

OCTOBER 2018



METHODOLOGY

Derivative Criteria for European Structured Finance Transactions

PREVIOUS RELEASE: OCTOBER 2017

Contact Information

Carlos Silva, Senior Vice President
Head of European Structured Credit
Global Structured Finance
+44 (0)20 7855 6604
carlos.silva@dbrs.com

Christian Aufsatz, Managing Director
Head of European Structured Finance
Global Structured Finance
+44 (0)20 7855 6664
caufsatz@dbrs.com

Claire Mezzanotte, Group Managing Director
Head of Global Structured Finance
Global Structured Finance
+1 (212) 806 3272
cmezzanotte@dbrs.com

Related Research

For a list of the Structured Finance related methodologies for our principal Structured Finance asset class methodologies that may be used during the rating process, please see the DBRS Global Structured Finance Related Methodologies document on www.dbrs.com. Please note that not every related methodology listed under a principal Structured Finance asset class methodology may be used to rate or monitor an individual structured finance or debt obligation.

DBRS is a full-service credit rating agency established in 1976. Spanning North America, Europe and Asia, DBRS is respected for its independent, third-party evaluations of corporate and government issues. DBRS's extensive coverage of securitizations and structured finance transactions solidifies our standing as a leading provider of comprehensive, in-depth credit analysis.

All DBRS ratings and research are available in hard-copy format and electronically on Bloomberg and at DBRS.com, our lead delivery tool for organized, web-based, up-to-the-minute information. We remain committed to continuously refining our expertise in the analysis of credit quality and are dedicated to maintaining objective and credible opinions within the global financial marketplace.

Table of Contents

Key Updates	3
Scope & Limitations	3
Executive Summary	3
Key Points	4
Derivatives in Structured Finance Transactions	5
Derivative Providers	6
DBRS Framework for Mitigating Risk of Derivative Counterparty Default	6
Remedies Upon Breach of Ratings Threshold	8
Delivering Collateral – Timing and Frequency	13
Collateral Accounts	13
Surveillance – Reporting	14
Transaction Priority of Payments on Counterparty Default	14
Derivative Documentation	15
Derivative Documentation – Specific Provisions	15
Conditions Precedent to Performance	15
Events of Default	15
Termination Events	16
Transfer Security	16

Key Updates

For key updates in this methodology, please refer to the press release titled “DBRS Publishes Updated Derivative Criteria for European Structured Finance Transactions” dated 10 October 2018.

Scope & Limitations

A methodology sets forth the key analytical considerations and applicable analytics used when DBRS assigns or monitors credit ratings or other opinions. DBRS applies approved methodologies in the evaluation of a structured finance transaction or debt obligation. Quantitative and qualitative factors set forth in a methodology or in a combination of methodologies are evaluated by a DBRS rating committee or discussion group that exercises analytical judgment and considers the regulatory environment, market standards and customary practices in addition to other factors deemed relevant to the analysis.

As part of the evaluation process, DBRS may opine as to whether a sponsor’s proposed capital structure supports the assignment of a given rating(s), the loss level(s) the capital structure is able to withstand or the rating level(s) supported by a sponsor’s proposed capital structure. Once completed, this process facilitates the assignment of a DBRS rating, at a given rating level.

In cases when an applicable methodology does not address one or more elements of a structured finance transaction or obligation, or such element(s) differs from the expectations contemplated when an applicable methodology was approved, DBRS may apply analytical judgment in the determination of any related analytical factor, assumption, rating or other opinion. For a methodology that incorporates the use of a predictive model, DBRS may also depart from the rating stress(es) implied by the predictive model. DBRS typically expects there to be a substantial likelihood that a reasonable investor or other user of the credit rating(s) would consider a three-notch or more deviation from the rating stress(es) implied by the predictive model to be a significant factor in evaluating the rating(s). When a rating committee determines a material deviation, DBRS discloses the material deviation and its analytical judgment for the material deviation.

Executive Summary

Derivatives are a common feature in structured finance transactions, allowing the issuer of rated securities (the Issuer) to convert cash flows, such as receipts from an underlying collateral pool, into the form needed in order to meet its obligations in respect of the securities it has issued. Derivatives may also be used by the Issuer to assume or hedge credit risk directly.

Where rated securities are dependent on the performance by the derivative counterparty of its obligations pursuant to a derivative, those securities are exposed to the risk that the counterparty may default on those obligations. The purpose of this methodology is to describe the criteria applied by DBRS in reviewing derivatives in the context of a structured finance transaction where a DBRS rating has been requested. The criteria include a framework for mitigating the risk associated with counterparty default in structured finance transactions, which, if followed, may provide a number of benefits. Firstly, where it is possible for Issuers to meet the criteria, the reduction in exposure to the derivative counterparty should result in reduced risk to the rated securities, and therefore the potential for higher ratings. Secondly, assuming the criteria described herein are met, DBRS believes that the exposure of the rated securities to the risk of counterparty default may be mitigated to an extent sufficient to avoid modelling that risk in a transaction.

A central principle of the framework is the removal of credit risk associated with the counterparty from the transaction before the counterparty defaults. This may be achieved by the inclusion of structural features intended to ensure that, as its creditworthiness deteriorates, as evidenced by its ratings, the counterparty will be replaced or its obligations will be collateralised or otherwise guaranteed, prior to the point where it might be expected to default.

However, no framework can apply to every transaction or to every set of circumstances that might exist or arise. Therefore, even where a transaction on its face meets the framework's criteria, DBRS may decide that the risks of the counterparty and/or the circumstances are such that this framework may not be appropriate. The criteria in this publication should not be seen as static. DBRS reviews market, legislative and case law developments on an ongoing basis to assess whether the criteria set forth herein remain relevant. The structural features necessary to provide sufficient comfort that the risk associated with the counterparty can be treated in this way depend on a variety of factors, including:

1. The rating of the derivative counterparty;
2. The nature of the derivative, including both the importance of the derivative to the ability of the Issuer to meet its obligations in respect of such rated securities and the DBRS view of the likelihood that, in due course, a replacement counterparty might be found who would be willing to assume the transaction, and;
3. The rating(s) evaluated for the rated securities.

