

CROSS-SECTOR RATING METHODOLOGY

Table of Contents:

SUMMARY	1
OVERVIEW	2
CREDIT SUBSTITUTION APPROACH SEEKS TO LIMIT BONDHOLDER RISK TO PERFORMANCE BY THE CREDIT SUPPORT PROVIDER	3
ELEMENTS OF CREDIT SUBSTITUTION	4
RATING GUIDANCE AND MONITORING	8
CONCLUSION	9
ANNEX A: APPLYING OUR JOINT DEFAULT ANALYSIS TO LETTER OF CREDIT BACKED TRANSACTIONS IN THE US PUBLIC FINANCE SECTOR	10
ANNEX B: CONFIRMING LETTER OF CREDIT TRANSACTIONS	20
ANNEX C: DIRECT PAY LETTER OF CREDIT TRANSACTIONS INVOLVING MOODY'S RATED ISSUERS	24
ANNEX D: SPECIAL RATING CONSIDERATIONS WHEN LAYERING A LETTER OF CREDIT ON TOP OF AN EXISTING BOND INSURANCE POLICY	26
ANNEX E: KEY CHARACTERISTICS OF STRONG GUARANTEE AGREEMENTS	28
MOODY'S RELATED RESEARCH	33

Contacts:

NEW YORK	+1.212.553.1653
Joann Hempel	+1.212.553.4743
Vice President - Senior Credit Officer	
joann.hempel@moodys.com	
Margaret Kessler	+1.212.553.7884
Vice President - Senior Analyst	
margaret.kessler@moodys.com	
Mark LaMonte	+1.212.553.0455
Managing Director - Ratings & Process Oversight	
mark.lamonte@moodys.com	

Rating Transactions Based on the Credit Substitution Approach: Letter of Credit- backed, Insured and Guaranteed Debts

This rating methodology replaces "Rating Transactions Based on the Credit Substitution Approach: Letter of Credit-backed, Insured and Guaranteed Debts" last revised on December 18, 2015. We have updated some outdated links.

Summary

This rating methodology identifies the criteria required to achieve full credit substitution based on the following forms of explicit third party support to the security – financial guaranty insurance, letters of credit and third party guarantees.¹ Once those criteria have been met the rating assigned to supported securities will generally be the higher of the support provider's financial strength rating and the underlying rating, subject to the limitations described below.

This methodology is designed to present a comprehensive guide to our approach to credit substitution in cases where third party credit support is utilized. In addition to the key elements of credit substitution, Moody's adjusts its approach to the specific structure, mechanics, and legal considerations related to a given transaction, as follows:

» Transactions backed by both a US municipal obligor and third party credit support. We apply a joint default analysis (JDA) to certain transactions supported by third party credit support where both parties are jointly obligated to make payment, as described in Annex A. We generally do not apply joint default analysis where the underlying rating and the support provider rating are highly correlated or where there is no published underlying rating.

This methodology is no longer in effect. For information on rating methodologies currently in use by Moody's Investors Service, visit www.moodys.com/methodologies

¹ For the purposes of this publication, underlying rating will mean the rating of the security without any consideration for any third party support. Please note that for US municipal issuers Moody's analysis would also include any enhanced rating based on a state credit enhancement program.

- » Confirming letters of credit. While our approach to these structures is similar to that of letter of credit transactions, confirming letter of credit structures have additional mechanical and legal issues that must be considered when a primary letter of credit ("LOC") is confirmed by a second LOC. Considerations unique to confirming letters of credit is outlined in Annex B.
- » Certain US public finance direct pay letters of credit. We apply the higher of the rating on the municipal obligor and the LOC provider in transactions without preference risk, as described in Annex C.
- » Layering on a letter of credit to an existing transaction wrapped by bond insurance. For transactions that are supported by an existing bond insurance policy and also supported by a third party letter of credit, we apply credit substitution as described in Annex D.

Overview

Third-party credit support is typically provided by a bank, financial guarantor or corporate entity and is utilized by municipalities, not-for-profit entities, private companies and sponsors of structured finance securities to access the capital market at a lower cost with a higher credit rating than would be achievable on a stand-alone basis. Generally, transactions that are rated based upon the credit substitution approach are assigned a rating consistent with the rating of the credit support provider as long as it is higher than the underlying rating of the guaranteed security.

The goal of a transaction utilizing this approach is to insulate investors from the issuer's² performance, default or bankruptcy and to provide for payment of principal and accrued interest on the debt when due (including a final payment prior to the expiration or termination of the credit support). In these types of transactions, investors accept primarily the credit risk of the support provider and therefore are exposed to the credit deterioration or improvement of such provider.

Given the differences in the forms of support, variation in legal structures, underlying relationships and specific circumstances surrounding each financing, rating assessments are made on a transaction-specific basis. Common transaction types that are rated using the credit substitution methodology are listed in Table 1 below. Additionally, the annexes included in this methodology contain more information on the application of this approach to specific structure types.

Table 1: Common Forms of Support Applicable to This Methodology

- » Letters of credit ("LOC")
- » Direct-pay credit enhancement instrument/agreement from Fannie Mae or Freddie Mac
- » Financial guaranty insurance
- » Third-party guaranty

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

² The term "issuer" refers to the entity that is obligated on the debt which may be the issuer or may be the obligor in transactions in which debt is issued by a conduit.

Credit Substitution Approach Seeks to Limit Bondholder Risk to Performance by the Credit Support Provider

When an issuer chooses to utilize third-party credit support on a capital market transaction, the goal is to substitute the credit risk of the support provider for its own credit risk. Credit substitution requires more than just the presence of a credit support instrument from a third-party credit provider. Full and effective credit substitution insulates the investor from the credit risk of the issuer. The transaction documentation provides clear instructions to ensure that payments under the credit support facility are made when due and that there are no impediments to the timely payment of debt service.

Generally, the long-term ratings on credit supported transactions track the long-term rating assigned to the credit provider³. Subsequent to the initial rating, any change in the long-term rating on the transaction will reflect either a downgrade or upgrade of the long-term rating of the support provider or a change associated with the substitution of the support provider. When rating changes result in the security's underlying rating being higher than the support provider's rating, the higher rating will generally be applied. Certain debt instruments that we rate utilizing the credit substitution approach also have short-term ratings assigned to them. In transactions backed by letters of credit, generally the short term ratings track the short-term rating assigned to the letter of credit provider.

Bank Supported Ratings Based on Moody's Counterparty Risk Assessments

Moody's counterparty risk assessments (CR Assessments) constitute our opinion of probability of default on senior bank obligations and counterparty commitments other than debt and deposit instruments. Senior bank obligations and counterparty commitments include letters of credit, liquidity facilities, guarantees, swap agreements and other contractual obligations.

