

Learning Curve

Derivative Product Cos: New Rating Agency Guidelines

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Derivative product companies are structured financial entities that act as intermediaries for, or guarantors of, an affiliated entity under interest rate or fx derivatives with a non-affiliated counterparty.



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In a typical intermediation structure, a DPC will enter into a trade with a counterparty and simultaneously enter into an offsetting mirror transaction with the sponsor. In such manner, the DPC hedges its market risk while retaining the credit risk of its counterparty.

Generally, there are two types of DPCs: termination and continuation. The main difference between them is the consequence of certain 'trigger' events relating to the sponsor. Upon the occurrence of a trigger event with respect to a termination DPC, all DPC trades—both those with the sponsor and the counterparty—will terminate. Upon the occurrence of a trigger event with respect to a continuation DPC, only sponsor trades will terminate; counterparty trades will remain in place and a contingent manager will step in to re-hedge and otherwise manage the DPC's book of counterparty transactions.

By complying with criteria established by the various rating agencies, some of which are discussed in this Learning Curve, a DPC is able to achieve credit ratings that exceed those of its sponsor. Recently, perhaps in response to the market's need for highly rated swap counterparties, each of **Standard & Poor's** Ratings Service, **Moody's Investors Service** and **Fitch Ratings** has published new guidelines outlining procedures and criteria for issuing counterparty ratings to DPCs. While the guidelines contain a number of similarities (bankruptcy-remoteness, operational independence, and the involvement of a contingent manager), this article will focus only on certain material differences among the guidelines.

I. Maximum & Minimum Ratings

S&P. S&P links the maximum credit rating of a DPC to that of its sponsor due to its ongoing financial relationship. S&P provides that the maximum rating elevation of a DPC above its Sponsor is three notches for a termination DPC and two notches for a continuation DPC. S&P analyzes a DPC's stand-alone creditworthiness to determine an "entity specific score" (or ESS) with respect to three different factors: (i) minimum equity capital, (ii) counterparty risk sizing and (iii) market risk volatility sizing. The number of notches above the Sponsor that a DPC may be rated is equal to the lowest ESS assigned to the DPC. S&P cites the additional length of time to which a continuation DPC will be exposed to post-trigger event market volatility, as well as the additional counterparty credit risk it will be exposed to when rehedging its book, as key reasons for the

one-notch difference. As a result of the ratings linkage, as the sponsor's rating changes, so will that of the related DPC. Accordingly, there is no ultimate maximum or minimum S&P rating for a DPC (i.e., 'AAA' is possible).

Fitch. Unlike S&P, Fitch expressly states that a 'AAA' rating is not attainable by a DPC. However, like S&P, Fitch links a DPC's rating to that of its sponsor, but less closely than S&P does. Pursuant to the Fitch guidelines, the rating for a properly structured and financed DPC will be the higher of (i) one notch above its sponsor's rating and (ii) its stand-alone rating floor, which is 'AA' for a termination DPC and 'A' for a continuation DPC. According to Fitch, the lower floor for a continuation DPC is due to the risks arising from (i) market volatility during the extended maturity period, (ii) the performance of the contingent manager and (iii) the difficulty rehedging the book during a post-trigger event period very likely characterized by general market stress.

Moody's. Unlike Fitch and S&P, Moody's does not establish maximum or minimum ratings for a DPC or link a DPC's rating to that of its sponsor.

II. Capital Requirements

Although a DPC hedges market risk by entering into offsetting mirror transactions with a sponsor, it continues to bear credit risk—the risk that the counterparty will default on its obligations to the DPC. To mitigate such risk, each of S&P, Fitch and Moody's requires that a DPC maintain a level of capital sufficient for the DPC to be able to make payments to nondefaulting counterparties (including the sponsor).

Generally, capital requirements are a function of the DPC's exposure and the creditworthiness of its counterparties. As stated by Moody's: "[a] DPC's capital requirement will be higher when:

- the ratings of the DPC's nonaffiliated counterparties are lower,
- diversification across counterparties is less extensive (i.e., the greater the extent of default correlation and obligor concentration),

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- the exposures to the products in the DPC's derivative portfolio are greater (e.g., long-term currency swaps vs. short-term interest-rate swaps),
- un-netted exposures across all transactions with a particular counterparty are higher, and
- the interval over which the DPC is exposed to third-party default risk is longer."

Moody's. Moody's expects a DPC's capital requirements to at least equal the *sum of* (i) the greater of (A) the amount determined pursuant to its capital model *and* (B) a 'minimum capital override' and (ii) additional amounts relating to unmodeled risks or risks arising from exotic trades.

The Moody's capital model is usually a simulation model that generates different outputs using various market variables and simulated counterparty defaults. Moody's uses correlation and default parameters generated by its latest version of CDOROM to evaluate the assumptions in a DPC's model. The model must be run at least weekly and a failure to maintain sufficient capital must be a trigger event.

The minimum capital override is a baseline capital requirement that serves to mitigate over-dependence on the model. Moody's simply describes the override as the aggregation of large counterparty exposures.

The unmodeled risks for which a DPC is expected to maintain additional capital include operational risks such as errors in the model, pricing errors and booking errors. Moody's will conduct on-site reviews to help it assess the need and/or size of such a buffer. Moody's will also require that additional capital be maintained in the event the DPC enters into non-vanilla transactions.

S&P. Whereas Moody's requires capital equal to the greater of two dynamic amounts, S&P requires that capital be maintained in an amount equal to the greatest of three amounts, two of which are dynamic and one of which is static.