The methodology applies to the derivatives customarily used in securitisations. The methodology is intended to cover interest rate, basis, currency and revenue swaps, as well as caps, floors and collars, and is relevant to both derivatives with fixed notional amounts and derivatives where the notional amounts amortise or otherwise follow an uncertain payment profile. It is not intended to apply to credit default swaps or other derivatives whose primary purpose is to provide protection against the default of one or more reference entities.

Key Points

- For transactions where the highest ratings assigned¹ are AA (low) or higher, in order to qualify for the treatment contemplated by the framework, the counterparty should be rated at least "A" at the outset of the transaction. In addition, the counterparty should agree, as soon as practicable following a downgrade of its rating to below "A" but in any event no later than 30 business days after such date, to either:
 - Post collateral meeting the framework criteria,
 - Obtain a suitable guarantee of its obligations, or
 - Replace itself with an eligible counterparty.

If the counterparty is subsequently downgraded below BBB, the obligation to post collateral remains, but the collateral levels increase, to reflect the increased credit risk associated with the counterparty at this rating level. In addition, the counterparty should use commercially reasonable efforts to either obtain a suitable guarantee of its obligations or replace itself with an eligible counterparty. If a suitable guarantee has been obtained, the counterparty need no longer post collateral nor seek to replace itself.

A counterparty rated below "A" at close of a transaction may still qualify for the treatment contemplated by the framework, provided that:

1. It is rated at least BBB, and
 2. It agrees to post collateral consistent with the framework from the outset.
- For transactions where the highest ratings assigned² are not higher than A (high), the counterparty should be rated at least BBB at the outset of the transaction. In addition, the counterparty should agree as soon as practicable following a downgrade of its rating to below BBB, but in any event no later than 30 business days after such date, to post collateral meeting the provisions of the framework, and to use commercially reasonable efforts either to obtain a suitable guarantee of its obligations or to replace itself with an eligible counterparty.
 - A counterparty rated below BBB at close of a transaction is not eligible for the treatment contemplated by the framework, even if it agrees to post collateral consistent with the framework.

1. To securities whose performance relies on the performance of the derivative.
2. To securities whose performance relies on the performance of the derivative.

- The framework is intended to apply to derivative transactions where the exposure of the rated securities to the performance of the derivative counterparty is such that the failure of the derivative counterparty to perform its obligations would not, in and of itself, be expected to result in a default by the Issuer in respect of those rated securities becoming either inevitable or significantly likely. Derivatives on which rated securities are more reliant for their continued performance will be reviewed by DBRS on a case-by-case basis.
- The framework assumes that both the Issuer and derivative counterparty make their payments on the same payment dates, regardless of the frequency of payment that might be implied by the relevant indices and, with respect to same currency exchanges, on a net basis, thereby minimising the Issuer's credit risk with respect to the derivative counterparty.
- DBRS monitors the exposure of the transaction to the counterparty throughout the life of the deal and may, notwithstanding compliance with the provisions of the framework, take rating actions in relation to the rated securities in situations where the risk to the transaction posed by counterparty default is no longer consistent with the then assigned ratings. In order to be able to do this, DBRS expects that the derivative mark-to-market (MTM) be supplied even when there is no requirement for the posting of collateral. In addition to the MTM, DBRS may use other valuations and analysis to determine the exposure of the Issuer to the derivative counterparty.
- DBRS expects that any costs due to such replacement of a derivative counterparty are covered by the counterparty.

Derivatives in Structured Finance Transactions

Derivatives are commonly used in structured finance transactions to convert the cash flows received by the Issuer from the underlying collateral pool into the cash flows it requires in order to meet its payment obligations in respect of the securities it has issued to fund that collateral.³ As a result, they can occur in a variety of different forms.

Interest Rate and Basis Risk Swaps

Interest rate and basis swaps can be used to convert payments based on a fixed rate of interest to amounts based on a floating index, such as EURIBOR, or to convert amounts determined in accordance with one basis to another, e.g., three-month EURIBOR to six-month EURIBOR.

Currency Swaps

Currency swaps exchange a payment stream in one currency for a payment stream in another, and are often found in transactions where the currency of some underlying assets is different from the currency of some or all of the Issuer's liabilities.

Caps, Floors and Collars

Caps, floors, collars and other options can be used to limit exposure to movements in interest rates or currencies.

Balance Guaranteed Swaps

While in many swap agreements the notional amounts that determine the parties' respective payment obligations have a fixed schedule, for collateral pools with an amortising or otherwise uncertain repayment profile the swap may specify a notional amount that is linked to either the actual or a projected amortisation profile of the underlying assets or the outstanding balance of the Issuer's liabilities. Swaps that track the actual amortisation profile of a transaction are referred to as balance-guaranteed.

Revenue Swaps

Swaps may also attempt to match transaction cash flows more closely, such as where the swap counterparty agrees to convert whatever cash flows are received in connection with an underlying pool of assets (or at least that portion of the collateral pool that is still performing) into whatever cash flows are necessary in order to make payments on the notes issued by the Issuer. For the purposes of this criteria, such swaps are referred to as revenue swaps.

3. Derivatives may attempt to hedge transaction cash flows perfectly, or may be based on assumptions as to the nature of future cash flows, which may result in an imperfect hedge. Where cash flows have not been perfectly hedged, DBRS considers whether the potential for a mismatch in cash flows is consistent with the assigned ratings.

Derivative Providers

A number of different types of entity, such as banks, insurance companies and derivative product companies (DPCs), may act as the derivative counterparty in a structured finance transaction. DBRS considers the identity of the derivative counterparty in the context of its review of the transaction. Where the derivative counterparty is itself a structured entity, such as a DPC, DBRS reviews the structural features applicable to the counterparty to determine whether they are consistent with the structural features of the relevant transaction and the assigned ratings.

DBRS Framework for Mitigating Risk of Derivative Counterparty Default

Where rated securities are dependent on the performance by a derivative counterparty of its obligations, those securities are exposed to the risk that the counterparty may default. This section of the criteria describes a framework for mitigating the risk associated with that default in structured finance transactions. A central principle of the framework is the removal of credit risk associated with the counterparty from the transaction, or the mitigation of that risk, before the counterparty defaults. This is achieved by the inclusion of structural features sufficient to ensure that, as its creditworthiness deteriorates as evidenced by its ratings, the counterparty will be replaced or its obligations will be collateralised or otherwise guaranteed prior to the point where it might be expected to default.