In applying this methodology to third party obligations supported by banks, we use the CR assessment as an input to reflect both the long-term and short-term payment risk of the bank. Specifically, ratings based on irrevocable bank support are equal to the bank's long-term and short-term CR Assessments, as applicable.

³ If the Joint Default Analysis (see Annex A) is applied, the rating may not track the rating of the credit support provider.

Elements of Credit Substitution

Mitigation of Payment Default Risk on Underlying Obligation

Table 2: Key Elements of Credit Substitution:

- » Mitigation of Bankruptcy Risk of Issuer
- » Sufficiency of Credit Support
- » Structural Provisions Which Provide for the Timely Payment of Debt Service
- » Bondholders to Be Paid in Full if Credit Support Expiration or Termination Will Result in a Change in Credit Quality
- » High Quality Investments That Preserve Funds Held for the Payment of Debt Service
- » Legally Enforceable Credit Support

For credit substitution to be achieved, investors are insulated from the risk of payment default by the underlying obligor or an inability to pay principal and interest as due from the cash flows generated by securitization's collateral. Debt service payments made to investors in transactions that meet the standards for credit substitution are not eligible to be recovered as a preference in the event of the issuer's bankruptcy or, if such payments are able to be recovered, the credit support instrument provides coverage to repay any funds recovered from an investor. A preference is an issuer's pre-bankruptcy transfer of assets that is determined to treat one creditor more favorably than another. Consequently, if a payment is deemed to be a preferential transfer, it would be recovered by the bankruptcy trustee (or similar party) and returned to the issuer's bankruptcy estate for redistribution. Monies paid directly by the support facility, such as monies received under a direct-pay letter of credit, are generally viewed as "preference proof" in the event of the issuer's bankruptcy and are not expected to be recoverable since the funds used to make debt service payments were not received from the issuer. In a transaction structured to achieve credit substitution, the support provider utilizes its own funds to make payments under the support facility and there are no provisions within the transaction documents (such as a requirement that monies of the issuer be on deposit before a payment under the support facility is made) that could support a claim that the monies of the issuer were used to fund payments made under the credit enhancement facility.

Issuer monies are considered to be "preference proof" when they have been provided by the issuer and have been on deposit ("aged") with the trustee⁴ for the period of time during which such funds are at risk of being considered preferential payments. This period typically ranges for issuers other than municipalities from 90 days to one year prior to a bankruptcy of the issuer.⁵ The aging period may vary from transaction to transaction depending on the identity of the issuer and the specifics of the transaction. If monies other than funds provided by the support facility or aged funds are to be utilized or if the transaction structure is new or unique, we will review legal opinions provided by bankruptcy counsel to ascertain if the monies used to pay debt service are consistent with the rating to be assigned to the debt.

⁴ The term "trustee" is used generically to denote the fiduciary that is the beneficiary of the credit support facility. The beneficiary may also be termed the tender agent, paying agent, or fiscal agent.

⁵ Payments made by municipalities (as defined under the U.S. Bankruptcy Code) issuing bonds or notes for their own purposes are not recoverable as a bankruptcy preference.

Sufficiency of Credit Support

The credit support provider's commitment under the support facility is considered sufficient when it covers full principal of bonds issued, the maximum interest accrual period, plus any other amount, such as premium upon mandatory redemption, which may be promised to investors. The necessary size of the interest coverage varies from transaction to transaction because the variables needed to calculate such coverage are derived from the documents governing the bonds.

The components of interest coverage are the sum of the following:

- » the longest period of time interest can accrue between interest payment dates;
- » the reinstatement period, if applicable, which is the length of time that the support provider reserves in the credit facility to determine whether it will reinstate the interest component after honoring a draw on an interest payment date; and
- » if the support is subject to reinstatement, the remedy period which is the length of time the trustee has to pay bondholders in full (typically through a mandatory tender, acceleration or redemption of the debt) if the interest coverage component of the credit facility is not reinstated in full.

Document provisions are also reviewed by Moody's to determine how, if applicable, the issuance of additional bonds or the partial conversion of bonds to an interest rate mode not covered by the support facility is addressed. Issuance of additional bonds could dilute the level of support provided to the bonds if the new bonds are also entitled to the benefit of the support facility. Partial conversion of bonds in a structure with multiple interest rate modes to a rate mode not initially covered by the support facility could also result in insufficient support under the credit facility for all the bonds. For example, if the support facility is intended to cover bonds paying interest monthly and a portion of the bonds are converted to an interest rate mode that pays semiannually, there may not be sufficient interest coverage under the facility to support all the bonds.

One alternative to address this gap is for the transaction documents to provide for an increase in coverage of the credit facility prior to the issuance of additional bonds or conversion to a rate mode that requires additional interest coverage under the support facility. Alternatively, the transaction documents may incorporate other safeguards such as: a prohibition on drawing by the trustee on the credit enhancement for non-covered additional or converted bonds, establishment by the trustee of segregated bond fund accounts so monies for the payment of covered and non-covered bonds will not be commingled, and separate series designations or bond captions to distinguish covered versus non-covered bonds.

Transactions with Mandatory & Optional Tender Provisions

Most variable rate municipal and corporate bonds supported by letters of credit are subject to both mandatory and optional tenders. Tenders are paid from remarketing proceeds and from a draw on the letter of credit if the bonds are not successfully remarketed. In these transactions the letter of credit will state that it is available to cover the full purchase price of all outstanding bonds at the time of any mandatory or optional tender. Therefore, pursuant to the credit substitution approach, the short-term portion of the rating on a letter of credit supported bond would reflect the short-term rating of the provider.

Mandatory tenders can occur for; (i) expiration of the credit support; (ii) conversion of the interest rate mode; (iii) substitution of the credit support; or (iv) early termination of the credit support following a default under the bank agreement.

In our analysis of transactions that include optional tenders, we review the tender process to evaluate whether investors are exposed to credits other than the provider of the support provider and the timing and mechanics of the draws provide for timely payment of purchase price to tendering investors. Transactions that achieve full credit substitution involve a fiduciary as the party receiving tender notices from investors. In addition, the various legal documents direct the appropriate party to draw upon the letter of credit in a timely manner in order to pay purchase price. Our analysts review the documents to ensure there is sufficient time between events such as the bondholder's notice of optional tender, the remarketing agent's delivery of the amount of remarketing proceeds, and the trustee's notice to the letter of credit provider of a request for funds.

