

# CDO Research Data Feed Glossary of Terms

## Moody's Investors Service

### Synthetic CDOs

Term	Definition
<b>WARF</b>	<i>The Weighted Average Rating Factor as calculated by Moody's is independent of the Trustee's and collateral manager's calculations and is a numerical representation of the credit risk of a portfolio. It is calculated as a Weighted Average of the Rating Factor values for each of the individual entities in the portfolio.</i>

*Moody's calculations are based on ratings obtained directly from Moody's internal ratings database as of the processing date of the report (typically 5-7 weeks subsequent to a deal's reporting date). If a rating cannot be obtained from Moody's internal ratings database for the security in question, we apply the Moody's Equivalent credit rating as disclosed in the CDO's surveillance report, deduced according to 'rules' specified in the transaction.*

*This calculation typically excludes defaulted securities but some CDO surveillance reports may include these in their reported Moody's Rating Factors.*

*For securities on Moody's Watchlist, the Rating Factor is adjusted by treating such securities as if they have been downgraded (if on watch for possible downgrade) or upgraded (if on watch for possible upgrade). The table below provides a mapping between Moody's Rating Factors and Moody's credit ratings. Note that Estimated Ratings provided by Moody's are excluded from this calculation. The rating letter associated with such Estimate will provide a Rating Factor applicable for WARF calculations.*

<u>Moody's Rating</u>	<u>Moody's Rating Factor</u>
<b>Aaa</b>	1
<b>Aa1</b>	10
<b>Aa2</b>	20
<b>Aa3</b>	40
<b>A1</b>	70
<b>A2</b>	120
<b>A3</b>	180
<b>Baa1</b>	260
<b>Baa2</b>	360
<b>Baa3</b>	610
<b>Ba1</b>	940
<b>Ba2</b>	1350
<b>Ba3</b>	1766
<b>B1</b>	2220
<b>B2</b>	2720
<b>B3</b>	3490
<b>Caa1</b>	4770
<b>Caa2</b>	6500
<b>Caa3</b>	8070
<b>Ca-C</b>	10000



**Moody's Investors Service**



## Synthetic CDOs (continued)

Term	Definition
<b>Watch Adjusted WARF</b>	The Watch Adjusted Rating Factor is calculated assuming that securities on watch for possible upgrade or downgrade are one notch higher or lower, respectively, than their current ratings. Estimated Ratings provided by Moody's are excluded from this calculation.
<b>Diversity Score</b>	Moody's Diversity Score is a measure to estimate the diversification in a portfolio. The methodology considers the issuer and industry concentrations in the actual portfolio and incorporates assumptions on default correlations. The Diversity Score is obtained from the CDO's monthly surveillance reports. More precisely in terms of modelling a CLO structure, the Diversity Score measures the number of uncorrelated and identical assets that would have a similar loss distribution the actual portfolio of correlated assets. This portfolio proxy significantly simplifies the modelling with little loss in accuracy (in conjunction with some additional features).
<b>Moody's Metric</b>	The Moody's Metric is an ordinal, continuous numerical rating representation of the maximum expected loss boundaries relative to each rating category and time horizon. For example, the Moody's Metric for the Aa1 rating at its expected loss hurdle is 2.0, irrespective of the time horizon being considered. For Aa1, the hurdle is 3.0. A Moody's Metric of 2.5 represents the geometric mean between the Aa1 hurdle and the Aa2 hurdle.
<b>Moody's Metric by Rating and Tenor</b>	
	<b>Tenor (years)</b>
<b>Rating</b>	<b>1</b> <b>2</b> <b>3</b> <b>4</b> <b>5</b> <b>6</b> <b>7</b> <b>8</b> <b>9</b> <b>10</b>
<b>Aaa</b>	1   1   1   1   1   1   1   1   1   1
<b>Aa1</b>	2   2   2   2   2   2   2   2   2   2
<b>Aa2</b>	3   3   3   3   3   3   3   3   3   3
<b>Aa3</b>	4   4   4   4   4   4   4   4   4   4
<b>A1</b>	5   5   5   5   5   5   5   5   5   5
<b>A2</b>	6   6   6   6   6   6   6   6   6   6
<b>A3</b>	7   7   7   7   7   7   7   7   7   7
<b>Baa1</b>	8   8   8   8   8   8   8   8   8   8
<b>Baa2</b>	9   9   9   9   9   9   9   9   9   9
<b>Baa3</b>	10   10   10   10   10   10   10   10   10   10
<b>Ba1</b>	11   11   11   11   11   11   11   11   11   11
<b>Ba2</b>	12   12   12   12   12   12   12   12   12   12
<b>Ba3</b>	13   13   13   13   13   13   13   13   13   13
<b>B1</b>	14   14   14   14   14   14   14   14   14   14
<b>B2</b>	15   15   15   15   15   15   15   15   15   15
<b>B3</b>	16   16   16   16   16   16   16   16   16   16
<b>Caa1</b>	17   17   17   17   17   17   17   17   17   17
<b>Caa2</b>	18   18   18   18   18   18   18   18   18   18
<b>Caa3</b>	19   19   19   19   19   19   19   19   19   19
<b>Moody's Metric Date</b>	The Moody's Metric Date is the most current date for which a Moody's Metric has been generated.
<b>Ratings Distribution</b>	A ratings distribution is a systematic way to order a set of ratings from the lowest to the highest, showing the number of occurrences (frequency) at each rating or range of ratings.
<b>Reported Diversity</b>	Diversity score as reported in the trustee report.
<b>Deal Type</b>	Moody's deal type as it appears in Moody's indices.