Issuers are under no obligation to follow the framework.⁴ However, the potential benefits of following the criteria described herein are twofold:

1. Where it is possible for Issuers to meet the criteria, the reduction in exposure to the derivative counterparty should result in reduced risk to the rated securities, and therefore the potential for higher ratings.
2. Assuming the criteria described herein are met, DBRS believes that, for appropriate transactions, the exposure of the rated securities may be mitigated to an extent sufficient to avoid analysing the counterparty risk associated with the derivative. In order to be comfortable that the risk of a derivative counterparty default can be treated in this way, DBRS must be satisfied that this risk is limited when compared with the risk addressed by the rating(s) assigned to the securities issued. In determining whether this is the case, DBRS examines the rating of the derivative counterparty, the nature of the derivative and the rating evaluated for those securities.

The potential for default of a derivative counterparty can present both liquidity and credit risks for a transaction. Liquidity risks might arise where the Issuer depends on the performance of the derivative counterparty to provide it with funds required to meet its upcoming payment obligations in a timely manner, such as where the Issuer receives payments in one currency from an underlying pool of assets but is required to make payments in a different currency in respect of its liabilities, or where the Issuer receives fixed cash flows from an underlying pool of assets but is required to make payments on its liabilities based on an index. Even if the default of the counterparty does not result in an ultimate credit loss for the Issuer, it may find itself temporarily without the cash flows it requires in order to meet its obligations. Credit risk may arise in respect of a derivative counterparty where the derivative becomes significantly in the money for the Issuer. In such circumstances, some or all of the cost to the Issuer of replacing the derivative if the original counterparty were to default may need to be provided from the Issuer's assets, thus reducing the amount of collateral available to support the rated securities.

In order for DBRS to be satisfied that it is not necessary to separately model the risk of a counterparty default, the exposure of the rated securities to the derivative counterparty should be such that failure of the derivative counterparty to perform its obligations would not, in and of itself, be expected to result in a default by the Issuer in respect of those securities becoming either inevitable or significantly likely, either in the short term (for instance as a result of liquidity risk) or in the longer term (because the derivative represents ultimate credit risk). Depending on the nature of the derivative, structural features, such as excess spread, liquidity facilities or reserve accounts, may be capable of mitigating the impact of the non-performance of the counterparty from a liquidity perspective. Similarly, the timing of available cash flows, the ability of the Issuer to apply principal receipts to cover obligations in respect of interest amounts due and, where it can be shown to exist,⁵ the ability of the Issuer to enter the market and enter into similar spot transactions pending replacement of the counterparty may, if relevant, each mitigate the immediate effect of a counterparty's default. In examining the credit risk associated with the derivative counterparty's default, DBRS reviews the nature of the derivative and the supplied ongoing MTM of the derivative.

4. The criteria described herein are not requirements. Originators and their advisors may choose to incorporate features in their transactions that differ from those discussed in this publication and DBRS assesses those structures to determine whether those transactions may be rated, and if so, what rating may be appropriate.

5. Such as by the nomination of a transaction party responsible for and capable of carrying out the necessary tasks on the Issuer's behalf.

Where the nature of the derivative is such that a payment default by the counterparty would result in a significant likelihood that the Issuer might default in respect of its obligations under the rated securities, whether in the short term or ultimately, the rating criteria described herein are unlikely to be sufficient to avoid separately modelling the counterparty risk as part of DBRS analysis of the transaction. DBRS considers any structural mitigants for such risk as proposed on a case-by-case basis.

In circumstances where the transaction depends to a significant extent on the performance of a counterparty in order for the payment obligations in respect of the rated securities to be met, a rating higher than that of the counterparty may not be achievable. Details on the factors analysed in such a determination are contained in the Account Bank section of the *DBRS Legal Criteria for European Structured Finance Transactions* methodology.

Issues to be Addressed at Transaction Closing

The framework relies on the principle that the transaction documentation provides for the credit risk of the counterparty to be removed from the transaction before the derivative counterparty defaults.

DBRS uses the ratings assigned⁶ to the derivative counterparty as an indicator of its proximity to default. For counterparty ratings with respect to derivatives, a rating means a Critical Obligations Rating (COR) or, if a COR is not currently maintained on the counterparty, the higher of an Issuer Rating or Senior Unsecured debt rating. To fall within the parameters of the framework, at closing the derivative counterparty is expected to be rated at least “A,”⁷ or at least BBB if collateral consistent with the framework is to be posted from the outset. If the highest rating assigned to a class of notes dependent on the derivative is below AA (low), then collateral will not need to be posted until the Second Rating Threshold is breached.

ISDA-standard documentation,⁸ including a Credit Support Annex or Credit Support Deed, is expected to be in place at the transaction’s closing. Regardless of whether the counterparty is required to post collateral from the outset, a collateral account should be established.

Rating Thresholds

The DBRS framework anticipates that the Schedule to the ISDA Master Agreement will provide for the following actions should the rating of the derivative counterparty be downgraded below the thresholds described.

First Rating Threshold

Assuming the derivative counterparty is rated “A” or above at closing⁹, if the counterparty is subsequently downgraded such that it is rated below “A,” the derivative counterparty, at its own cost, is expected as soon as practicable, but in any event no later than 30 business days after such date, to:

1. Post eligible collateral sufficient to meet the criteria for the First Rating Threshold (described below) or
2. Arrange for its obligations pursuant to the derivative to be guaranteed in a manner consistent with the framework (see further below) by a third party rated at least “A” or
3. Arrange for its obligations pursuant to the derivative to be assumed by a third party rated at least “A.”

If at closing the derivative counterparty is rated below “A” but at least BBB, the counterparty may still meet these criteria by posting collateral consistent with the framework from the outset. At any time after closing, the counterparty may stop posting collateral if:

1. It is upgraded such that its rating is at least “A” or
2. It procures a guarantee for its obligations pursuant to the derivative consistent with the framework (see further below) by a third party rated at least “A” or
3. It arranges for its obligations pursuant to the derivative to be assumed by a third party rated at least “A.”