Structural Provisions Which Provide for the Timely Payment of Debt Service

In addition to adequate coverage under the support facility, a transaction structured for full credit substitution clearly outlines the mechanics and timing for submitting a draw or claim for payment under the credit facility and the timing for payment by the credit provider upon receipt of a draw or claim in the transaction documents. The instructions for submitting a draw or claim by the trustee to the credit provider under the governing document should conform to what is required under the credit facility. To avoid any interruption in draw responsibilities the credit facility is expected to be transferred to a successor trustee before its resignation or removal.

Since the funds which the credit provider is legally obligated to provide under the form of enhancement is typically finite in nature and may be sized to a certain dollar amount to provide payment of principal and interest on the bonds, it is essential that such funds be available and applied only for the timely payment to bondholders and not seized or encumbered by any other party to the transaction. Bond transactions that are fully supported by third-party credit enhancement have clear document provisions that prevent any transaction party from having a lien on funds provided by the credit enhancer, other than the trustee, acting for the benefit of the bondholders, to pay principal and interest on the bonds.

To prevent the possibility of a delay in payment to investors, the legal documents in an adequately structured transaction provide that the trustee is required to perform non-discretionary duties and actions (i.e. drawing on the credit support, making payments to investors, effecting mandatory redemption, mandatory tender, or acceleration of the bonds under the indenture) without first seeking and receiving indemnity or the consent of any other party. Such structural elements are important to ensure that the provisions related to the payment of debt service are carried out in a timely basis so that bondholders are exposed only to the credit risk associated with the credit support provider and not subjected to situations in which payments may be delayed or impaired by circumstances unrelated to the creditworthiness of the support provider.

Bondholders to Be Paid in Full if Credit Support Expiration or Termination Will Result in a Change in Credit Quality

Credit support instruments may be issued to the stated maturity of the debt or for a finite period with a stated expiration date prior to the maturity date of the bonds, which may be extended at the discretion of the credit provider. At the credit provider's discretion, certain credit support instruments may also be terminated prior to the stated expiration due to an event of default under the applicable credit documents. The expiration or early termination of the credit support is the most obvious event upon which a security may lose its credit support. It is important that the transaction documents provide that investors are paid in full from the credit support prior to its termination via a mandatory tender, mandatory redemption, or acceleration upon expiration or earlier termination unless the rating on the bonds will not be reduced or withdrawn following the loss of the existing credit support.

Transactions that utilize credit support typically permit the issuer to replace the original credit support provider with support from an alternate provider. Upon substitution of the credit provider, the original credit support facility will terminate or be surrendered for cancellation and a new credit facility will support the bonds. As in the case of expiration of the credit support, the substitution of one credit facility for another could have an adverse impact on bondholder security, depending on the credit quality of the new provider and the form of the replacement of the credit support instrument. In order to be considered for credit substitution, a transaction must therefore contain provisions for a mandatory tender upon substitution or provide that a substitution of the credit support be permitted only if the Moody's rating will not be reduced or withdrawn as a result of such substitution.

Defeasance or refunding of variable rate bonds poses a risk to bondholders in that the security and documentation supporting their bonds changes. Credit support provided by banks typically automatically reduce to zero when no bonds remain outstanding. After defeasance, bonds can be considered to be no longer outstanding, resulting in termination of credit support. In addition, the governing bond documents are normally released upon defeasance eliminating tender rights and the procedures supporting those rights. In its analysis of puttable variable rate debt, we consider protection for variable rate bondholders against loss of rights and support in the event of defeasance.

Special Considerations for Credit Supported Commercial Paper

- » Commercial paper notes have maturities of 1-270 days and are typically not subject to mandatory tenders or redemptions. Therefore, notes are structured to mature no later than the business day prior to the expiration date of the credit support.
- » Because commercial paper programs are designed so that various amounts of notes, maturing at various periods, may be outstanding simultaneously during the life of the program, it is important that the total amount of notes outstanding plus accrued interest not exceed the commitment amount available under credit support.
- » Substitute credit support can become effective on a date following the maturity of all the outstanding notes and secure any notes issued after the effective date of the substitution.
- » The credit support provider typically has the right to send a no-issuance notice upon an event of default under the bank agreement. The fiduciary should be instructed to cease issuing new notes and either: (a) draw on the credit support for the entire amount of notes outstanding and hold the proceeds until such notes mature; or (b) if the credit support remains in effect until all notes outstanding mature, draw on the credit support as required until all the outstanding notes are paid at maturity.

High Quality Investments that Preserve Funds Held for the Payment of Debt Service

Governing bond documents often include provisions that allow the trustee to invest the proceeds of draws on third-party credit enhancement. As the rating on transactions discussed in this methodology only reflects the credit rating of the support provider, investments of such funds should not add additional risk to the transaction due to increased credit risk or market value risk. Only those investments that are limited to safe, conservative, and liquid investments which mature in order to be available on the payment date.⁶

⁶ See Moody's rating methodologies for additional information regarding the assessment of counterparty risks, eligible investments and account risk. A link to sector and cross-sector credit rating methodologies can be found in the Related Research section of this report.

Legally Enforceable Credit Support

Since the credit support is the main funding source relied upon for debt service payments, it is essential that the credit provider's obligation to make payments is legal, valid, binding and enforceable against the support provider. We review the applicable legal opinions to ascertain that the obligation of the credit provider under the credit support facility is enforceable. In the legal opinion, we expect that it will be clear that the only exceptions to the enforceability of the credit support be the insolvency, reorganization or liquidation of the support provider itself. For enhancement issued by non-U.S. entities, foreign counsel opinions are reviewed to establish that the obligation of the credit support provider is enforceable in the home country of the provider and to understand where the obligation ranks within the credit support provider's debt structure. We will apply the appropriate rating of the credit support provider, based on the information provided in the legal opinions or other sources, to transactions that meet the standards for credit substitution.

Rating Guidance and Monitoring

In order to best reflect the credit risk on a fully supported security we will apply the rating that is the higher of the support provider's rating and the published underlying rating for the issuer. For structured finance securities the rating applied will be the higher of the support provider's rating and the published or unpublished underlying rating. In the event of a downgrade of a financial guarantor's rating to below investment grade, we expect to withdraw the rating for instruments that do not have published underlying ratings.

As part of ongoing surveillance analysis and process, we track, therefore, the rating or CR assessment of a support provider and the rating of the issuer. Rating changes to either one or both are reflected in the ultimate rating we assign to the issuer.

Our long-term ratings for fully supported securities express an opinion on the likelihood of timely payments of principal and interest on the supported securities. Phrased in another way, the ratings address the possibility that the timely payment of principal and interest when due will not be made to holders of the securities. With respect to securities fully supported by third-party credit support, the obligation will be honored unless two events happen: (1) the underlying obligation defaults and (2) the support provider defaults. Therefore, when the published or unpublished (when applicable) rating on the underlying obligation of a wrapped security is higher than the support provider's financial strength rating, the rating of the transaction will be higher than the support provider's rating.

