buyout market, huge writedowns of nonperforming loans by prominent financial institutions, extreme volatility in global stock markets, wobbling of heretofore solid bond insurers, and substantial loss of face at major rating agencies.

In the U.K., news of minor subprime losses at Northern Rock (NR) set off a run by bank depositors who quickly withdrew more than \$2 billion. The Bank of England, lacking an FDIC-type deposit insurance protection system, chose to provide an emergency credit line rather than risk NR's failure and see the depositor run metastasize.

The NR crisis initially brought the European mortgage market to a standstill. Then a curious thing happened. Deals started to close in Portugal, Spain, and Greece. These transactions relied on covered bonds, a much older tool than securitization. Established in Germany in 1769 (Pfandbriefe), covered bonds are one of the largest asset classes in the European bond market and an important source of finance for mortgage lending.

Many experts have been predicting development of a robust U.S. covered bond market for a decade, but securitization's advantages have tended to outweigh those of covered bonds. Now the covered bond tipping point may be at hand, as press reports indicate that underwriters hold \$200 billion in nonperforming RMBS and CDOs and another \$300 billion in CLOs (*Bloomberg*).



What are Residential Mortgage Covered Bonds?

Residential Mortgage Covered Bonds (RMCBs) are debt instruments fully secured or “covered” by a loan pool that remains on the originator’s balance sheet. Investors have full recourse against both the originator and the pool of mortgage loans, which sets RMCBs apart from both senior unsecured debt and RMBS.

RMCBs are backed by underlying asset pools equating to at least the same amount of the issue. Credit enhancement is achieved primarily through overcollateralization. The originator is required to maintain the credit quality and relative size of the covering pool for the duration of the transaction. If an asset in the pool defaults, or ceases to satisfy specified eligibility criteria, the originator must replace it or top up the covering pool with eligible assets. There are active covered bond markets in 20 different European countries. These offerings rival the European government bond market.

A second difference is that no true sale occurs, giving the bonds more built-in investor protection but less bankruptcy remoteness (see chart: RMBS Vs. RMCBs). Since 1995, covered bond laws have been introduced in many European countries to enhance bankruptcy protection. In the U.K. and the Netherlands, where no covered bond laws exist, contracts are structured to enhance bankruptcy remoteness. In the U.K., for example, RMCBs often are structured to resemble an RMBS master trust.

The RMCB approach would seem to offer a middle way between conducting ongoing reverse repos and attempting a full securitization.

Issuer/Underwriter Benefits

When the subprime crisis began in the summer of 2007, issuers began to cut back on making higher risk loans, concentrating instead on issuing conforming loans (under \$417,000) that could easily be sold to established government-sponsored entities (GSEs), such as Freddie Mac and Fannie Mae. These GSEs quickly reached their portfolio capacities, forcing lenders to warehouse more of their loans. Down the pipeline, underwriters faced a similar problem as jumbo whole loans and Level 2 and Level 3 assets could not be priced or securitized.

Warehoused individual mortgage loans typically are used as collateral in short-term reverse repo transactions—as long as the mortgages are not in default—until a loan securitization package can be created. In the current market, however, it may be difficult to continually find new repo counterparties or to mark to market the securities to be pledged as collateral.

The RMCB approach would seem to offer a middle way between conducting ongoing reverse repos and attempting a full securitization. RMCBs provide an efficient, cost-effective way to raise funds or refinance whenever it is necessary to retain control of the underlying assets.

- **Efficiency.** The originator is obligated to replenish the loan pool as bonds mature or if certain loans within the pool are found to be nonperforming. The requirement to maintain a dynamic loan pool versus a static pool enables the issuer to keep the capital raised and recycle the debt by indefinitely rolling over the bond.
- **Cost.** The dual recourse nature of RMCBs generates credit ratings that are superior to senior unsecured debt and trade at lower yields.
- **Investor diversification.** In Europe, RMCBs typically attract risk-averse investors who want the safety of government paper combined with a higher yield.
- **An alternative for warehoused jumbo whole loans and Level 2/3 assets.** With issuers and underwriters forced to hold these assets on their books, the best approach may be to use them for RMCBs.

Investor Benefits

Investor skittishness over subprime risk and the slowing economy has driven yields for government paper below the point where buying the securities is justified. The market imbalance may set the stage for RMCBs, as they offer a risk profile well suited to this particular environment.

RMCBs address the one central question—even beyond bankruptcy recourse—that subprime debt brought to light for investors: “How much skin does the borrower and issuer have in the game?”