## **Synthetic CDOs (continued)**

<b>Term</b>	<b>Definition</b>
<b><i>Pct. On Watch for UPG</i></b>	<i>Percentage of the collateral portfolio with a rating that is on Moody's watchlist for possible upgrade.</i>
<b><i>Attachment Point</i></b>	<i>The attachment point refers to the lower boundary of the risk level of a tranche.</i>
<b><i>Detachment Point</i></b>	<i>The attachment point refers to the upper boundary of the risk level of a tranche.</i>
<b><i>Legal Final Maturity</i></b>	<i>The date (after the scheduled maturity) by which all deal matters must be resolved. For example, if there is a defaulting entity close to the scheduled maturity and the settlements can not be worked out in time for the scheduled maturity, the deal remains live until the legal final maturity.</i>
<b><i>Expected Maturity</i></b>	<i>The date on which the bond's principal is projected to be repaid to the investor and interest payments cease, based on assumptions about portfolio performance.</i>
<b><i>Watch DNG PCT</i></b>	<i>Percentage of the collateral portfolio with a rating that is on Moody's watchlist for possible downgrade.</i>
<b><i>Watch UPG PCT</i></b>	<i>Percentage of the collateral portfolio with a rating that is on Moody's watchlist for possible upgrade.</i>
<b><i>Protection Purchaser</i></b>	<i>Purchaser of Protection for Synthetic CDOs</i>
<b><i>Collateral Provider</i></b>	<i>Collateral Provider for Synthetic CDOs. If the notes are funded, the entity or securities to which the rating of the notes is linked. Irrelevant for unfunded credit default swaps.</i>
<b><i>Determination Dates</i></b>	<i>Months of the determination dates.</i>

## Cash CDOs

Term	Definition
<b>WARF</b>	<i>The Weighted Average Rating Factor as calculated by Moody's is independent of the Trustee's and collateral manager's calculations and is a numerical representation of the credit risk of a portfolio. It is calculated as a Weighted Average of the Rating Factor values for each of the individual entities in the portfolio.</i>

*Moody's calculations are based on ratings obtained directly from Moody's internal ratings database as of the processing date of the report (typically 5-7 weeks subsequent to a deal's reporting date). If a rating cannot be obtained from Moody's internal ratings database for the security in question, we apply the Moody's Equivalent credit rating as disclosed in the CDO's surveillance report, deduced according to 'rules' specified in the transaction.*

*This calculation typically excludes Defaulted securities but some CDO surveillance reports may include these in their reported Moody's Rating Factors.*