There are specific circumstances where the approach outlined above will not apply and the rating assigned will be based on different criteria. For example, when a letter of credit is layered on top of an existing financial guaranty policy, there may be structural considerations which will prevent the application of the higher of the rating of the bank, financial guarantor and underlying rating of the issuer. It will only be applied when all payments of principal and interest are to be due from or fully supported by each of the parties on the payment date.

In transactions supported by direct pay letters of credit and other arrangements in which the support provider pays bondholders and is reimbursed, it is not always possible to apply the higher of the rating of the support provider and the underlying obligation to the credit enhanced debt due to risk that payments made by the support provider could be reclaimed as a possible preference in the event of support provider insolvency. For a more detailed discussion of these issues please see Annex B (Confirming Letters of Credit), Annex C (Direct Pay Letter of Credit Transactions Involving Moody's Rated Issuers) and Annex D (Layering a Letter of Credit on an Insured Transaction).

Conclusion

Generally, the rating assigned to a security benefitting from third-party support that meets Moody's criteria for credit substitution will be the higher of (i) the relevant rating of the support provider's rating and (ii) (a) the underlying published rating (public finance and corporate securities) and (b) the underlying published or unpublished rating (structured finance securities).

OUTDATED
METHODOLOGY

Annex A: Applying Our Joint Default Analysis to Letter of Credit Backed Transactions in the US Public Finance Sector

Introduction

Under the JDA approach for letter of credit backed transactions, the credit risk of both the entity receiving support and the LOC bank are factors in determining the long-term rating of the bonds, as is the default dependence between the two entities.⁷ The JDA approach recognizes the potential benefit of dual support and as such, transactions may achieve a long-term rating that is higher than either the obligor or the LOC bank. The range of long-term rating outcomes for transactions based on the JDA approach is generally 0 to 2 notches above the higher of the LOC provider's or obligor's long-term rating.

This annex outlines a general framework for determining the joint default long-term rating. Factors and variables, other than those contained here, may be considered by rating committee in the assignment of a JDA rating.

JDA Approach for LOC-Backed Transactions

The JDA approach for LOC backed transactions considers the long-term rating of the obligor⁸, the long-term rating of the LOC bank, the level of support of the LOC bank which is typically 100%, and the default dependence between the obligor and the LOC bank and the banking sector.

The framework for determination of default dependence takes into account the revenue overlap between the obligor and the bank and the financial/operational linkages between the two entities.⁹

An LOC-backed transaction rated based on the JDA approach may achieve a long-term rating that is 0 to 2 notches above the higher of the LOC bank's or the obligor's long-term rating.¹⁰ Appendix I displays a guideline for the rating outcomes based on the applicable determined default dependence.

We also review the transaction documents to determine if the structure and mechanics support the assignment of a rating based on the JDA approach.

The key determinants of the JDA rating for an LOC backed transaction are:

1. Standalone probability of default of the obligor and the LOC bank;
2. the default dependence between the obligor and the LOC bank; and
3. the structure of the transaction.

The following is a discussion of each factor.

1. Probability of Default of the Obligor and the LOC Provider

An important determinant of the JDA rating is the standalone risk of the obligor and the LOC provider. These risks are represented by the individual probability of default of the obligor and LOC bank. We utilize the 4-year global idealized default rate table in our rating assessments of transactions rated based on the

⁷ When a LOC-backed transaction is a variable rate demand bond, the short-term rating assigned to the bonds is based on the short-term rating of the LOC bank.

⁸ The obligor in a LOC-backed transaction is typically a municipality, corporation or non-profit organization.

⁹ Additional factors may be reviewed in transactions with obligors or LOC banks rated below investment grade (Baa3).

¹⁰ The long-term rating based on the JDA approach will not be lower than the higher of the LOC bank's or obligor's long-term rating.

JDA approach. These default rates correspond to the global scale ratings assigned to the entities and are consistent with those used in the application of the JDA rating approach in other sectors.

2. Default Dependence¹¹

Default dependence reflects both the degree to which an obligor's and the letter of credit provider's credit profiles share common risk factors, and the tendency of the entities to be jointly susceptible to adverse circumstances that simultaneously move them closer to default. Rating outcomes and default dependence are generally inversely related; generally, the lower the default dependence, the higher the potential outcome for the long-term rating.

In determining default dependence, we assess the linkages between the obligor and the LOC bank and the broader banking sector. Default dependence is scored on a scale of low, moderate, high or very high with corresponding quantitative values of 30%, 50%, 70% and 90%, respectively. The assigned default dependence value corresponds to the higher score of factors A(revenue overlap) and B(financial/operational linkages), as discussed below.

(A) REVENUE OVERLAP OF OBLIGOR AND LOC BANK

In determining default dependence, we consider the extent to which the obligor and LOC bank derive their revenues from the same geographic area, market base, or sources. This factor is scored on a low, moderate, high and very high scale. As the banks currently operating in the LOC provider market are relatively large and diversified with limited exposure to any specific U.S. public finance or corporate sector or any geographic area, we expect that this factor will be scored 'low' for most obligors and LOC banks. For example, when assessing the revenue overlap between a large national bank and a regional health care provider, we may assign a "low" score for this factor due to the generally unrelated revenue drivers for health care and banking sector firms as well as the differences in geographic markets served.

(B) FINANCIAL/OPERATIONAL LINKAGES BETWEEN THE OBLIGOR & BANKING SECTOR

As a proxy for an obligor's exposure to the banking sector, we will review the obligor's level of bank-supported and bank-owned variable rate debt. This factor is scored on a low, moderate and high scale. Obligor with high levels of bank-supported variable rate debt are exposed to both the specific banks

that provide credit and/or liquidity support on their variable rate debt, as well as to banking industry changes or stresses. Banking industry changes or stresses can result in increased debt service costs on variable rate debt and higher costs on or difficulty in obtaining credit and/or liquidity facilities.

Bank-supported variable rate debt introduces risks to obligors not typically present in traditional fixed rate debt. These risks include renewal or rollover risk associated with credit and/or liquidity facilities, restrictive covenants, or rating triggers under credit or liquidity agreements. An obligor with bank-supported variable rate debt also faces the possibility of significantly shorter repayment terms than the typical 20 to 30 year term of the bonds. This would be the case if its variable rate bonds are tendered and purchased by the bank as 'bank bonds' because they are unable to be remarketed. The failure to remarket bonds may be due to issues unrelated to the obligor, but rather due to credit concerns related to the bank providing the credit and/or liquidity support. The accelerated repayment of bank bonds could result in liquidity and/or credit pressure on the obligor and increase the probability of it defaulting on its debt.