From an investor’s perspective, RMCBs are substantially safer than RMBS for several reasons. RMCBs have maximum loan-to-value thresholds that range from 60% to 80% (60% in Germany), so borrowers cannot easily walk away from their loan obligations. In addition, RMCBs force the issuer to conduct greater asset servicing due diligence as the assets remain on the originator’s balance sheet.

Other protections include the dual-recourse provision, preferential treatment in the event of issuer default, and mandatory overcollateralization in some markets. The issuer is also required to maintain the credit quality and relative size of the covering pool.

Taken together, investors perceive that they are investing in creditworthy loans that carry a “full faith and credit” type obligation from the issuer and, in return, are paid yields superior to government paper.

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Role of the Agent/Trustee

The role of the RMCB trustee varies by country, as each jurisdiction has its own rules and regulations. The Bank of New York Mellon supports covered bonds internationally, and has been involved in every American covered bond issue. Under the German Pfandbriefe model, an independent trustee is proposed by the mortgage bank and approved by the BaFin, which supervises German financial services. The trustee must ensure that the prescribed cover for Pfandbriefe exists at all times.

Throughout Europe, the independent trustee role is growing, driven by changes in legislation, rating agency methodologies, and market developments. Where no covered bond laws exist, the trustee role is being established by contract.

On any given RMCB agreement, corporate trust services may include acting as Account Bank, Asset Monitor, Calculation Agent, Cash Manager, Common Depository, Covered Asset Monitor (U.K. and Ireland), Issuing and Paying Agent, Listing Agent, Registrar, SPV Administrator (Spain), and Trustee, depending on the jurisdiction.

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Overcoming Hurdles

The final impediments for RMCBs would appear to be largely legal and regulatory. Several issues may need to be addressed for the U.S. RMCB market to take flight.

- **Enforceability of first liens.** One outstanding question is whether investor first liens on RMCBs are 100% enforceable in bankruptcy. In a securitization, this is typically achieved when assets are transferred to a Special Purpose Vehicle (SPV). The U.K.'s Financial Services Authority is considering two proposals to ring-fence these assets in case of bankruptcy proceedings ("Proposals for a UK Recognised Covered Bonds Legislative Framework," July 2007).

One method, currently being used in the EU, is to create a statutory fence around the RMCB asset pool, in effect tying the hands of a future bankruptcy judge.

A second method would allow for full transfer to an SPV. Under this model, the issuer would lend the proceeds of an RMCB issue to an SPV. The SPV would use the funds to buy a portfolio of mortgage assets from the issuer. In consideration of the issuer loan, the SPV would guarantee the issuer's obligations to pay RMCB principal and interest. In the event of issuer default, notice to pay would be served on the SPV.

- **Materiality.** Questions have also been raised about how much RMCB-type debt can appear on an issuer's balance sheet without raising material impact issues. In the U.K., the FSA has established general guidelines for materiality, which is generally between 4% and 20% of balance sheet assets, depending on the individual bank.

- **Transparency.** A third challenge is to address investor demands for greater loan-level transparency. The subprime blowup has made investors far more cautious, leading many to demand greater loan-level data to determine whether underlying assets are actually performing.

To address these concerns, one leading global diversified financial services issuer is providing U.K. investors with complete loan-level performance data. This data is provided anonymously to protect individual borrower privacy as required under the Data Protection Act. In Germany and the U.K., an outside third party such as the Trustee is tasked with running models to verify loan asset pool performance.

Over the past several years, The Bank of New York Mellon has been diligently building a sophisticated, end-to-end collateral management platform that can provide the detailed loan-level information investors want. For dealers and originators, the interface can provide the detail needed to aggregate multiple pools of collateral across multiple asset types. For investors, the system can provide a platform for monitoring current loan level performance activity via the internet.

RMBS vs. RMCBs

Key Differences	RMBS	RMCBs
Issuer	SPV	Originator
Structure	Off Balance Sheet	On Balance Sheet
Mortgage Loan to Value (LTV)	Higher	Lower
Coupon	floating	fixed or floating
Management of asset pool	static	dynamic
Tranching	yes	no
Spreads	wider	narrower
Transaction Average Life	shorter	longer
Prepayment Risk	yes	no
Investor Bankruptcy Recourse	SPV only	Originator and cover pool

Shelter from the Storm

The overall shakeout in the financial markets will continue in 2008. Deals will become more transparent, more straightforward, and more scrutinized. However, many creditworthy individuals will still require mortgages and many banks with strong balance sheets will continue to underwrite these loans. The only question is which financial vehicle is best suited to providing the necessary liquidity in this market.