*For securities on Moody's Watchlist, the Rating Factor is adjusted by treating such securities as if they have been downgraded (if on watch for possible downgrade) or upgraded (if on watch for possible upgrade). The table below provides a mapping between Moody's Rating Factors and Moody's credit ratings. Note that Estimated Ratings provided by Moody's are excluded from this calculation. The rating letter associated with such Estimate will provide a Rating Factor applicable for WARF calculations.*

<b>Moody's Rating</b>	<b>Moody's Rating Factor</b>
<b>Aaa</b>	1
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<b>Aa2</b>	20
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<b>A1</b>	70
<b>A2</b>	120
<b>A3</b>	180
<b>Baa1</b>	260
<b>Baa2</b>	360
<b>Baa3</b>	610
<b>Ba1</b>	940
<b>Ba2</b>	1350
<b>Ba3</b>	1766
<b>B1</b>	2220
<b>B2</b>	2720
<b>B3</b>	3490
<b>Caa1</b>	4770
<b>Caa2</b>	6500
<b>Caa3</b>	8070
<b>Ca-C</b>	10000



## Cash CDOs (Continued)

Term	Definition
<b>Watch Adjusted WARF</b>	<i>The Watch Adjusted Rating Factor is calculated assuming that securities that are on watch for possible upgrade or downgrade are one notch higher or lower, respectively, than their current ratings. Estimated Ratings provided by Moody's are excluded from this calculation.</i>
<b>Reported WARF</b>	<i>Weighted Average Rating Factor as reported in the trustee report.</i>
<b>Diversity Score</b>	<i>Moody's Diversity Score is a measure to estimate the diversification in a portfolio. The methodology considers the issuer and industry concentrations in the actual portfolio and incorporates assumptions on default correlations. The Diversity Score is obtained from the CDO's monthly surveillance reports. More precisely in terms of modelling a CLO structure, the Diversity Score measures the number of uncorrelated and identical assets that would have a similar loss distribution the actual portfolio of correlated assets. This portfolio proxy significantly simplifies the modelling with little loss in accuracy (in conjunction with some additional features).</i>
<b>WAC</b>	<i>Weighted Average Coupon is the par-weighted average coupon of the performing fixed-rate securities in the portfolio (typically bonds). This number is calculated by Moody's independent of the level disclosed in the respective deal's monthly surveillance report. Moody's excludes defaulted securities from the calculations. Furthermore, Moody's does not reflect any interest only securities that may be included in the WAC/WAS calculations; nor does Moody's adjust one test for the excess that may exist in another test. For example, in some deals cushion in the WAC (or WAS) test could be used as credit in the WAS (or WAC) test.</i>
<b>WAM</b>	<i>Weighted Average Maturity of the portfolio is the par-weighted average life of the portfolio, excluding defaulted securities. No prepayments are assumed in this calculation. Since resecuritisation deals account for prepayments in their WAM calculation, the Moody's WAM calculation will typically provide a significantly larger level than the official portfolio WAM for these deals.</i>
<b>WAS</b>	<i>Weighted Average Spread is the par-weighted average spread (generally above LIBOR) of the performing floating-rate securities in the portfolio (typically loans). This number is calculated by Moody's independent of the level disclosed in the respective deal's monthly surveillance report. Moody's excludes defaulted securities from the calculations. Furthermore, Moody's does not reflect any interest-only securities that may be included in the WAC/WAS calculations; nor does Moody's adjust one test for the excess that may exist in another test. For example, in some deals cushion in the WAC (or WAS) test could be used as credit in the WAS (or WAC) test.</i>
<b>Reported Diversity</b>	<i>Diversity score as reported in the trustee report.</i>
<b>Moody's Deal Score (MDS)</b>	<i>The Moody's Deal Score is intended to represent a standardised parameter to assess deal and collateral manager performance. It is an average of the natural log values of the ratio of the current to initial expected loss for all notes that were initially rated investment grade. The Deal Score is based on the number of tranches initially rated investment grade by Moody's and not on the issue/volume size of such tranches. Moody's calculation excludes combination notes. Moody's also excludes Aaa notes that have an initial over-collateralisation of at least 250%, and treats pari-passu tranches as one. The Moody's ratings of the deal's notes are used as a proxy for expected loss. For CDO notes on watch, we assume that we upgraded or downgraded that security to the proposed rating category (1 level for notes rates <math>\geq</math> A3 and 2 levels for notes rated <math>&lt;</math> A3).</i>

