

Global CMBS Newsletter

Volume 3, Issue 7, June 6, 2008



Jack Toliver
Managing Director
Global CMBS
+1 312 332 0889
jtoliver@dbrs.com

Mary Jane Potthoff
Senior Vice President
CMBS
+1 312 332 0837
mjpotthoff@dbrs.com

Erin Stafford
Senior Vice President
CMBS Surveillance
+1 312 332 3291
estafford@dbrs.com

Tim Westlake
Senior Vice President
CMBS
+1 416 597 7320
twestlake@dbrs.com

William Dallman
Senior Vice President
CMBS Marketing
+1 312 332 9445
wdallman@dbrs.com

Toronto
DBRS Tower
181 University Avenue
Suite 700
Toronto, ON M5H 3M7
+1 416 593 5577

New York
140 Broadway
35th Floor
New York, NY 10005
+1 212 806 3277

Chicago
101 North Wacker Drive
Suite 100
Chicago, IL 60606
+1 312 332 3429

Andrea Flynn
Publisher
+1 312 332 3429
aflynn@dbrs.com

EXPECTED LOSSES – CMBX SERIES 1-5

In response to many investor requests over the past six months for our opinion on expected (i.e., most likely to occur) losses in the last few CMBS vintages, DBRS conducted a detailed review of each of the transactions within CMBX Series 1-5. By modeling the transactions within each CMBX series, we were able to get a good sample of transactions issued from 2005 to 2008 and at the same time model a subset of transactions that are highly scrutinized in the public market. DBRS's model results show that our expected losses translate into a large number of investment-grade classes in each vintage defaulting and taking losses. Who's really surprised? Given that many BBB-rated bonds are trading at interest-only (IO) prices (with return of principal entirely unnecessary in order to achieve investment objectives), it is obvious that many investors have already come to this conclusion. The defaults, however, vary widely by CMBX series and the range of losses within each series expresses the importance of differentiating among transactions because clearly not every transaction from every vintage is the same. The results show that there are some transactions that will stand up better than others over time. There is no reason to run from the CMBS sector or an entire vintage; investors just must have the tools and apply analytics to distinguish the good from the bad.

For well over three years, DBRS has been vocalizing the need to consider the consequences of reversion to the mean when making investment decisions. Under the concept of reversion to the mean, what goes up is likely to come down and vice versa. Prudent analytics must recognize inherent cyclicity and reflect at least some level of reasonably foreseeable events. Four factors fueled origination volumes during the "voodoo" vintages (2006 and 2007): (1) low debt constants (combination of 10-year Treasury rates, spreads and amortization), (2) all-time low cap rates, (3) high leverage and (4) aggressive underwriting. All of these extremes are likely to revert to the mean at some point over the ten-year terms of the CMBS transactions (in the case of loan spreads, cap rates and underwriting, we have already started to experience this).

To help investors get a better understanding of some of DBRS's credit concerns and common practices, we modeled each of the 118 transactions with consistent assumptions. We used public information (similar to what public investors receive) provided in the Annex A and referred to the transaction's term sheet in some instances. In an effort to keep results consistent, the same data references and assumptions were applied to all transactions, even those rated by DBRS (one transaction in CMBX.3, one in CMBX.4 and three in CMBX.5) to keep results consistent.

Simply modeling the projected underwriting (UW) net cash flow (NCF) as reported in some of the Annex A perpetuates the puffery of the worst underwriting offenders. DBRS's modeling attempts to identify loans with Annex A underwritten NCF figures that are based on projections of future cash flow and reduce them to an in-place level. Pro forma underwriting peaked in Series 4 and our estimate of the percentage of pro forma underwriting per transaction varied drastically between transactions. According to the Lehman Brothers estimate, published in its May 30, 2008, CMBS Strategy Weekly, some transactions had more than 50% exposure to pro forma collateral. The NCF used in our modeling to determine the property's ability to service its debt is based on one of the following: (1) the lower of (a) the originator's UW NCF or (b) the borrower's last reported net operating income (NOI) adjusted for capital items or (2) if the issuer failed to include the borrower's last reported NOI in the Annex A, a 7.5% NCF haircut to the UW number. One exception was Series 1, where we applied a 5.0% haircut to the UW NCF when a borrower's NOI was not provided because we believe underwriting was not as aggressive in this series. The NCF haircut per loan was maxed at a 20% adjustment. DBRS calculates debt service coverage ratio (DSCR) during the term using the contractual debt service payment, amortizing if partial IO, and the NCF determined above to calculate term default probability. DBRS's expected loss scenario assumed no cash flow volatility adjustment.