6. In cases where DBRS does not maintain a public rating for a particular institution, the DBRS Financial Institutions Group may provide a private rating or an internal assessment, which are monitored over the life of the transaction. DBRS will notify the relevant institution and may notify the Issuer and certain relevant transaction counterparties, if any such rating or assessment is downgraded to a level that results in the counterparty being rated below a relevant threshold, so that such institution may decide which of the applicable remedies to implement. In certain cases, DBRS may rely on public ratings assigned and monitored by other credit rating agencies.

7. Where the counterparty is rated at each of the rating thresholds such rating must not be Under Review with Negative Implications.

8. DBRS notes that derivative documentation based on other standards may also be used, such as the CMOF form commonly found in Spanish transactions. While this paper focuses on the ISDA standard, DBRS reviews other forms of derivative documentation on a case-by-case basis to ensure that the principles set forth in this methodology are met.

9. In this document, the references to the rating and undertakings of a counterparty at closing apply similarly to any counterparty that subsequently takes on the role of derivative counterparty after the transaction has closed.

Second Rating Threshold

DBRS does not consider that the posting of collateral sufficiently mitigates the risks associated with the default of a counterparty rated lower than BBB. As a result, when a derivative counterparty in an existing transaction has been downgraded below BBB, the derivative documentation is expected to provide for:

1. The derivative counterparty to post eligible collateral sufficient to meet the criteria for the Second Rating Threshold (described below) as soon as practicable, but in any event within 30 business days, and
2. The counterparty to use commercially reasonable efforts to either
 - a. Arrange for its obligations pursuant to the derivative to be guaranteed in a manner consistent with the framework (see further below) by a third party rated at least “A” or
 - b. Arrange for its obligations pursuant to the derivative to be assumed by a third party rated at least “A.”¹⁰

The Schedule to the ISDA Master Agreement is expected to provide that a failure by the derivative counterparty to comply with its obligations on a breach of either the First or Second Rating Threshold should enable the Issuer to terminate the derivative transaction.¹¹

As mentioned above, once a counterparty is rated below BBB, DBRS no longer considers the credit risk associated with a counterparty default to be adequately addressed solely by the provision of collateral. Consequently, the aim of the framework from this point is to facilitate the removal of this credit risk, either by having the counterparty replaced or by having its obligations guaranteed by an entity rated at least “A” (or BBB, with or without posting collateral consistent with the framework at the outset, depending on the highest rating assigned to the securitisation). The framework provides for an increase in the collateral to be posted once the counterparty is no longer rated above the Second Rating Threshold to mitigate the increased credit risk associated with the counterparty while a search for a replacement continues. For the avoidance of doubt, if a suitable guarantee has been obtained, as long as the guarantor is rated at least “A”, the counterparty need no longer post collateral nor arrange for its obligations pursuant to the derivative to be assumed by a replacement third party.

Where the rating(s) assigned to the highest rated securities issued by the Issuer that are dependent on performance of the derivative do not exceed A (high), the above framework may also be applied, although in such circumstances the First Rating Threshold would not need to apply. For the avoidance of doubt, a counterparty rated below BBB at close of a transaction is not eligible for the treatment contemplated by the framework, even if it agrees to post collateral consistent with the framework.

Remedies Upon Breach of Ratings Threshold

1. Posting Collateral

One-Way Posting

ISDA credit support documentation contemplates bilateral collateralisation. Whichever party suffers an exposure (where the agreed value of collateral provided by the other party is less than the amount by which the derivative is in the money for the first party), the other party must transfer sufficient collateral to remove that exposure.

Consistent with the purpose of the framework, as well as the general nature of structured finance transactions, DBRS anticipates that the form of credit support documentation entered into provide only for a one-way transfer of collateral, i.e., only the derivative counterparty may be required to post collateral.

If the documentation provides for two-way collateral posting (as required since 1 September 2017 of US entities for non-cleared swaps, pursuant to regulations from the U.S. bank regulators and the U.S. Commodity Futures Trading Commission or as required for certain entities in the European Market Infrastructure Regulation (EU) No 648/2012), DBRS assesses the likely amount of collateral that the Issuer might need to post, the Issuer’s ability to post those amounts and the consequence of any failure by the Issuer to post collateral. In determining the potential posting amounts, DBRS uses stressed market prices and rates, such stresses increasing at each successively higher rating level.

Derivative Counterparty as Calculation Agent

The Issuer in a structured finance transaction is likely to be a special-purpose vehicle, lacking either significant operational infrastructure or the systems or expertise necessary to adequately value derivative obligations. The framework recognises this fact, assuming, as is the case in the majority of structured finance transactions that include derivatives that the counterparty also acts as Calculation Agent. Consistent with ISDA documentation, DBRS expects that in performing its obligations, the counterparty be subject to a contractual obligation to act in good faith and in a commercially reasonable manner.

10. Or a counterparty rated at least BBB with or without collateral posting consistent with the framework at the outset, depending on the highest rating assigned to the securitisation.

11. Whether as a consequence of an Additional Termination Event or an Event of Default under the ISDA Master Agreement.

Collateral Delivery Considerations

Minimum Transfer Amount

ISDA credit support documentation requires collateral (or additional collateral) to be posted where the amount required to be delivered (the Delivery Amount) exceeds the Minimum Transfer Amount. DBRS reviews the Minimum Transfer Amount proposed to determine whether it is consistent with the ratings assigned. DBRS typically expects a Minimum Transfer Amount not exceeding EUR 100,000, or its equivalent, to be specified unless an Event of Default or Termination Event has occurred, in which case the Minimum Transfer Amount should be zero.

Determining Delivery Amount¹²

The Delivery Amount is determined based on the excess of the Credit Support Amount (the amount required to be covered, i.e., the Issuer's exposure to the counterparty in respect of the derivative) over the value of collateral (if any) already posted (referred to in ISDA credit support documentation as the Credit Support Balance).

The process therefore begins with the determination of the Issuer's exposure to the counterparty with the MTM of the derivative used as an indicator of this level.

