# Rating Shopping – Now the Consequences*

16 February 2006

On December 19, securitization professionals received a strong reminder about the consequences of rating shopping. That day, Standard & Poor's watchlisted 35 tranches from 18 U.S. deals in connection with an update to its CDO rating criteria.[1] Fourteen of the 18 deals carried ratings only from S&P (see Appendix). The absence of ratings from a second rating agency on those 14 deals probably reflected "rating shopping" by the deals' issuers.

**Rating Shopping Defined:** Rating shopping occurs when an issuer chooses the rating agency that will assign the highest rating or that has the most lax criteria for achieving a desired rating. Rating shopping rarely involves corporate, sovereign, and municipal bonds. However, it is common for securitization issues.

Rating shopping has a strong effect when one rating agency's criteria is much more lax than its competitors' criteria. Unless investors demand multiple ratings on deals, issuers will tend to use only ratings from the agency with the most lenient standards. This seems to be what happened to many of the deals affected by the December 19 watchlisting.

**S&P's Criteria Change:** S&P's old criteria for rating CDO's backed by corporate debt included a modeling assumption of zero correlation between companies in different industries.[2] That assumption was very lenient and often allowed CDO issuers to achieve their target rating levels with less credit enhancement than the other rating agencies would have required.

The assumption of zero inter-industry correlation had been widely criticized. For example, in early 2005, Arturo Cifuentes and Natasha Chen, both formerly of Wachovia Securities, called the assumption "outdated and implausible."[3] They specifically addressed the issue of rating shopping and actually noted that "[g]iven S&P's generous inter-industry correlation assumption of 0%, it is not surprising that S&P has the dominant market share of the publicly rated part of this market."[4]

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* An earlier version of this report appeared on page 12 of the 30 January 2006 issue of ASR Daily, which was distributed to attendees at the ASF 2006 conference in Las Vegas, NV.

[1] Kobylinski, J., S. Anderberg, A. Bryan, and E. Wong, *S&P Places Ratings on Selected Tranches from 18 U.S. Synthetic CDO Transactions on Watch Neg*, Standard & Poor's press release (19 Dec 2005).

[2] Standard & Poor's, *Global Cash Flow and Synthetic CDO Criteria*, p.44 (21 Mar 2002).

[3] Cifuentes, A. and N. Chen, *The Young and the Restless: Correlation Drama at the Big Three Rating Agencies*, Wachovia Securities at 4 (22 Feb 2005).

[4] *Id*. at 3.

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Around the same time, Moody's attacked the assumption in a report titled *CDO Sensitivity to Inter-Industry Correlation*.[5] After presenting its findings from simulation exercises, Moody's concluded:

> The results from the examples set out in this report illustrate the significant impact of inter-industry correlation between underlying reference entities on required credit enhancement and expected loss calculations. *It is also apparent that it is not possible to adequately compensate for ignoring inter-industry correlation by significantly increasing (even doubling) the assumed intra-industry correlation of underlying reference entities.* In particular, in the case of Aaa-rated CDO-squared tranches, doubling the intra-industry correlation has only a marginal impact on the requisite credit enhancement necessary to attain the Aaa rating. This in turn demonstrates the prevalence of inter-industry correlation of underlying reference entities over intra-industry correlation in well-diversified portfolios.[6]

In July, Fitch too attacked the zero correlation assumption. Fitch emphasized its statistical interpretation of empirical findings. Fitch concluded as follows:

> ***Are the inter-industry correlation estimates equal to zero?***
>
> We ran three different statistical tests to determine if inter-industry asset correlations are zero for all industries. These included:
>
> - a simple two-tailed t-test with Satterthwaite's approximation for unequal variances
> - the Kolmogorov-Smirnov test, and
> - a two-tailed Wilcoxon test
>
> All of these tests unanimously and conclusively concluded that inter-industry asset correlations are not zero at the 0.01% level.[7]