With respect to the S&P guidelines, the minimum level of capital is pre-defined. S&P will assign an ESS with respect to 'minimum equity capital' as set forth below:

Equity capital	Termination DPC ESS	Continuation DPC ESS
Greater than or equal to \$100 million	3	2
Greater than or equal to \$75 million but less than \$100 million	2	1
Greater than or equal to \$50 million but less than \$75 million	1	0
Less than \$50 million	0	0

With respect to the dynamic capital amounts, S&P will assign an ESS based upon two components: the scenario default rate (SDR) and the event default rate (EDR). The EDR is similar to the

minimum capital override required by Moody's in that it is based upon the aggregation of certain exposures. Again, S&P has pre-defined the test. The 'event risk amount' will be the highest of the following exposures:

- to the one largest counterparty rated 'AAA' or lower;
- to the two largest counterparties rated 'AA+' or lower;
- to the three largest counterparties rated 'A+' or lower;
- to the four largest counterparties rated 'BBB+' or lower; and
- to all counterparties rated 'BB+' or lower.

Once the event risk amount is determined, it is compared to the DPC's capital resources and an ESS is assigned as follows:

If capital is:	Termination DPC ESS	Continuation DPC ESS
Greater than or equal to the event risk amount	3	2
Greater than or equal to 80%, but less than 100%, of the event risk amount	2	1
Greater than or equal to 50%, but less than 80%, of the event risk amount	1	0
Less than 50% of the event risk amount	0	0

The SDR test is similar to the simulation model required by Moody's in that S&P will estimate the level of counterparty default risk in the DPC's portfolio. S&P will generate the estimate using the most recent version of its CDO evaluator with the following variables: the counterparty, the amount of exposure to the counterparty, the exposure period (one year for a termination DPC and the weighted average maturity of swaps between the DPC and the counterparty for continuation DPCs), the counterparty's industry and the country where the counterparty is located. S&P will run the SDR at various rating levels and will assign an ESS based upon the highest level for which the DPC's capital resource is sufficient.

Fitch. The Fitch guidelines provide much less detail about how a DPC can assess the sufficiency of its capital model. Fitch does not provide pre-defined minimums or formulas, but implies that it is open to the requirements similar to those promulgated by S&P and Moody's:

"Fitch will analyze the capital model's key assumptions and their compatibility with Fitch's rating criteria at various rating levels. Such assumptions include the default probability of counterparties as well as the correlation between obligors and market value stresses for exposures such as interest rates and currencies. . . . Fitch will also consider any qualitative assumptions or deterministic stresses that may be overlaid on the capital model, such as the impact of defaults by one or more of the largest counterparty exposures."

III. Collateral Requirements

In addition to maintaining capital to offset the risk of counterparty default, the guidelines also require a DPC to hold collateral posted by the sponsor to offset the risk of a sponsor default. Such collateral

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must be in an amount at least equal to the market value of sponsor transactions, as well as to cover the market risk to which a DPC will be exposed following a trigger event until such time as all trades with counterparties are either terminated (in the case of a termination DPC) or reheded (in the case of a continuation DPC). The amount of required collateral will vary by agency, as well as by DPC type.

Moody's. Moody's guidelines provide that the collateral posted should be in an amount at least equal to the sum of (i) the mark-to-market of the back-end transactions with the sponsor, (ii) a volatility buffer to mitigate the post-trigger event market risk and (iii) an amount to address unmodeled risks (e.g., liquidity problems). Although Moody's does not set forth a particular formula for the volatility buffer, it does state that annual 'backtesting' is required, whereby the model-generated volatility buffer is to be compared with actual market data. Backtesting is to be performed on individual trades, subportfolios and the entire portfolio. The goal of backtesting is to ensure that the model is conservative and accurate enough to cover actual risks. Moody's will consider the frequency and size of backtesting failures in providing a rating to a DPC.

S&P. As with its explanation of capital requirements, S&P is more detailed than both Moody's and Fitch. S&P requires collateral be posted by the Sponsor in an amount at least equal to the sum of (i) the mark-to-market of the DPC's trades with counterparties and (ii) a volatility buffer. With respect to the volatility buffer, S&P estimates the post-trigger event market risk amount as the higher of (i) the highest-rolling 15-business day increase in the mark-to-market of the counterparty trades over the previous three months

and (ii) the higher of the average 15-business day changes in the mark-to-market plus two standard deviations over one-month and three-month periods. S&P will then compare the DPC's volatility buffer to its market risk estimate and assign an ESS to the DPC as set forth below:

If volatility buffer is:	Termination DPC ESS	Continuation DPC ESS
Greater than or equal to the market risk estimate	3	2
Greater than or equal to 80%, but less than 100%, of the market risk estimate	2	1
Greater than or equal to 50%, but less than 80%, of the market risk estimate	1	0
Less than 50% of the market risk estimate	0	0

Fitch. Fitch also requires the sponsor to post collateral with respect to both the mark-to-market of the DPC's trades and a volatility buffer, which Fitch expects to be based upon conservative assumptions regarding various market factors, including volatility, bid-ask spread and the risk exposure period. For a continuation DPC, posting with respect to mark-to-market should be on a gross basis (i.e., no netting across Counterparties), while such amounts may be posted on a net basis for a termination DPC. Fitch will also permit the volatility buffer to be calculated on a net basis across all Counterparties.

Conclusion

Although there are certain similarities among the guidelines, material differences exist. Based upon such differences, sponsors of DPCs can make an informed decision as to whether to pursue a rating from a particular rating agency.