Notwithstanding the obligation, when acting as Calculation Agent, to act in good faith and in a commercially reasonable manner, DBRS may nevertheless expect the valuation the counterparty applies to the derivative for the purposes of determining the Delivery Amount to be consistent with that used for its own internal valuation purposes. Where the valuation of the derivative depends on a weighted-average life or other amortisation profile for notional amounts under the derivative, DBRS expects to receive details of the method used to determine that weighted-average life or paydown profile as part of the transaction's periodic reporting.

As discussed in more detail below, the framework assumes that the valuation of both the derivative and any collateral posted occur no less frequently than weekly. As the MTM of a derivative can fluctuate between valuation dates, the method for determining the amount of collateral to be posted at each rating threshold provides for an additional derivative volatility cushion¹³ to account for the volatility of the derivative's MTM from one period to the next.

Credit Support Amount at the First Rating Threshold

If the counterparty is, or has been downgraded to below the First Rating Threshold, but remains above the Second Rating Threshold, the framework determines the exposure to be collateralised as follows:

$$\text{Max (0; MTM + hedge notional}^{14} \text{ * derivative volatility cushion)}$$

The derivative volatility cushions are as follows:

For Single Currency Interest Rate Swaps, Caps, Floors, Collars, Swaptions and Balance Guaranteed Swaps

Derivative Weighted-Average Life (years) ²	Note Rating ¹
	AA (low) or higher
0-1	0.25%
1-3	0.50%
3-5	1.00%
5-7	1.50%
7-10	2.50%
10-20	3.50%
Greater than 20	4.00%

¹ This refers to the highest rating on securities issued by the Issuer supported by the derivative.

² DBRS expects, for the purposes of determining the derivative volatility cushions throughout the criteria, that the weighted-average life be determined based only on scheduled payments in which the possibility of voluntary prepayments by underlying obligors is ignored, as is the potential for their default.

12. For the purposes of simplifying the explanation in this section, it has been assumed that a single derivative has been entered into under the ISDA Master Agreement.

13. The derivative volatility cushions described in connection with the valuation of the derivative transaction for the purposes of collateralising upon the breach of rating thresholds as described herein are appropriate for derivative denominated in the following currencies: United States Dollars, British Pounds, Euro, Swiss Francs, Japanese Yen, Danish Krone and Swedish Krona. Other currencies are considered on a case-by-case basis.

14. Where different notional amounts exist under the derivative, such as for a currency derivative, the relevant notional amount will be for the leg of the transaction whose cash flows support the rated securities.

For Cross Currency Swaps and All Revenue Swaps

Swap Weighted-Average Life (years)	Note Rating
	AA (low) or Higher
0-1	2.00%
1-3	2.50%
3-5	2.75%
5-7	3.00%
7-10	3.50%
10-20	4.25%
Greater than 20	5.00%

For Single Currency, Single Index Basis Swaps

Swap Weighted-Average Life (years)	Note Rating
	AA (low) or Higher
0-1	0.25%
1-3	0.50%
3-5	0.80%
5-7	0.95%
7-10	1.20%
10-20	1.50%
Greater than 20	1.80%

Credit Support Amount at the Second Rating Threshold

Upon a downgrade to below the Second Rating Threshold, the credit risk of the hedge provider becomes more of a concern. The framework now assumes a higher likelihood of the Issuer being exposed to movements in the value of the derivative (and therefore the cost of replacing the original counterparty) and as a result provides for higher derivative volatility cushions.

Where the counterparty is downgraded to below the Second Rating Threshold the framework determines the exposure to be collateralised as follows:

$$\text{Max (0; MTM + hedge notional * derivative volatility cushion; next payment}^{15}\text{)}$$

The derivative volatility cushions are as follows:

For Single Currency Interest Rate Swaps, Caps, Floors, Collars, Swaptions and Balance Guaranteed Swaps

Derivative Weighted-Average Life (years)	Note Rating	
	AA (low) or higher	A (high) or lower
0-1	0.75%	0.50%
1-3	1.25%	0.75%
3-5	2.00%	1.50%
5-7	3.00%	2.00%
7-10	5.00%	3.00%
10-20	7.00%	5.00%
Greater than 20	9.00%	6.50%

15. The net amount due from the derivative counterparty on the immediately following payment date. In relation to currency derivatives this amount would be calculated based on the difference between the counterparties' payments, expressed in the currency required by the Issuer, even if such payments would not actually required to be netted under the derivative.

For Cross Currency Swaps and All Revenue Swaps

Swap Weighted-Average Life (years)	Note Rating	
	AA (low) or higher	A (high) or lower
0-1	7.00%	5.00%
1-3	7.50%	5.50%
3-5	8.00%	6.00%
5-7	9.00%	7.00%
7-10	10.00%	8.00%
10-20	12.00%	9.00%
Greater than 20	14.00%	12.00%

For Single Currency, Single Index Basis Swaps

Swap Weighted-Average Life (years)	Note Rating	
	AA (low) or Higher	A (high) or lower
0-1	0.75%	0.50%
1-3	1.25%	0.75%
3-5	1.60%	1.40%
5-7	1.90%	1.45%
7-10	2.40%	1.50%
10-20	3.00%	2.00%
Greater than 20	4.05%	2.30%

Please note the following points:

1. The exposure of the Issuer is floored at zero, consistent with the premise that it is only the derivative counterparty that may be subject to an obligation to post collateral.
2. While the framework contemplates that the MTM of the derivative may be netted against the derivative volatility cushion, note that it is nevertheless possible that collateral may need to be posted by the counterparty at a time when the MTM of the derivative shows it to be in the money for the counterparty. This would occur where the MTM of the derivative in favour of the counterparty was less than the derivative volatility cushion, reflecting the risk that the value of the derivative might move during the relevant valuation period such that it would become in the money for the Issuer.
3. As stated before, if the initial DBRS rating of the most senior rated securities is A (high) or lower, the derivative counterparty can be rated as low as BBB and not have to post collateral. However, once the rating of the derivative counterparty is below the Second Rating Threshold, the derivative volatility cushions used until the derivative counterparty is replaced are those specified in the Second Rating Threshold table.
4. Where the derivative counterparty has been downgraded below the Second Rating Threshold, in determining the amount of collateral that needs to be posted, the framework includes in the calculation the net amount due from the counterparty on the following payment date. This ensures that the Issuer is provided with sufficient funds to cover its imminent obligations in respect of the rated obligations, therefore mitigating immediate liquidity issues associated with the counterparty's default.