The substitution of RMCBs for RMBS in 2008 may offer issuers, underwriters, and investors a potential short- or medium-term respite from current market turbulence.

For issuers and underwriters, RMCBs provide an efficient, cost-effective way to raise funds or refinance whenever it is necessary to retain control of the underlying asset pool. One scenario is to carry these loans on balance sheet for a year or two until the securitization market settles down. In the interim, covered bonds can be used as another funding or liquidity source, or in a blend with one portion of loans kept on balance sheet and another portion of loans financed off balance sheet.

At the same time, investors and rating agencies see RMCBs as safer than RMBS, as they require dual-recourse obligation ensuring ongoing issuer/originator due diligence throughout the life of the transaction.

The lack of bankruptcy remoteness is certainly an issue that needs to be addressed, either through legislation or through contractual obligation. To date, the bankruptcy question has not been a problem in risk-averse Germany. Since the inception of Pfandbriefe in 1769, the *International Financial Law Review* notes that there has not been a single recorded case of default ("Regulatory confusion casts shadow over launch of UK Pfandbriefe," *IFLR*, August 2003).



As head of Global Structured Finance Product Management, Tony oversees a team of product managers around the globe. He is responsible for product strategy and development for services supporting capital market participants. He joined The Bank of New York Mellon in 2006 as business head of Mortgage Backed Securities. Tony has 20 years financial services organization experience holding management positions within business unit management, technology, and business strategy.

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The Bank of New York Mellon's corporate trust business services \$11 trillion in outstanding debt from 54 locations around the world. It services all major debt categories, including corporate and sovereign debt, mortgage-backed and asset-backed securities, collateralized debt obligations, derivative securities and international debt offerings.

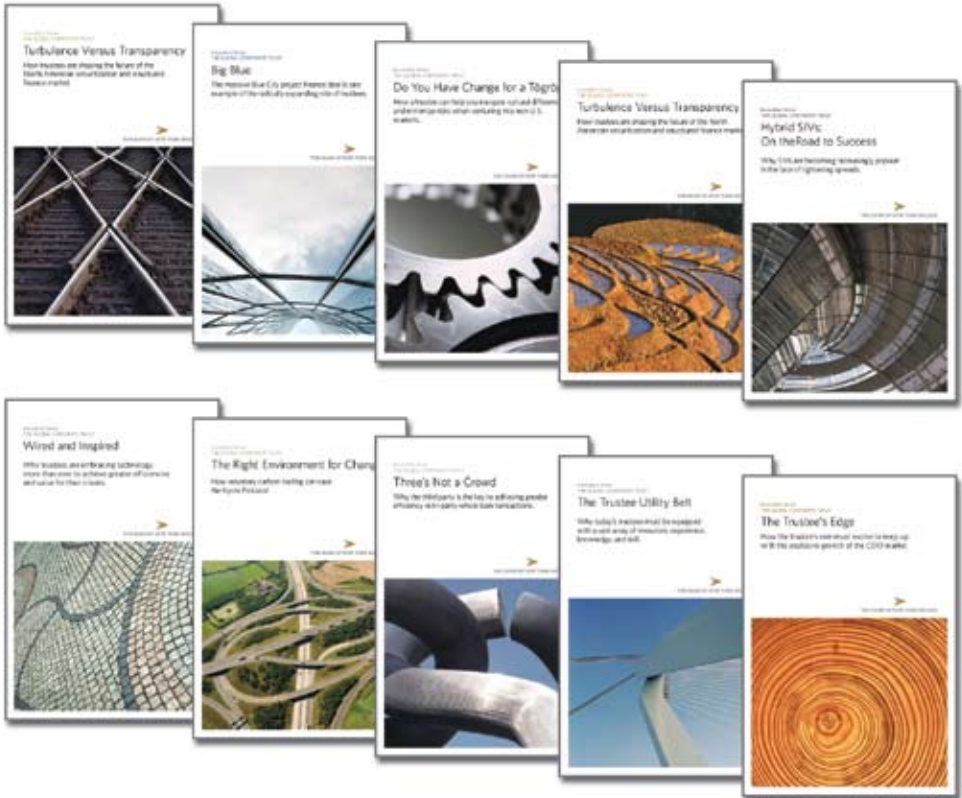
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Who's Helping You?



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The subprime crisis of 2007 left the U.S. mortgage industry in complete disarray. Some lenders were forced into bankruptcy while other financial institutions took massive losses on nonperforming loans. In this edition of the Global Corporate Trust Innovation Series, you'll learn about an alternative way to finance mortgage debt and the vital role trustees play in its issuance.

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By Tony A. Nunes



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