Nomura also focused on correlation and model risk in 2003.[8] We argued broadly that existing Monte Carlo simulation models – including S&P's CDO model – inadequately addressed correlations of risk among assets in securitization pools. Years earlier, Richard Skora identified correlation as the key "hidden risk" in CDOs.[9]

With so much criticism on its treatment of inter-industry correlation, it was only a matter of time before S&P had to update and correct its CDO rating criteria. Finally, on 19 December 2005, S&P did so. Among the changes – and arguably the most important single change – was raising the inter-industry correlation assumption from 0% to 5%.[10] The result of the change was that S&P placed 35 tranches from 18 U.S. deals on CreditWatch with negative implications.

**Reasonable Expectations:** Securitization professionals should not have been surprised by S&P's decision to revise its modeling assumptions. Criticism of the zero-correlation modeling assumption was widely known. From the issuer side, the assumption was a key basis for rating shopping. Issuers realized it was a loophole and actively exploited it. Although they may be disappointed, they cannot reasonably claim to be surprised.

Likewise, on the buy-side, many sophisticated investors were fully aware of the questionable assumption and knowingly bought tranches in rating-shopped deals. Their motivation for doing so was simple: higher yields for greater risk while still adhering to the rating requirements in their

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[5] Marjolin, B. and L. Lassalvy, *CDO Sensitivity to Inter-Industry Correlation*, Moody's special report (28 Jan 2005).

[6] *Id*. at 3 (emphasis added).

[7] Akhavein, J., A. Kocagil, and M. Neugerbauer, *A Comparative Empirical Study of Asset Correlations*, Fitch special report at 16 (14 Jul 2005).

[8] Adelson, M., *CDO and ABS Underperformance: A Correlation Story*, J. of Fixed Income, at 53 (Dec 2003).

[9] Skora, R., *Correlation – The Hidden Risk in CDOs*, Derivatives Strategy (Nov 1998) <http://www.derivativesstrategy.com/magazine/archive/1998/1198col.asp>. An different version of the report is available at <http://www.defaultrisk.com/pdf__files/Correlation-the%20hidden%20risk%20in%20CBOs.pdf>.

[10] Gilkes, K., N. Jobst, and B. Watson, *CDO Evaluator Version 3.0: Technical Document*, Standard & Poor's criteria report, Appendix III, at 22 (19 Dec 2005); Standard & Poor's, *Standard & Poor's CDO Evaluator™ Version 3.0 Frequently Asked Questions* (19 Dec 2005).

investment guidelines. Those investors have no right to cry "foul" at this point. Indeed, they were complicit in the rating shopping process.

**Single-Rated vs. Multiple Rated Deals:** We have closely studied the frequency of adverse credit migrations for ABS and CMBS. In those sectors, we found that deals rated by only one rating agency generally displayed higher frequencies of adverse credit migrations than deals rated by multiple rating agencies.[11] We suspect that the same trend holds true in other securitization sectors.

Somewhat ironically, researchers at the Bank for International Settlements concluded in 2004 that CDO rating shopping is not a "significant phenomenon in practice" because CDOs "are commonly regarded as a 'two ratings market.'"[12] However, they note the possibility that rating shopping can be a factor in "the market segments serving the most sophisticated CDO investors."

**Conclusion:** The implications are reasonably clear. An investor seeking rating stability generally should favor multiple-rated deals. Deals that carry multiple ratings are less likely to carry significant migration risk associated with rating shopping. However, an investor should expect to give up some increment of yield to get securities that carry multiple ratings.

[11] Adelson M. and J. Manzi, *CMBS Credit Migrations 2005 Update*, Nomura fixed income research (30 Nov 2005); Adelson, M. and E. Bartlett, *ABS Credit Migration Update*, J. of Struct. Fin. at 51 (Fall 2005) (*adapted from* Adelson M. and E. Bartlett, *ABS Credit Migrations 2004*, Nomura fixed income research (7 Dec 2004)); Adelson, M. and E. Hoyt, *CMBS Credit Migrations*, J. Port. Mgt., at 87 (Sep 2003) (*adapted from* M. Adelson and E. Hoyt, *CMBS Credit Migrations*, Nomura fixed income research (4 Dec 2002)); Adelson M., Y. Sun, P. Nikoulis, and J. Manzi, *ABS Credit Migrations*, Nomura fixed income research (9 Jan 2002, updated 5 Mar 2002).

