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ARCHIVE | Criteria | Structured Finance | CDOs: Supplementary Assumptions Relating To CDO Evaluator Version 5.0: The Corporate Credit Rating Transition Matrix

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Supplementary Assumptions Relating To CDO Evaluator Version 5.0: The Corporate Credit Rating Transition Matrix

(Editor's Note: This article is no longer current. We originally published this article on Nov. 6, 2009. The article was initially published to supplement "Update To Global Methodologies And Assumptions For Corporate Cash Flow And Synthetic CDOs," published Sept. 17, 2009, and it partially superseded "CDO Evaluator Version 3.0: Technical Document," published Dec. 19, 2005.)

1. Standard & Poor's Ratings Services is clarifying its assumptions relating to the corporate credit rating transition matrix, which is consistent with the corporate default table in CDO Evaluator 5.0, our analytical tool for estimating the defaults and losses of collateralized debt obligation (CDO) transactions at different rating levels. We are publishing this article to help market participants better understand our assumptions relating to the corporate credit rating transition matrix.
2. For CDO Evaluator 5.0, we use credit rating transitions with a constant one-year matrix that we created based on our CreditPro database. We create multiyear transition matrices by raising the one-year transition matrix to iterative powers. We use these corporate credit rating transition matrices solely in connection with our default assumptions for corporate credits.
3. These assumptions relating to the corporate credit rating transition matrix, by themselves, don't have any impact on our ratings on outstanding CDO transactions because they are consistent with the corporate default table in CDO Evaluator 5.0, which we adopted as part of our overall criteria updates on Sept. 17, 2009 (see "Update To Global Methodologies And Assumptions For Corporate Cash Flow And Synthetic CDOs" and "Application Of Supplemental Tests For Rating Global Corporate Cash Flow And Synthetic CDOs").
4. Standard & Poor's methodology for estimating credit curves involves the estimation of transition rates between ratings for a one-year time period and the iterative application of the estimated rates to determine the credit curves over a specified time period.
5. We highlight the fact that the assumptions in the one-year corporate credit rating transition matrix are only one of the many inputs for CDO Evaluator to estimate portfolio-level default rates.
6. The table below shows the one-year corporate credit rating transition matrix that generates the corporate default table in CDO Evaluator 5.0. We create multiyear rating transition matrices by raising the one-year matrix to iterative powers. CDO Evaluator's corporate default rates are the same as the matrices' transition rates to 'D'.

One-Year Corporate Credit Rating Transition Matrix

Rating to transition from	Rating to transition to (%)									
	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-
AAA	83.90908	7.43619	5.83899	1.03058	0.65326	0.41408	0.26247	0.16637	0.10546	0.06685
AA+	2.10573	79.88643	9.26959	3.58276	2.02101	1.22803	0.74620	0.45342	0.27551	0.16741

One-Year Corporate Credit Rating Transition Matrix (cont.)