¹¹ The default dependence framework detailed in this annex is applicable when the LOC provider is a bank. The factors used in the default dependence analysis when a non-bank entity is the LOC provider will be determined on a case by case basis by rating committees.

Conversely, credit issues of obligors could result in pressure on LOC banks. Investors' perceptions about credit concerns in the municipal sector could lead to a large volume of bonds being put back to the LOC banks for purchase. At the same time, LOC banks may be experiencing financial stress of their own resulting from the same fundamental factors that are driving the credit concerns in the municipal sector. Widespread puts could exert or exacerbate financial stress on the LOC banks and may increase the likelihood that the LOC banks will need external support to avoid payment defaults on their debts and obligations, including funding commitments under their letters of credit.

Absent any mitigating factors, we generally consider obligors with bank-supported variable rate debt in excess of 50% of their debt outstanding as having 'high' financial/operational linkages with the banking sector. Those obligors with less than or equal to 20% bank-supported variable debt would be viewed as having a 'low' linkage.

Factors that may mitigate the risks associated with exposure to the banking sector through variable rate debt include (i) a high level of available liquid resources and (ii) the obligor's ability to access the capital markets.

i. AVAILABILITY OF LIQUID RESOURCES

Obligor with available liquid resources equal to or greater than their bank-supported variable rate debt are less susceptible to the financial stresses that may arise with variable rate debt. For example, an obligor with 125% available liquid resources to bank-supported variable rate debt is expected to be well-equipped to handle an accelerated repayment of bank bonds. Conversely, an obligor with only 50% available liquid resources to bank supported variable rate debt could face financial pressure if its bonds were to become bank bonds.

All else being equal, obligors with higher levels of available liquid resources relative to their total bank-supported variable rate debt would have a lower default dependence than obligors with weaker own-source liquidity positions. We will assume a low level of default dependence if an obligor's available liquid resources are greater than their total bank supported puttable variable rate debt.

ii. ABILITY TO ACCESS THE CAPITAL MARKETS

Higher-rated obligors are more likely to have adequate credit strength to absorb the risks associated with variable rate debt. They are also expected to be well-positioned to access the capital markets in a timely fashion, if needed, to repay accelerated bank obligations. Generally, we would consider obligors rated A2 or higher to have a lower default dependence than obligors whose ability to access the market when needed is more uncertain.

(C) DEFAULT DEPENDENCE SCORING

The default dependence score will be the higher of factor A (revenue overlap) and factor B (financial/operational linkages).

With respect to factor B, if an obligor's available liquid resources exceed its variable rate debt, we will score factor B low. If available liquid resources are less than an obligor's variable rate debt, we will then assess an obligor's ability to access the capital markets, if needed, to alleviate the financial pressure resulting from accelerated LOC bank repayment obligations. If we determine the obligor is likely to have market access, we will reduce the score resulting from the variable rate debt/total debt calculation by one category to determine the score for factor B.

Exhibit 2 illustrates the process for determining default dependence for a municipal market obligor under the various circumstances detailed in Exhibit 1. In this example, the obligor's high percentage of bank supported variable rate debt is used as a starting point and then the mitigants (available liquid resources relative to the bank supported puttable variable rate debt or our opinion regarding an issuer's ability to access the market) are considered. The result of evaluating these elements leads to a low, moderate or high default dependence score for Factor B. As mentioned previously, we expect that factor A (revenue overlap) will be low for most transactions. Exhibit 3 details the default dependence outcomes based on the factor A and B scores.

EXHIBIT 1

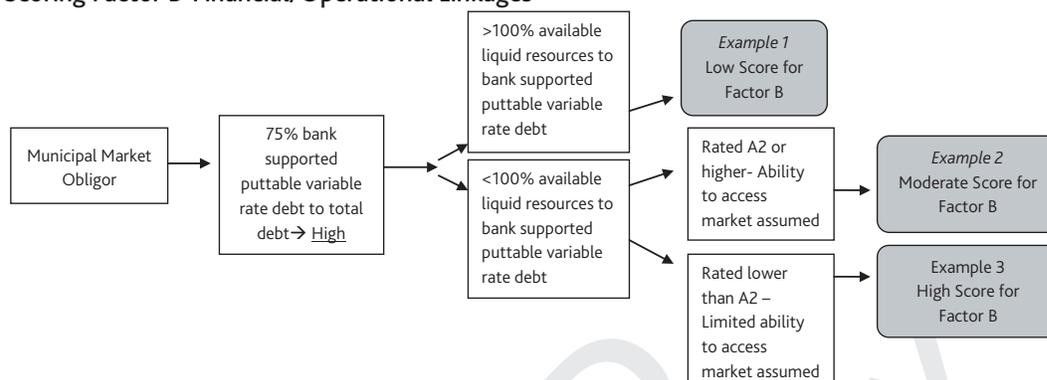
Evaluating Factor B – Financial/Operational Linkage

Default Dependence Factors and Mitigants	Example 1	Example 2	Example 3
Obligor Rating	A1	Aa2	A3
Factor: Bank Supported Puttable Variable Rate Debt/Total Debt	75%	75%	75%
Mitigant: Available Liquid Resources / Bank Supported Puttable Variable Rate Debt	150%	65%	50%
Mitigant: Credit Given for Market Access	Yes	Yes	No

OUTDATED
METHODOLOGY

EXHIBIT 2

Scoring Factor B-Financial/Operational Linkages



Source:

EXHIBIT 3

Default Dependence Outcomes

	Example 1	Example 2	Example 3
Factor A Score (Revenue Overlap)	Low	Low	Low
Factor B Score (Financial/Operational Linkages)	Low	Moderate	High
Default Dependence → (higher of factor A & B)	Low	Moderate	High

The dependence level generated by this approach acts as a reference point for rating committees decisions in applying JDA for the letter of credit-backed transactions.

3. Adequate Structure and Mechanics

We analyze the transaction documents to confirm that the obligor is responsible for making debt service payments when due or upon the LOC bank's failure to honor a conforming draw to ensure timely payment of principal and interest to bondholders.

Transactions have two general types of payment arrangements to facilitate timely payment:

A. AUTOMATIC TRANSFER OF FUNDS FROM OBLIGOR TO TRUSTEE

In the first, the obligor is unconditionally responsible to provide payment in full of principal and interest when due. The mechanics of this type of arrangement is the most straightforward. The bond documents (The Indenture, Trust Agreement or Resolution and the Loan or Lease Agreement) obligate the obligor to deposit funds with the trustee¹² sufficient to cover bond debt service payments prior to the time such payments are due. The funds are therefore immediately available to the trustee if needed and no further action is required by the obligor or trustee to provide for such funds.