Historical data shows that 85% of loans that default do so in the first six years. Given the environment in which the loans securing these transactions were originated, this window is likely to be compressed. Many of these transactions include a significant amount of losses that are likely to occur during this time horizon (see the Expected Losses table below). Once debt service reserves have been depleted, cash flow projections have fallen short and cap rates have risen to a point where all equity has been eroded, borrowers will hand back the keys and defaults during the term will escalate.

If cash flow remains healthy enough during the term to cover the fixed-rate, non-amortizing payment, the odds of getting a takeout loan with similar terms (IO, coupon below 6%, debt yield below 7.2%) are slim. Don't ignore the balloon risk. Many of these loans are IO loans that by their very nature don't burn off principal. Adding balloon risk to the equation, expected losses obviously increase and in some cases double. The lower of term or refinance DSCR determines the likelihood of default for the overall expected loss estimate.

DSCR at balloon was calculated by inflating NCF 1% annually to conservatively estimate cash flow growth during the term. The NCF was sized against a debt service calculated by applying a refinance constant to the loan's balloon balance. Refinance constants were based on a reversionary spread per property type (looking back at ten years of American Council of Life Insurers (ACLI) data), a reversionary treasury rate (a 50% confidence level was applied to a 20-year look back of the ten-year treasury, 5.87% (see the Historical Ten-Year Treasury graph below)) and a 30-year amortization schedule.

Historical Ten-Year Treasury



Source: Federal Reserve.

Loss given default was generally calculated as a percentage of principal lost as supported by Mark Snyderman's and Howard Esaki's research on ACLI and CMBS data. Recognizing that loans were not as excessively leveraged in any previous vintage covered in their studies, DBRS capped recoveries for loans exceeding 95% DBRS loan-to-value (LTV). Additional leverage does not translate into additional recovered principal. As an example, if a property is worth \$100 and one lender provides \$95 of debt and the other \$110, in the event of default, the \$110 loan will not experience greater recoveries in our model just because there is more debt. DBRS values were derived based on an average cap rate over 17 years of historical data in major markets. Haircuts to value were maxed out at 35% of the issuance appraised values.

The compounding effects of applying consistent underwriting standards and a reversion to the mean of interest rates and cap rates will exacerbate losses in the event of default. DBRS's expected losses exceed the 1% to 3% figures that some industry participants anticipate.

Expected Losses

Series	Average Expected Loss	Expected Loss Range	Losses Occurring during the Term
CMBX.1	2.71%	1.31% to 3.46%	1.68%
CMBX.2	3.45%	1.90% to 4.93%	2.63%
CMBX.3	4.65%	2.76% to 7.08%	2.60%
CMBX.4	5.53%	2.86% to 8.07%	2.89%
CMBX.5	4.52%	2.58% to 7.42%	3.06%

Source: DBRS.

Percentage of Classes Taking a Loss

Series	AAA	AA	A	BBB	BBB (low)	BB	B
CMBX.1	0.00%	0.00%	0.00%	0.00%	16.00%	60.00%	100.00%
CMBX.2	0.00%	0.00%	0.00%	4.00%	68.00%	100.00%	100.00%
CMBX.3	0.00%	0.00%	4.00%	68.00%	100.00%	100.00%	100.00%
CMBX.4	0.00%	0.00%	4.00%	84.00%	100.00%	100.00%	100.00%
CMBX.5	0.00%	0.00%	0.00%	44.00%	76.00%	100.00%	100.00%

Note: 4% = 1 CMBS transaction within the CMBX series. Source: DBRS.

