

Residential Subordinate Mortgage Backed Securities

What Are They?

Non-agency loans are usually made in the form of jumbo loans to prime borrowers where the loan size exceeds FNMA/FHLMC standards. Residential subordinate mortgage backed securities (“RSUBS”) are the subordinate counterparts to senior tranches within the non-agency collateralized mortgage obligation (“CMO”). The RSUBS issues are combined with senior issues to trade off prepayment risk for credit risk.

The subordinate tranches provide the over-collateralization that enables the senior tranches to achieve a triple AAA credit rating. Each subordinate tranche is rated AA and lower, depending on the amount of underlying credit support below that tranche. Therefore RSUBS include both investment grade and high yield classes.

The senior sequential tranches provide call protection to the RSUBS by absorbing all of the collateral prepayments under a shifting of interest schedule. Additional protection is provided by AAA non-accelerating senior tranches (“NAS”) which begin to receive principal prepayments in the sixth year. As a result of this senior/subordinate structure, RSUBS have an improving convexity profile versus similarly rated commercial mortgage backed securities (“CMBS”), sequential passthroughs, PAC classes and conventional low coupon GNMA’s.

Ratings on RSUBS are a function of the current housing market and affordability. Rating agencies will often look at issuers’ lending practices and historical track records.

Factors Affecting RSUB Performance

RSUBS have experienced significant spread widening since the risk aversion led sell-off of all non-agency CMO product in mid October. We believe that this widening has been indiscriminate and doesn’t properly reflect the varying credit and prepayment risks associated with different structures. RSUBS yields have skyrocketed in sympathy with the other credit sectors yet these securities avoid most prepayment risk and in fact, improve in credit quality as prepayments pick up momentum due to the unique way in which they are structured.

Ratings actions in the corporate and high yield sector depend largely on improvements in the financial condition of a specific entity. ABS and CMBS structures are also monitored and evaluated in light of their corporate issuers. In a similar fashion, the lending/underwriting standards of RSUBS will greatly impact the credit profile of the product. Lenders with solid standards will produce pools with better quality and lower default risk.

Each issuer has its own business practice, strategy, underwriting guidelines and market experience. These factors ultimately drive the performance and quality of the loans that the issuer extends. Therefore there is great variability in the subordination requirements that rating agencies and investors require among issuers in order to level the playing field. These are the baseline subordination requirements that Moody's Investor Service applies to the following major issuers:

Subordination Requirements

• Bank of America	4.0 %
• Countrywide Home Loans	4.0 %
• Norwest Mortgage	4.0 %
• Chase Manhattan Mortgage	4.5 %
• GE Capital Mortgage Services	4.5 %
• First Union Mortgage Loan Conduit	5.0 %
• Citicorp Mortgage	5.5 %
• PNC Mortgage Securities	5.5 %
• Residential Funding Corporation	5.5 %

Although each issuer is assigned a baseline level, every new issue is reviewed on its unique merit and assigned a relative subordination level. According to Moody's, the primary considerations include: origination strategy (wholesale or retail distribution), historical loan performance track record, underwriting standards and exception policy, loan characteristics and the availability of loan performance data.

After the initial ratings have been assigned to the various tranches within a whole loan structure, ratings agencies will complete ongoing reviews in order to assess the collateral performance over time. According to Moody's and Fitch rating services, rating reviews are automatically triggered when the credit support on a mortgage security appreciates by either 30 – 60 basis points or by more than 50.0%. In addition, issuers and bondholders can request that an issue be reviewed at any time. Furthermore, if the subordinate tranches are combined through a re-remic program, the ratings agencies must evaluate the issue on the basis of the new composition.

Market Factors Affecting Default Rates

RSUBS collateral is comprised of many borrowers from different regional markets. Across all regions, non-agency collateral performance has improved in credit quality consistently since the early 1990's. Today, these loans have lower LTV ratios, full documentation, and are more often owner occupied properties.

Fixed Rate 30 Year JUMBO	1998	1997	1996	1995
Average Loan Size	304	269	283	276
Original LTV (%)	74	76	77	78
Original LTV > 80 (%)	11	18	24	27
Original LTV < 80 (%)	3	6	7	8

The California Housing Recovery, boosted by rising home prices and income levels along with falling mortgage rates, has also improved the quality of RSUBS. California comprises over 40 % of the non-agency market. Rising home resale driven prepayments serve to de-leverage the inherent credit risk in RSUB structures. The de-leverage effect is accomplished as the subordinate piece becomes a greater percentage of the outstanding balance. As such, the credit support on the RSUBS increases over time. Prepayments also substantially reduce average life instability, which in turn improves the convexity of the issue.