B. TRANSFER OF FUNDS FROM OBLIGOR UPON TRUSTEE'S REQUEST

The second type of payment arrangement directs the obligor to make debt service payments to the trustee if and to the extent the LOC provider fails to honor a draw on the letter of credit. In certain structures, the obligor may receive a credit toward payment obligations based on the LOC bank's obligation to pay. In such structures, we review the governing bond document to determine that the timing of payment by the bank for a draw on the letter of credit allows sufficient time for the trustee to give notice to the obligor if the

¹² The term "trustee" is used generally to denote the fiduciary that is the beneficiary of the credit support facility. The beneficiary may also be termed the tender agent, paying agent, or fiscal agent.

LOC bank should fail to honor such draw and time for the obligor to deliver funds to the trustee to make debt service payments.

In addition to the structural, legal and mechanical issues discussed above, there are other important elements considered when applying the global JDA approach:

When assigning a rating based on the JDA approach, we would not expect the failure of the bank to honor a conforming principal or interest draw or the LOC bank's insolvency to lead to acceleration of the maturity or the redemption of the bonds. This is because the obligor may not have sufficient liquid funds to pay full principal and interest on bonds upon acceleration or redemption on a same day basis without prior knowledge;

The provisions detailed in the Credit Substitution Methodology are applicable to transactions rated based on this Global JDA approach for LOC backed transactions. A discussion of structural, legal and mechanical issues relating to draw mechanics, LOC reinstatement and sizing provisions, additional bonds and partial conversions, LOC termination considerations and legal opinions can be found in the Credit Substitution Methodology.

Confirming LOC Transactions

In a confirming structure, a confirming letter of credit (CLOC) provider is obligated to pay bondholders in the event the provider of the underlying letter of credit (LOC) fails to make principal, interest, or purchase price payments when due. In transactions where both the LOC and CLOC providers are rated by Moody's, we have assumed a very high default dependence between the entities as the banks are in the same sector, share similar risk factors and are likely to be similarly adversely impacted in unfavorable economic environments. Under this structure, in the absence of preference risk relating to the LOC bank making debt service payments to bondholders, the rating on the bonds will reflect the higher of the LOC or CLOC provider's long-term rating. For more information on confirming letters of credit, please see Annex B to this publication.

Risks when LOC Bank Is a State-Chartered or Foreign Bank

Special issues may arise when the LOC provider is a state-chartered or foreign bank. It is possible that LOC payments made by state chartered and foreign banks may be subject to recovery as a preference upon the insolvency of the bank under applicable state or foreign law.¹³ In these transactions, obligor monies as the

second source of payment are utilized to pay bondholders if the LOC bank fails to honor a draw or repudiates its obligations under the LOC. If the LOC bank does honor a draw and the payment is subsequently recovered, bondholders will not necessarily be made "whole" as the obligor is not typically obligated to make a payment to bondholders once the LOC bank has paid bondholders. Because, in this theoretically possible situation, the bondholder is exposed to the credit risk of the LOC bank and may not receive additional support from the obligor, we may assign a rating lower than the JDA approach would otherwise imply, but no lower than the long-term rating on the LOC bank.

To determine whether preference or similar risks exist in a LOC transaction, we may ask to review a legal opinion outlining the circumstances under which LOC payments may be subject to recovery under the applicable state or foreign law. If recovery of LOC payments is not permissible under the laws applicable to the LOC provider, then preference risk will not be a factor in the application of the JDA methodology.

¹³ Federal law governing nationally chartered U.S banks and savings and loan associations, which are Federal Deposit Insurance Corporation ("FDIC") insured, allow conservators or receivers of insolvent banks to disgorge funds the bank has paid, if a preference is deemed to have existed. However, based on an Advisory opinion provided by the FDIC, dated January 11, 1991, we believe this risk is extremely remote.

Appendix I – Guideline JDA Rating Outcomes By Default Dependence Level

Low Default Dependence

Rating of the Higher- Rated Party:

	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C
Aaa	Aaa																				
Aa1	Aaa	Aa1																			
Aa2	Aaa	Aa1	Aa1																		
Aa3	Aaa	Aa1	Aa1	Aa1																	
A1	Aaa	Aa1	Aa1	Aa1	Aa2																
A2	Aaa	Aa1	Aa1	Aa1	Aa2	Aa3															
A3	Aaa	Aa1	Aa1	Aa1	Aa2	Aa3	A1														
Baa1	Aaa	Aa1	Aa1	Aa1	Aa2	Aa3	A1	A1													
Baa2	Aaa	Aa1	Aa1	Aa1	Aa2	Aa3	A1	A2	A2												
Baa3	Aaa	Aa1	Aa1	Aa2	Aa2	Aa3	A1	A2	A2	Baa1											
Ba1	Aaa	Aa1	Aa1	Aa2	Aa2	Aa3	A1	A2	A2	Baa1	Baa2										
Ba2	Aaa	Aa1	Aa1	Aa2	Aa2	Aa3	A1	A2	A2	Baa1	Baa2	Baa3									
Ba3	Aaa	Aa1	Aa1	Aa2	Aa3	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1								
B1	Aaa	Aa1	Aa1	Aa2	Aa3	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2							
B2	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A1	A2	A3	Baa2	Baa3	Baa3	Ba1	Ba2	Ba2						
B3	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A1	A2	A3	Baa2	Baa3	Ba1	Ba1	Ba2	Ba3	Ba3					
Caa1	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A2	A3	A3	Baa2	Baa3	Ba1	Ba1	Ba2	Ba3	B1	B2				
Caa2	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	Ba3	B1	B2	B3			
Caa3	Aaa	Aa1	Aa2	Aa3	A1	A2	A2	A3	Baa1	Baa3	Ba1	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2		
Ca	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	
C	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C

Moderate Default Dependence

Rating of the Higher- Rated Party:

	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	
Aaa	Aaa																					
Aa1	Aaa	Aa1																				
Aa2	Aaa	Aa1	Aa1																			
Aa3	Aaa	Aa1	Aa1	Aa2																		
A1	Aaa	Aa1	Aa1	Aa2	Aa3																	
A2	Aaa	Aa1	Aa1	Aa2	Aa3	A1																
A3	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A2															
Baa1	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A2	A2														
Baa2	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A2	A2	A3													
Baa3	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A2	A2	A3	Baa2												
Ba1	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A2	A3	A3	Baa2	Baa3											
Ba2	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A2	A3	A3	Baa2	Baa3	Ba1										
Ba3	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A2	A3	A3	Baa2	Baa3	Ba1	Ba2									
B1	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba2								
B2	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	Ba3							
B3	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	Ba3	B1						
Caa1	Aaa	Aa1	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3					
Caa2	Aaa	Aa1	Aa2	Aa3	Aa3	A1	A2	A3	Baa1	Baa3	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1				
Caa3	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa1	Baa3	Ba1	Ba2	Ba2	Ba3	B1	B2	B3	Caa1	Caa3			
Ca	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca		
C	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	

High Default Dependence

Rating of the Higher- Rated Party:

	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	
Aaa	Aaa																					
Aa1	Aaa	Aa1																				
Aa2	Aaa	Aa1	Aa2																			
Aa3	Aaa	Aa1	Aa2	Aa3																		
A1	Aaa	Aa1	Aa2	Aa3	Aa3																	
A2	Aaa	Aa1	Aa2	Aa3	Aa3	A1																
A3	Aaa	Aa1	Aa2	Aa3	Aa3	A1	A2															
Baa1	Aaa	Aa1	Aa2	Aa3	Aa3	A1	A2	A3														
Baa2	Aaa	Aa1	Aa2	Aa3	Aa3	A1	A2	A3	Baa1													
Baa3	Aaa	Aa1	Aa2	Aa3	Aa3	A1	A2	A3	Baa1	Baa2												
Ba1	Aaa	Aa1	Aa2	Aa3	Aa3	A1	A2	A3	Baa1	Baa3	Baa3											
Ba2	Aaa	Aa1	Aa2	Aa3	Aa3	A1	A2	A3	Baa1	Baa3	Baa3	Ba1										
Ba3	Aaa	Aa1	Aa2	Aa3	Aa3	A1	A2	A3	Baa1	Baa3	Baa3	Ba1	Ba2									
B1	Aaa	Aa1	Aa2	Aa3	A1	A2	A2	A3	Baa1	Baa3	Baa3	Ba1	Ba2	Ba3								
B2	Aaa	Aa1	Aa2	Aa3	A1	A2	A2	A3	Baa1	Baa3	Ba1	Ba1	Ba2	Ba3	B1							
B3	Aaa	Aa1	Aa2	Aa3	A1	A2	A2	A3	Baa1	Baa3	Ba1	Ba1	Ba2	Ba3	B1	B2						
Caa1	Aaa	Aa1	Aa2	Aa3	A1	A2	A2	A3	Baa1	Baa3	Ba1	Ba2	Ba2	Ba3	B1	B2	B3					
Caa2	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa1	Baa3	Ba1	Ba2	Ba2	Ba3	B1	B2	B3	Caa1				
Caa3	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3			
Ca	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca		
C	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C	

Very High Default Dependence

Rating of the Higher- Rated Party:

	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C
Aaa	Aaa																				
Aa1	Aaa	Aa1																			
Aa2	Aaa	Aa1	Aa2																		
Aa3	Aaa	Aa1	Aa2	Aa3																	
A1	Aaa	Aa1	Aa2	Aa3	A1																
A2	Aaa	Aa1	Aa2	Aa3	A1	A2															
A3	Aaa	Aa1	Aa2	Aa3	A1	A2	A3														
Baa1	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1													
Baa2	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2												
Baa3	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3											
Ba1	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1										
Ba2	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2									
Ba3	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3								
B1	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1							
B2	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2						
B3	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3					
Caa1	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1				
Caa2	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2			
Caa3	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3		
Ca	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	
C	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1	Ba2	Ba3	B1	B2	B3	Caa1	Caa2	Caa3	Ca	C

Annex B: Confirming Letter of Credit Transactions

Summary

There are many types of credit support instruments utilized by municipalities, not-for-profit entities and corporations which serve to provide credit substitution for their debt. One form of credit support is to utilize a letter of credit.

A variation on the letter of credit structure is the use of a confirming letter of credit. In this transaction structure, there is an underlying letter of credit which is to be drawn upon for all debt service payments (principal, interest and purchase price, if applicable). If the underlying letter of credit does not make payment for any reason, the confirming letter of credit (or 'confirmation') is available to be drawn upon to make such payment. The confirming letter of credit provider is obligated to make debt service payments should the underlying letter of credit provider fail to do so. The use of a properly structured confirming letter of credit transaction can result in the rating of the confirming bank being applied to the bonds.

Borrowers may consider a confirming letter of credit structure when they want to maintain an existing relationship with a bank that is either unrated or has a rating which would not result in the desired market pricing on the bonds to be issued. By adding a confirming letter of credit, in addition to an underlying letter of credit, the borrower may be able to achieve more favorable pricing due to the substitution of the confirming letter of credit provider's rating for that of the underlying bank. Confirming letters of credit can also be added to an existing letter of credit transaction after initial issuance to provide additional support.

While our rating approach for confirming letter of credit structures is similar to that of letter of credit transactions, confirming letter of credit structures have additional mechanical and legal issues that must be considered. In this report, we outline our analytic approach to rating debt securities with a confirming letter of credit based on the credit substitution methodology.

Structural Provisions are Critical to the Value of a Confirming LOC

Stand Alone Obligation

A confirmation should act as a stand-alone credit obligation that would provide credit support in the event the beneficiary (usually the trustee) is required to draw upon it. We will review a confirmation to ensure that it will be available to be drawn upon if the underlying letter of credit has not honored a conforming draw request or is otherwise unavailable for payment. Provisions that make it possible for investors to rely on a confirming letter of credit for timely payment include:

- » a statement that the confirmation is irrevocable,
- » clear draw mechanics for the beneficiary to follow,
- » a statement that all payments will be made with the bank's own funds,
- » an adequate commitment sized to cover full and timely payment on the bonds,
- » draw certificates specific to the confirmation,
- » provisions for reinstatement, and
- » provisions for termination.

The structural provisions that we evaluate in a standard letter of credit financing will also be evaluated for a confirming letter of credit transaction. These provisions include:

- » draw mechanics,
- » reinstatement,
- » sizing considerations,
- » termination,
- » expiration; and
- » substitution

Draw Mechanics

Draw mechanics included in the governing bond document are more complicated in a confirming letter of credit structure than in a standard letter of credit structure. The beneficiary must be able to draw under two letters of credit (the underlying letter of credit and the confirmation) and ensure timely payment to bondholders. The timing issues are addressed by carefully structuring the draw and payment times under both letters of credit as well as having specific instructions for the beneficiary to follow in the bond documents. Typically, the beneficiary will have to draw on the underlying letter of credit the business day prior to any interest, principal or purchase price payment date. This allows for the draw on the confirmation to occur on the bond payment date should the underlying letter of credit fail to pay.