Valuing Collateral to be Delivered

The purpose of collateral arrangements is to remove one party's exposure to another under a derivative by requiring the other party to provide collateral with sufficient value to remove that exposure. In addition to determining the amount of the exposure that needs to be covered, the framework must also consider the nature of the collateral that may be provided and, assuming that the value of that collateral is itself subject to fluctuations in value, how to ensure that collateral with sufficient value is provided such that the credit risk associated with the counterparty is adequately mitigated.

The framework assumes that collateral provided by the counterparty is limited by the transaction documentation to either cash or interest-bearing debt issued by sovereign entities rated at least AA (low). Where the currency of the collateral matches the currency of the rated securities whose payment obligations are supported by the derivative, the value attributed by the framework to collateral posted is reduced in accordance with the following tables of advance rates, reflecting the potential for

the value of the collateral to move between the date on which it is provided and the date when the Issuer may need to realise the collateral in order to obtain a replacement counterparty. No reduction is necessary where same currency cash collateral is provided.

First Rating Threshold

Collateral Maturity (years)	All Rating Levels
0-1	99.70%
1-3	99.00%
3-5	98.50%
5-7	98.00%
7-10	97.50%
10-20	97.00%
Greater than 20 years	96.00%

Second Rating Threshold

Collateral Maturity (years)	Note Rating	
	AA (low) or higher	A (high) or lower
0-1	99.00%	99.50%
1-3	98.00%	99.00%
3-5	96.50%	97.50%
5-7	95.00%	97.00%
7-10	93.00%	95.00%
10-20	90.00%	93.00%
Greater than 20 years	86.00%	90.00%

Where the currency of the collateral does not match the currency of the rated securities¹⁶ whose payment obligations are supported by the derivative, the value attributed by the framework to collateral posted is reduced in accordance with the following tables of advance rates:

First Rating Threshold

Collateral Maturity (years)	All Rating Levels
0-1	95.50
1-3	95.00
3-5	94.50
5-7	94.00
7-10	93.00
10-20	92.50
Greater than 20 years	91.50

Second Rating Threshold

Collateral Maturity (years)	Note Rating	
	AA (low) or higher	A (high) or lower
0-1	91.00	92.50
1-3	90.50	92.00
3-5	90.00	91.50
5-7	89.50	91.00
7-10	89.00	90.00
10-20	85.00	88.00
Greater than 20 years	79.00	84.00

16. For collateral denominated in the following currencies: United States Dollars, British Pounds, Euro, Swiss Francs, Japanese Yen, Danish Krone and Swedish Krona. Other currencies are considered on a case-by-case basis.

Delivering Collateral – Timing and Frequency

As mentioned above, the framework assumes that the valuation of both the derivative and any collateral posted occur no less frequently than weekly. To reflect the likely operational capacity of the Issuer, and to ensure that delays do not occur, transaction documentation should provide that the Issuer is deemed to have made the required demands for collateral once the Delivery Amount exceeds the Minimum Transfer Amount, i.e., where conditions requiring the posting of collateral (or further collateral) arise.

Collateral Accounts

A separate collateral account should be established by the Issuer (or the arranger on its behalf) at closing. The account should be established such that it is isolated from the insolvency of the derivative counterparty. DBRS expects opinions from counsel confirming that securities posted to the account would not form part of the bankruptcy estate of the counterparty nor would they be affected by any moratorium or other stay on enforcement that might prevent access to those securities in a timely manner should the counterparty become insolvent. DBRS checks whether the securities intermediary or custodian with whom the account is to be held meets the general criteria for securities intermediaries and custodians described in DBRS *Legal Criteria for European Structured Finance Transactions*. While DBRS recognises that the laws of certain jurisdictions provide protection for securities that are held in trust, custody or fiduciary accounts from the insolvency of the securities intermediary or custodian, in jurisdictions where this is not the case DBRS considers whether the ratings of such parties are consistent with the criteria described in that methodology. DBRS reviews transaction documentation to determine whether collateral accounts are secured in favour of the security trustee from the outset of the transaction.

2. Replacement

The framework allows a counterparty to mitigate its credit risk by collateralising its obligations, and provided that the counterparty's rating remains above the Second Rating Threshold, the counterparty retains the option to continue providing collateral in accordance with the framework as an alternative to finding a replacement. However, once the derivative counterparty's rating is below the Second Rating Threshold the framework assumes that the derivative counterparty is subject to an obligation to use commercially reasonable efforts to replace¹⁷ itself. The continued provision of (increased) collateral amounts supports the obligation to replace, but does not remove it.

However, DBRS recognises that, depending on a number of factors including the nature of the particular transaction and the state of the market at the relevant time, replacement of the counterparty may prove difficult. Given the likely importance of the derivative to an Issuer's ability to meet its obligations in respect of the rated securities, DBRS does not consider that the framework should prescribe termination of an existing derivative in the absence of a suitable replacement, provided that the existing counterparty is complying with its obligations pursuant to the framework, i.e., it is continuing to post collateral and is actively seeking a replacement counterparty.

The framework also contemplates that once the counterparty's rating is downgraded below the Second Rating Threshold, the Issuer should be in a position to terminate the existing derivative agreement if, at any time not earlier than 30 business days after a breach of the Second Rating Threshold, it manages to locate an eligible counterparty¹⁸ willing to enter into the transaction and at that stage the original derivative counterparty has failed to procure its own replacement.

Once a replacement derivative counterparty is found, depending on whether the derivative is in the money or out of the money for the Issuer, a payment is likely to be required either to or from the replacement derivative counterparty for it to assume the original counterparty's obligations.

Whether the replacement counterparty has been located by the original derivative counterparty or by the Issuer, DBRS assumes that the derivative documentation reflects that the amount payable in connection with the termination of the original derivative be determined in accordance with the amount required to be paid to or received from the new counterparty for entering into the derivative.

Provided that the original counterparty is not in default, such payment is likely to be made between the original counterparty and the replacement counterparty, and as a result, transaction cash flows should not be affected. Once the replacement derivative agreement has been executed, the Issuer would return any collateral that had been posted by the original counterparty.