**Cash CDOs (Continued)**

<b>Term</b>	<b>Definition</b>
<b><i>Weighted Average Seasoning</i></b>	<i>The Weighted Average Seasoning refers to the duration of periods after loan origination.</i>
<b><i>Deal Type</i></b>	<i>Moody's deal type as it appears in Moody's indices.</i>
<b><i>Average Market Price</i></b>	<i>Average price of the loans in the collateral pool as given by LoanX. Loan prices are average loan prices of a given issuer, not the specific loan price of a facility.</i>
<b><i>Expected Maturity</i></b>	<i>The date on which the bond's principal is projected to be repaid to the investor and interest payments cease, based on assumptions about portfolio performance.</i>
<b><i>Defaults Par</i></b>	<i>Reflects the par value of defaulted securities as identified by the collateral manager.</i>

## CDO Dashboard

Term	Definition
<b>WARF Gauges</b>	WARF (Weighted Average Rating Factor) is a measure of the average rating of the portfolio. Each rating in the underlying collateral pool is converted into a number between 1 and 10,000 and a weighted average of those numbers is then taken based on the par amount held by the CDO.
<b>WARF Cushion</b>	WARF Cushion % is a measure of the differential between current rating factor and the rating factor trigger in the deal. In the red zone you are in violation; in the yellow zone you are getting close.
<b>Default %</b>	Shows the percentage of assets in the collateral pool that have defaulted according to Moody's ratings database.
<b>Caa %</b>	Shows the percentage of assets in the collateral pool that have defaulted according to Moody's ratings database.
<b>Portfolio Rating Composition</b>	Shows how the portfolio's assets are spread across various Moody's rating categories and compares that with how the relevant Moody's CDO index's assets are spread across those same rating categories.
<b>Diversity Score</b>	A measure of the portfolio diversification, the diversity score is the theoretical number of uncorrelated assets represented by the collateral pool. This measure is obtained from the CDO's monthly surveillance reports and indicates collateral concentration implied by the industries and issuers represented in the portfolio.
<b>Diversity Trigger</b>	Trigger level for diversity score - all trigger levels for a given deal_id show up as a row of data with the run date = Jan 1 3000 12:00:00:000AM.
<b>Max Issuer/Industry %</b>	Shows the issuer/industry with the maximum concentration in the collateral pool. A concentration greater than 10% takes this dial into the red.
<b>Top 2-5 Issuer/Industry %</b>	Depicts the second, third, fourth and fifth largest issuer/industry concentrations. A concentration greater than 5% takes this dial into the red.
<b>Moody's Deal Score</b>	This score is a measure of the manager's ability to maintain Over-Collateralisation, WARF compliance and ultimately the rating of the tranches.
<b>Deal Score History</b>	Shows how the deal score has changed over the life of the transaction
<b>WAS gauges</b>	WAS (Weighted Average Spread) is the par-weighted average spread of the performing floating rate securities in the portfolio. Defaulted securities are excluded from this calculation. The WAS history compares the transactions spread with the benchmark over the transaction's lifetime. The WAS % dial is in the green zone when the spread is above the benchmark.
<b>OC and IC gauges</b>	Both the Over-Collateralisation Cushion and Interest Coverage Cushion gauges show the amount of OC and IC remaining before the reported values are in violation of the trigger levels.
<b>WARF History</b>	Compares the transaction's WARF against the benchmark WARF over the transaction's lifetime.
<b>Default % History</b>	Compares defaults over transaction lifetime against the expected average number of defaults across this type of transaction.
<b>Collateral Balance</b>	Shows how the value of the collateral assets varies over the life of the transaction.

## Information

To learn more about Moody's Structured Finance Services, please contact your Moody's representative or call Moody's at one of the locations listed:

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