AA	0.55981	2.82662	77.04986	8.25431	4.48762	2.76443	1.64226	0.97561	0.57958	0.34431
AA-	0.16440	0.17173	4.72293	76.13671	9.78958	4.81235	1.58698	0.98199	0.60763	0.37599
A+	0.09582	0.11342	2.34813	6.92624	72.71506	8.91265	3.93861	1.89542	1.15709	0.70637
A	0.05584	0.06961	1.34412	2.23094	5.46059	72.33057	9.71102	4.84004	1.21277	1.04121
A-	0.03255	0.04272	0.70347	1.35847	2.26022	6.20868	71.74974	9.18879	4.78476	1.35379
BBB+	0.01897	0.02622	0.36818	0.72492	1.43423	2.20961	7.57600	71.25884	9.19012	2.80781
BBB	0.01106	0.01609	0.19269	0.48684	0.98001	1.58906	3.00070	8.29804	69.74281	7.22903
BBB-	0.00644	0.00987	0.10085	0.20643	0.42421	0.87987	1.48666	3.73253	7.11651	66.05498
BB+	0.00376	0.00606	0.05278	0.11016	0.23071	0.48719	0.85739	0.97344	2.73928	8.06848
BB	0.00219	0.00372	0.02762	0.05878	0.12547	0.26976	0.49448	0.61768	1.55405	3.81195
BB-	0.00128	0.00228	0.01446	0.03137	0.06824	0.14937	0.28518	0.39193	0.98165	1.61505
B+	0.00074	0.00140	0.00757	0.01674	0.03712	0.08271	0.16447	0.24869	0.62008	1.08927
B	0.00043	0.00086	0.00396	0.00894	0.02019	0.04580	0.09485	0.15780	0.39168	0.73466
B-	0.00025	0.00053	0.00208	0.00478	0.01099	0.02536	0.05471	0.10013	0.24741	0.49549
CCC+	0.00015	0.00033	0.00116	0.00258	0.00602	0.01408	0.03156	0.06354	0.15628	0.33418
CCC	0.00009	0.00020	0.00071	0.00157	0.00351	0.00788	0.01823	0.04032	0.09872	0.22539
CCC-	0.00005	0.00012	0.00043	0.00095	0.00216	0.00486	0.01069	0.02562	0.06237	0.15202
D	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Rating to transition from	Rating to transition to (%)									
	BB+	BB	BB-	B+	B	B-	CCC+	CCC	CCC-	D
AAA	0.04237	0.02686	0.01702	0.01079	0.00684	0.00434	0.00275	0.00174	0.00070	0.00325
AA+	0.10172	0.06181	0.03756	0.02282	0.01387	0.00843	0.00512	0.00311	0.00115	0.00832
AA	0.20454	0.12151	0.07219	0.04288	0.02548	0.01513	0.00899	0.00534	0.00188	0.01766
AA-	0.23265	0.14396	0.08908	0.05512	0.03411	0.02111	0.01306	0.00808	0.00309	0.04944
A+	0.43122	0.26324	0.16070	0.09810	0.05989	0.03656	0.02232	0.01363	0.00508	0.10044
A	0.60893	0.36612	0.22827	0.14180	0.07123	0.04166	0.02436	0.01425	0.00833	0.19834
A-	0.81249	0.48763	0.29265	0.17564	0.10541	0.06326	0.03797	0.02279	0.01368	0.30528
BBB+	1.67161	0.97528	0.56902	0.33199	0.19369	0.11301	0.06593	0.03847	0.02244	0.40367
BBB	3.43913	1.93969	1.20104	0.57500	0.40477	0.20638	0.12431	0.06489	0.03683	0.46162
BBB-	7.83998	5.00053	3.18173	1.64355	0.94899	0.43855	0.22654	0.11702	0.06045	0.52429
BB+	64.99758	9.97096	6.08714	2.03244	1.11101	0.60732	0.33199	0.18148	0.09920	1.05163
BB	7.98820	62.76125	9.31032	4.16344	3.60683	1.71250	0.86629	0.35321	0.16280	2.10945
BB-	4.37162	6.28087	61.38799	11.39847	5.69483	2.65041	1.23351	0.57408	0.26718	2.60024
B+	2.89744	3.46107	6.57030	60.90932	12.45962	4.68205	2.12622	0.96556	0.43848	3.22118
B	1.92037	2.33361	5.24315	9.32955	59.51441	6.86790	3.23778	1.52640	0.71960	7.84805
B-	1.27279	1.57343	3.41795	5.72992	9.60576	56.12862	5.33019	3.93653	1.18096	10.88213
CCC+	0.84358	1.06088	2.22812	3.70780	5.82244	9.14310	43.44783	11.29852	6.14924	15.68860
CCC	0.55911	0.71529	1.45248	2.39928	4.10785	7.03312	11.47353	39.42063	11.94710	20.49498
CCC-	0.37057	0.48228	0.94685	1.55255	3.10510	4.92314	10.50982	21.01960	31.52955	25.30127
D	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	100.00000

RELATED RESEARCH

- "Update To Global Methodologies And Assumptions For Corporate Cash Flow And Synthetic CDOs," published Sept. 17, 2009;
- "Application Of Supplemental Tests For Rating Global Corporate Cash Flow And Synthetic CDOs," published Sept. 17, 2009; and
- "CDO Evaluator Version 3.0: Technical Document," published Dec. 19, 2005.

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