A significant and often overlooked advantage of the residential mortgage market is the shifting interest between the senior and subordinate pieces. Therein lies the direct link between credit risk and prepayment performance of a mortgage security. Prepayments insulate a pool of loans from an economic downturn, by increasing the subordination levels on the remaining tranches. As loans prepay, the shifting interest structure directs the cash flows to the senior classes first. As the principal balance falls, the subordinated classes grow as a percentage of the outstanding balance. Prepayments, in turn, reduce cumulative default risk, as would be defaulted borrowers are eliminated from the structures as they refinance in order to lower their debt burden.

As these market and structural factors improve the credit quality of the security, rating agencies will review and possibly upgrade these structures. The latest refinance wave, in combination with a strong housing market, should increase the probability of ratings upgrades on these classes in the future.

Relative Value

Mortgage rates have plummeted to a 28-year low of 6.49%. As a result of the subsequent prepayment activity, all mortgage-backed sectors widened to ten-year highs. While most MBS carry some degree of sensitivity to refinancing, not all structures are created equally. There is great opportunity to pick out relative value by adding those structures with less interest rate sensitivity, whose spreads have widened in sympathy.

There is currently strong intrinsic value in RSUBS, Alt-A's, and prepayment penalty bonds structures. But the RSUBS have additional value, in that the improving credit quality in these pools will likely result in a ratings upgrade. In fact, as credit support grows beyond a significant percentage, an automatic rating review is triggered at the ratings agency. If a class is small in size, investors can combine smaller outstanding tranches and create a "re-remic" class, which will also automatically be evaluated and assigned a new rating. The re-remic process will create a credit arbitrage by assuring the ratings upgrade. In addition, the re-remic process will improve the diversification of the structure and further improve the subordination on the new remic security.

Investors purchasing RSUBS at similar option adjusted spread to other credit product receive the added bonus of upgrade induced spread tightening. In contrast, corporate ratings are based primarily on the financial soundness of the issuer and third party credit enhancements or guarantees. Corporate debt has been historically downgraded much more often than similarly rated securitized subordinate tranches, yet RSUBS typically yield 100 to 200 basis points more than same-rated corporate issues.

Within the mortgage sector, RSUBS demonstrate better call protection and cash flow stability than plain vanilla PAC CMO's and have better credit improvement potential than subordinated CMBS. CMBS tranches do not benefit from the refinance driven credit improvement trend, because the CMBS structure highly constrains the borrower's ability to prepay regardless of the refinance incentive.

Summary

RSUBS benefit from their seniors/subordinate and the impact of prepayments on subordination levels. These joint factors increase the probability of upgrades in the future. The greater probability of RSUBS undergoing a possible ratings upgrade should be examined in the context of the indiscriminate spread widening. However, while many seasoned RSUBS issues are good upgrade candidates, at these wide levels, the spread backup eliminates much of the re-pricing benefit of the re-remic credit arbitrage at this time. But, we do believe that as the liquidity returns to the markets, there will be substantial value in swapping out of BBB residential subordinate tranches by outright sale or through a re-remic program in order to capture potential upgrades prior to the sale. And, the de-leveraging impact will only improve further over time.

Vanderbilt Research Team

Emad A. Zikry
Chief Executive Officer
Vanderbilt Avenue Asset Management

Emad is the Managing Partner and Chief Executive Officer of Vanderbilt Avenue Asset Management LLC. Vanderbilt's client base includes Multi-national Corporations, Public Funds, Foundations/Endowments, and Taft Hartley accounts.

Previously, Emad was Chairman of Institutional Business at Pioneer Investments. Pioneer investments has more than \$300 Billion in assets under management. The parent of Pioneer, UniCredit S.p.A., is the largest bank in Italy and the second largest bank in Europe. Pioneer had purchased Vanderbilt Capital Advisors, of which Emad was the founder and Chief Executive Officer.

Emad has had numerous articles published in professional and academic journals such as The Journal of Forecasting, The American Economist and The Journal of Fixed Income. He is a Board member of The National Investment Company. Emad was a member of the Board of Advisors of the Pacific Institute, The Advisory Committee of Fulcrum Global Partners, The Chief Executive Officers Club and formerly a board member of The Foreign Policy Association. He also served on the Board of Directors of the University of Albany Foundation, NextGen Healthcare Inc., The Park Avenue Bank, AA Bank and The New Providence Fund and Associates LP.

Emad is an FINRA Arbitrator. He is also a member of the National Association for Business Economists and The Economic Club of New York. Emad served as an adjunct professor at the University of Kansas and St. John's University.

Emad holds a Bachelor of Science from the University of Albany, and a M.A. and Ph.D. in Economics from the University of Kansas.