DBRS assumes that transaction documentation specify clearly that any costs associated with finding a replacement would be borne by the counterparty.

17. Or provide a guarantee from an eligible party in respect of its obligations.

18. DBRS appreciates that the Issuer is likely, in most instances, to need assistance in locating a replacement counterparty. DBRS reviews the transaction to determine whether a suitable party has been nominated to whom the task may be delegated in such circumstances.

3. Guarantee

DBRS recognises that guarantees need to be drafted to address specific jurisdictional and structural requirements, and reviews each guarantee on a case-by-case basis. However, DBRS typically expects that the guarantee meet the criteria for guarantees described in the DBRS *Legal Criteria for European Structured Finance Transactions* methodology.

DBRS typically reviews an opinion from counsel for the guarantor stating that the guarantor has the capacity and authority to issue the guarantee; the guarantee is an irrevocable and unconditional obligation of the guarantor, ranking equally with the senior unsecured debt of the guarantor; and constitutes its legal, valid and binding obligations enforceable by the Issuer, the security trustee or other noteholder representative in accordance with its terms. If the guarantor is located in a jurisdiction that differs from the governing law of the guarantee, DBRS expects an opinion to cover that a judgment obtained under the guarantee is enforceable against the guarantor in the guarantor's jurisdiction. The opinion should also address whether any payments from the guarantor would be subject to withholding or other taxes.

Surveillance – Reporting

The ongoing MTM of the derivative is an indicator of the exposure of the transaction to the derivative counterparty. DBRS therefore expects that such valuation be provided on an ongoing basis. DBRS can also monitor the exposure of the transaction to the derivative counterparty by, for example, modelling the derivative transactions in its own models.

In addition to the above, once the derivative counterparty is downgraded below either the First or the Second Rating Thresholds, DBRS expects periodic information in relation to:

- The valuation of the derivative and the collateral provided pursuant to the credit support documentation and
- Where relevant, efforts made by the derivative counterparty to facilitate its replacement.

Transaction Priority of Payments on Counterparty Default

It is possible that, notwithstanding compliance with the framework, a counterparty may nevertheless default prior to its replacement. In such circumstances, the Issuer would have the ability to terminate any outstanding transactions, and it is expected that this would typically occur. It would then be for the Issuer to seek a replacement counterparty. DBRS appreciates that the Issuer is likely, in most instances, to need assistance in locating a replacement counterparty. DBRS reviews the transaction to determine whether a suitable party has been nominated to whom the task may be delegated in such circumstances.

Once a replacement has been found, assuming the derivative was in the money for the Issuer, an upfront payment would be required to be made to the new derivative counterparty. Such payment would be made from the proceeds of collateral posted by the defaulting derivative counterparty and, assuming such proceeds were sufficient, would occur outside the transaction's payment waterfall.

If the derivative was out of the money for the Issuer at the time of the counterparty's default (and assuming the derivative was terminated), the Issuer would be required to make a payment to the original counterparty notwithstanding such counterparty's default. In most structured finance transactions, payments to derivative counterparties rank at or close to the top of the waterfall, typically higher than the payment of interest and principal on rated securities. However, in order to ensure that sufficient cash flows remain available to meet the Issuer's rated obligations, in circumstances where amounts might be due to a derivative counterparty as a result of its own default, transactions are often structured such that the payment of such amounts be subordinated to all amounts due in respect of the rated securities, or amounts otherwise required in order for the Issuer to continue performing its obligations in respect of those securities.¹⁹

DBRS considers any structural features intended to mitigate the risk that the transaction may have to a defaulted counterparty, including flip clauses or alternate structures. Whatever structure is proposed, DBRS expects the enforceability of such structure, including in the event of a bankruptcy of the derivative counterparty, to be analysed and addressed by counsel.²⁰

19. DBRS notes that a similar payment might typically be expected to be received from the replacement counterparty, in which case only the net amount (if any) required to be paid by the Issuer to the derivative counterparty would be subordinated as described above.

20. DBRS notes in particular recent case law in the United States concerning the enforceability of flip clauses with respect to entities subject to United States bankruptcy law.

Derivative Documentation

Derivative Documentation – Specific Provisions

The following section describes various features of or amendments to derivative documentation that DBRS typically expects to find in a structured finance transaction. However, DBRS recognises that each derivative needs to be tailored to the particular structured finance transaction. Therefore, DBRS reviews derivative documentation on a case-by-case basis to determine whether the provisions included are consistent with the ratings assigned.

Conditions Precedent to Performance

Section 2(a)(iii) of both the 1992 and 2002 Master Agreement provides that each party's payment or delivery obligations are subject to the condition precedent that no Potential Event of Default has occurred or is continuing with respect to the other party. A Potential Event of Default is defined in broad terms as any event that, with the giving of notice or the lapse of time or both, would constitute an Event of Default. DBRS reviews this provision in connection with the Events of Default applicable to the Issuer to determine whether it is consistent with the ratings assigned.

Events of Default

Failure to Pay or Deliver

This Event of Default typically applies to both the derivative counterparty and to the Issuer. DBRS reviews whether grace periods specified in connection with the performance by both parties of their obligations are consistent with the ratings assigned.

Breach of Agreement

This Event of Default typically applies to the derivative counterparty only. As the transaction parties typically rely on separate covenants provided by the Issuer (see the DBRS *Legal Criteria for European Structured Finance Transactions* methodology) this Event of Default typically does not apply to the Issuer.

The 2002 ISDA Master introduces a new Event of Default: Repudiation of Agreement. DBRS generally expects this Event of Default to apply to the counterparty. Given the nature of the Issuer as a special-purpose vehicle, it is not expected that this Event of Default would apply to the Issuer.

Credit Support Default

DBRS generally expects this Event of Default to apply to the derivative counterparty, with any guarantee provided in respect of the derivative counterparty's obligations being designated as a Credit Support Document. It does not typically apply to the Issuer.

Misrepresentation

DBRS generally expects this Event of Default to apply to the derivative counterparty. For the same reason that the Breach of Agreement does not typically apply to the Issuer, DBRS usually does not expect the Misrepresentation Event of Default to apply to the Issuer either. If it is deemed appropriate for this Event of Default to apply to the Issuer in a particular transaction, DBRS expects legal opinions covering each of the representations the Issuer is required to make.