[12] Fender, I. and J. Kiff, *CDO Rating Methodology: Some Thoughts on Model Risk and Its Implications*, BIS Working Paper No. 163, at 12 (Nov. 2004) <http://www.bis.org/publ/work163.pdf>.

**Appendix**
**U.S. CDO Tranches Watchlisted by S&P on 19 December 2005**

| Deal | Class | CUSIP | Initial Rating S&P | Initial Rating Mdy's | Initial Rating Fitch | Notes |
|---|---|---|---|---|---|---|
| Archstone I PLC | 2005-C1 | 03959AAE2 | A | | | |
| | 2005-C2 | 03959AAF9 | A | | | |
| Barton Springs CDO SPC Series 2005-1 SEG | D-1 | 81752AAQ0 | BBB | | | |
| | D-2 | 81752AAS6 | BBB | | | |
| Blue Point CDO SPC Series 2005-1 | C-1 | 81752CAJ2 | A | | | |
| | C-2 | 81752CAL7 | A | | | |
| | D-1 | 81752CAN3 | BBB | | | |
| | D-2 | 81752CAQ6 | BBB | | | |
| Blue Point CDO SPC Series 2005-2 | C | 81752EAC3 | A | | | |
| | D | 81752EAD1 | BBB | | | |
| Morgan Stanley ACES SPC Series 2005-14 | II Secured | | AAA | | | |
| Morgan Stanley ACES SPC Series 2005-15 | II Secured | 61748KCB8 | AAA | | | |
| Morgan Stanley ACES SPC Series 2005-18 | SFRN | | AAA | | | |
| Morgan Stanley ACES SPC Series 2005-22 | Notes | 61748KCM4 | AAA | | | |
| SALS 2004-A | F1 | | BB | | | |
| | F2 | | BB | | | |
| Salt Creek High Yield CSO 2005-1 Ltd. | A-4$L | 795528BP2 | AA- | | AA- | 1 |
| | A-6 | 795528AB4 | A | | A | 1 |
| | A-6EL-1 | | A | | A | 1 |
| | A-6EL | | A | | A | 1 |
| | A-7 | 795528AC2 | A- | | A- | 1 |
| | B-2 | 795528AJ7 | BBB | | BBB | 1 |
| | B-3$L | 795528BQ0 | BBB- | | BBB- | 1 |
| | B-5 | 795528AE8 | BB | | BB- | |
| | B-6$L | 795528BR8 | BB- | | B+ | |
| Signum Finance II PLC Series 2005-5 | E | | BB- | | | |
| Signum Finance II PLC Series 2005-7 | Combo notes | | BB- | | | |
| Signum Finance II PLC Series 2005-12 | E | | BB- | | | |
| Strata 2004-8 Ltd. | Floating rate notes | | BBB | Baa3 | | |
| Strata 2005-19 Ltd. | Floating rate notes | | BBB- | Baa3 | | |
| Sunset Park CDO Ltd. SPC Series 2004-4 | B | 86776QAC7 | A | | | |
| Sunset Park CDO Ltd. SPC Series 2005-5 | B | 81751XAE8 | AA+ | | | |
| Sunset Park CDO-M Ltd. SPC Ser. 2005-3 SEG | D-1 | 86776TAF4 | AA | Baa3 | | |
| | D-2 | 86776TAQ0 | AA | Baa3 | | |
| | E | 86776TAG2 | A | Ba3 | | |

[1]Rating confirmed 23 Dec 2005.

Source: Standard & Poor's, Moody's, Fitch, Bloomberg

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