To simply explain some of the results in the above charts, four transactions in CMBX.1 and 17 transactions in CMBX.2 have expected losses to investment grade. Every transaction in CMBX.3 and CMBX.4 has expected losses to investment grade and one transaction in each has expected losses to an “A”-rated class. Nineteen transactions in CMBX.5 have expected losses to investment grade. Given this economic scenario, if one is invested in the capital stack where 100% of the deals are expected to take a loss and the next highest rated class also has 100% of the classes taking a loss, one would not expect to get any principal.

Recognizing that investment-grade-rated securities expect to be insulated from a moderately stressful environment, DBRS also modeled a stressed scenario because much uncertainty exists over a ten-year transaction. Depending where you participate in the capital stack, you also may want more assurance than just an average stress (reversion to the mean, 50% confidence level). Therefore, the second set of DBRS’s results assumes increased stresses. A cash flow volatility factor was applied to the term NCF based on historical expense ratios, property type and cash flow volatility and assigning a 70% confidence level to the historical data. The ten-year Treasury rate was also sized to a 70% confidence level, 6.75% (see the Historical Ten-Year Treasury graph above) and NCF at balloon did not include an inflation factor. All other factors remain the same.

Losses under Stressed Scenario

Series	Average Stressed Loss	Stressed Loss Range	Losses Occurring during the Term
CMBX.1	5.08%	2.63% to 6.51%	3.29%
CMBX.2	6.39%	3.75% to 8.87%	4.90%
CMBX.3	8.25%	5.30% to 10.97%	4.82%
CMBX.4	9.66%	5.53% to 12.65%	5.35%
CMBX.5	8.28%	4.87% to 12.13%	5.71%

Source: DBRS.

Percentage of Classes Taking a Loss under Stressed Scenario

Series	AAA	AA	A	BBB	BBB (low)	BB	B
CMBX.1	0.00%	0.00%	0.00%	72.00%	100.00%	100.00%	100.00%
CMBX.2	0.00%	0.00%	8.00%	100.00%	100.00%	100.00%	100.00%
CMBX.3	4.00%	28.00%	68.00%	100.00%	100.00%	100.00%	100.00%
CMBX.4	4.00%	36.00%	88.00%	100.00%	100.00%	100.00%	100.00%
CMBX.5	0.00%	4.00%	56.00%	100.00%	100.00%	100.00%	100.00%

Note: 4% = 1 CMBS transaction within the CMBX series. Source: DBRS.

The results above show that there are no transactions within CMBX.1 and there are two transactions within CMBX.2 that have expected losses to an “A”-rated class. Seven transactions in CMBX.3 have expected losses to a AA class and one transaction has expected losses to a AAA AJ. Twelve transactions in CMBX.4 have expected losses to a AA class and one transaction has expected losses to a AAA AJ. Only one transaction in CMBX.5 has expected losses to a AA class.

DBRS chose to model the CMBX series as a way to select a sample, but we are not suggesting it is an effective way to invest in each vintage. By investing in CMBX, you get the good, the bad and the ugly. Without a doubt, some CMBX series and transactions are more vulnerable than others, but a prudent investor with a modicum of analytics should be able to invest in the good transactions and limit their exposure to the bad.

As borrowers continue to report and servicers spread YE2007 financials, it will be interesting to see how lengthy the watchlists become with cash flow shortfalls and DSCR declines. DBRS expects that upticks in delinquencies and perceived declines in performance from not meeting underwritten projections will prompt additional ratings volatility in these transactions. Just how severe and broad-brushed will the downgrades be? In a subsequent newsletter, DBRS will report on the perceived downgrade risk given DBRS’s loss results and help navigate the early warning signs of a downgrade.

For more information, please contact Mary Jane Potthoff, Senior Vice President, CMBS, at +1 312 332 0837 or mjpotthoff@dbrs.com.