Default Under Specified Transaction

This Event of Default may apply to the derivative counterparty, depending on the nature of the transaction. It is unlikely to be applicable to the Issuer.

Cross Default

This Event of Default may apply to the derivative counterparty, depending on the nature of the transaction. It is unlikely to be applicable to the Issuer.

Bankruptcy

DBRS generally expects this Event of Default to apply to the derivative counterparty. Given the nature of the Issuer as a bankruptcy-remote entity it should not be necessary to have the Bankruptcy Event of Default apply to it. Where the Bankruptcy Event of Default is nevertheless applied to the Issuer, DBRS reviews the terms of section 5(a)(vii) of the ISDA Master Agreement (as amended) to ensure that the Event of Default is not capable of being triggered inadvertently or in a manner inconsistent with the ratings assigned.

Merger Without Assumption

DBRS generally expects this Event of Default to apply to the counterparty. Given the nature of the Issuer and likely prohibitions contained elsewhere in the transaction documentation on its merging with third parties it is unlikely to be of relevance to the Issuer.

Termination Events

Illegality

DBRS typically reviews legal opinions addressing relevant aspects of the transaction (see the DBRS *Legal Criteria for European Structured Finance Transactions* methodology). Regardless of whether the Illegality Termination Event is applied, DBRS reviews any changes of law to determine their impact on the ratings assigned to the rated securities.

Tax Event

This Termination Event allows a party to a transaction to terminate a derivative transaction where a change in law results in that party either (1) being required to pay to the other party an additional amount in respect of a gross up for withholding tax or (2) receive from the other party a reduced amount as a result of the application of withholding tax. DBRS typically reviews opinions addressing the likelihood of withholding taxes applying to payments under the derivative. Regardless of whether the Tax Event Termination Event is applied, DBRS reviews any changes of law to determine their impact on the ratings assigned to the rated securities.

Tax Event Upon Merger

The nature of the Issuer should make its merger unlikely, and this Termination Event should not therefore be relevant to it as an Affected Party. DBRS would typically expect the counterparty to be under an obligation to gross up payments in the event that a merger of the counterparty resulted in the application of a withholding tax to payments to the Issuer. DBRS would not expect the Issuer to be subject to an obligation to gross up payments by it to cover the imposition of a withholding tax resulting from the merger of the counterparty.

Credit Event Upon Merger

The nature of the Issuer should be such that its merger is unlikely. This Termination Event may apply to the derivative counterparty.

Additional Termination Events

Where the framework is being relied upon to mitigate the risk of the derivative counterparty's default, Additional Termination Events consistent with those described herein should apply to the derivative counterparty. Further Additional Termination Events may apply to both the derivative counterparty and the Issuer consistent with the transaction.

Transfer Security

DBRS typically expects to see the rights of the Issuer pursuant to the derivative transaction secured in favour of the security trustee for the holders of the rated securities (and other relevant transaction parties). Depending on the nature of the security being granted it may be necessary therefore to amend the provision of Section 7 of the ISDA Master Agreement, which contains a general prohibition on transfers of rights pursuant to the derivative, including by way of security.



The DBRS group of companies consists of DBRS, Inc. (Delaware, U.S.)(NRSRO, DRO affiliate); DBRS Limited (Ontario, Canada)(DRO, NRSRO affiliate); DBRS Ratings Limited (England and Wales)(CRA, NRSRO affiliate, DRO affiliate); and DBRS Ratings México, Institución Calificadora de Valores S.A. de C.V. (Mexico)(CRA, NRSRO affiliate, DRO affiliate). Please note that DBRS Ratings Limited was registered as an NRSRO affiliate on July 14, 2017. For more information on regulatory registrations, recognitions and approvals, please see: <http://www.dbrs.com/research/225752/highlights.pdf>.

© 2018, DBRS. All rights reserved. The information upon which DBRS ratings and other types of credit opinions and reports are based is obtained by DBRS from sources DBRS believes to be reliable. DBRS does not audit the information it receives in connection with the analytical process, and it does not and cannot independently verify that information in every instance. The extent of any factual investigation or independent verification depends on facts and circumstances. DBRS ratings, other types of credit opinions, reports and any other information provided by DBRS are provided "as is" and without representation or warranty of any kind. DBRS hereby disclaims any representation or warranty, express or implied, as to the accuracy, timeliness, completeness, merchantability, fitness for any particular purpose or non-infringement of any of such information. In no event shall DBRS or its directors, officers, employees, independent contractors, agents and representatives (collectively, DBRS Representatives) be liable (1) for any inaccuracy, delay, loss of data, interruption in service, error or omission or for any damages resulting therefrom, or (2) for any direct, indirect, incidental, special, compensatory or consequential damages arising from any use of ratings and rating reports or arising from any error (negligent or otherwise) or other circumstance or contingency within or outside the control of DBRS or any DBRS Representative, in connection with or related to obtaining, collecting, compiling, analyzing, interpreting, communicating, publishing or delivering any such information. Ratings and other types of credit opinions issued by DBRS are, and must be construed solely as, statements of opinion and not statements of fact as to credit worthiness or recommendations to purchase, sell or hold any securities. A report with respect to a DBRS rating or other credit opinion is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. DBRS may receive compensation for its ratings and other credit opinions from, among others, issuers, insurers, guarantors and/or underwriters of debt securities. DBRS is not responsible for the content or operation of third party websites accessed through hypertext or other computer links and DBRS shall have no liability to any person or entity for the use of such third party websites. This publication may not be reproduced, retransmitted or distributed in any form without the prior written consent of DBRS. ALL DBRS RATINGS AND OTHER TYPES OF CREDIT OPINIONS ARE SUBJECT TO DISCLAIMERS AND CERTAIN LIMITATIONS. PLEASE READ THESE DISCLAIMERS AND LIMITATIONS AT <http://www.dbrs.com/about/disclaimer>. ADDITIONAL INFORMATION REGARDING DBRS RATINGS AND OTHER TYPES OF CREDIT OPINIONS, INCLUDING DEFINITIONS, POLICIES AND METHODOLOGIES, ARE AVAILABLE ON <http://www.dbrs.com>.