Reinstatement Provisions

In some transactions, the confirmation can only be drawn upon once while in others, the confirmation can be drawn upon repeatedly if reinstated. In the circumstances in which the confirmation allows for multiple draws, it may reinstate immediately following a draw or after a set period of time unless the beneficiary has received notice from the confirming letter of credit bank of nonreinstatement. Similarly, the underlying letter of credit will also contain language indicating whether it reinstates immediately or after a set period of time unless a notice is received from the bank stating otherwise. The bond documents provide for a final payment for the bonds (mandatory tender, redemption or acceleration) following such notice of nonreinstatement from the underlying bank or the confirming letter of credit bank.

Alternatively, some confirmations provide for only a single draw equal to the entire amount of the bonds (par plus accrued interest). When this type of confirmation structure is used, a final payment for all of the bonds is structured into the bond documents in the event the confirmation must be drawn upon.

Sizing Considerations

Moody's will calculate the appropriate size of the interest component separately for the underlying letter of credit and the confirming letter of credit. If the confirmation reinstates after a set period of time following a draw (unless a notice of non-reinstatement is received by the beneficiary), this period of time between the draw and when the notice may be received will be included in sizing the interest component of the confirmation. Typically, both letters of credit in a confirming structure reinstate after a similar time period but that is not always the case. In instances in which the underlying letter of credit and the confirmation have different reinstatement periods, the interest coverage for each should be calculated using its own reinstatement period.

Other Termination Considerations

In addition to the takeout needed due to non-reinstatement of interest in the confirmation, there are other considerations if the confirming letter of credit bank can send any other type of notice resulting in a reduction or termination of the confirmation. For instance, the bond documents would contain a takeout if the confirming bank could send a notice that an event of default or termination had occurred under the confirmation agreement and such event would lead to the expiration or termination of the confirmation.

Other Structural Considerations

Similar to a traditional letter of credit transaction, many of the structural protections related to the underlying letter of credit must be applied to the confirmation. For example, a final payment or mandatory tender of the bonds is necessary prior to the expiration or substitution of the confirmation unless the documents provide for termination or substitution of the confirmation without final payment or mandatory tender if such termination or substitution will not result in a downgrade of the supported debt's ratings.

Risks when LOC Bank is a State-Chartered or Foreign Bank

Special issues may arise when the underlying LOC provider is a state-chartered or foreign bank. It is possible that LOC payments made by state chartered and foreign banks may be subject to recovery as a preference upon the insolvency of the bank under applicable state or foreign law.¹⁴ In these transactions, underlying LOC monies are generally utilized to pay bondholders but the rating of the bonds is based on the confirming LOC. If the underlying LOC bank honors a draw, becomes insolvent and the payment is subsequently recovered as a preference, bondholders will not necessarily be made "whole" as the confirming LOC bank is not typically obligated to make payments to bondholders that have already been made by the underlying LOC bank.

Moody's rates only confirming letter of credit transactions in which the underlying bank is a state chartered bank in a state where that avoidance risk does not exist. We will rely on an opinion of counsel for the bank or representation of the state banking department to advise us that there are no provisions for such avoidance. If counsel concludes that the avoidance risk does exist, this risk can sometimes be mitigated through structural provisions in the documents. For instance, some state laws have provisions similar to the original provisions of the National Bank Act that allow for the recovery of payments if there was inside knowledge of the bank's financial condition. For transactions using underlying banks from these states, there would need to be structural protections that prevent the trustee and the underlying bank from being the same entity for the duration of the transaction. In addition, in some instances counsel has concluded that the state law does provide for the ability to recover payments upon the bank's insolvency but has been assured by the state banking regulators that the recovery provisions were not intended to apply to letter of credit transactions. Under these circumstances, written assurance from the regulator would provide us comfort that underlying bank payments to bondholders would not be subject to recovery.

When a state chartered, FDIC insured bank becomes insolvent, the appropriate state regulator can appoint itself, or the FDIC, as the bank's receiver or conservator. In addition, the FDIC can appoint itself as receiver or conservator in certain instances. A receiver or conservator would be empowered to utilize any avoidance powers available under state law. Since the confirmation would not be sized with interest sufficient to cover any such accrued interest for the avoidance period, a risk would exist for bondholders.

If a U.S. bank is taken over by a receiver or conservator, obligations of the bank can be repudiated, including letters of credit. In the case of repudiation, the beneficiary must draw directly upon the confirmation as the

¹⁴ Federal law governing nationally chartered U.S. banks and savings and loan associations, which are Federal Deposit Insurance Corporation ("FDIC") insured, allow conservators or receivers of insolvent banks to claw back funds the bank has paid, if a preference is deemed to have existed. However, based on an Advisory opinion provided by the FDIC, dated January 11, 1991, we believe this risk is extremely remote.

underlying letter of credit is no longer available to be drawn upon. In the instance where the confirmation allows only one draw, the bonds must be paid in full (mandatory tender, redemption or acceleration) from a direct draw under the confirmation. The confirmation should not contain a provision requiring a draw to be made on the underlying letter of credit prior to a draw being made on the confirmation. Also, the confirmation cannot require a copy of the dishonored sight draft be delivered as a condition to the draw since no draw can be made on the repudiated underlying letter of credit.

Foreign Banks

When a foreign bank is the provider of the underlying letter of credit, we consider the insolvency laws, in its country of origin, available to the bank. If the laws of a particular country are unfamiliar to us, we will request information from foreign counsel that outlines the insolvency laws available to the bank.

OUTDATED
METHODOLOGY

Annex C: Direct Pay Letter of Credit Transactions Involving Moody's Rated Issuers

Summary

In this annex we discuss our approach to assigning ratings to LOC backed debt with rated issuers and determining whether the rating should be the “higher of” the issuer and letter of credit (“LOC”) provider. In most cases these transactions will be rated based on a joint default analysis which can result in a rating higher than that of either the support provider or the underlying obligation. In some instances in which it is not possible to apply JDA it is possible to rate a transaction based on the higher of the support provider's rating and the rating of the underlying obligation. However, certain structural and legal issues that relate to direct-pay letter of credit transactions may preclude the assignment of the “higher of” rating to these types of transactions.

In a direct-pay LOC transaction the funds from the LOC are the first source of payment for regularly scheduled debt service. The issuer is also obligated to pay principal and interest on the debt. The issuer's funds are utilized to either reimburse the LOC bank for drawn amounts or to make payment if the LOC provider fails to make payment.

Our approach to assigning a “higher of” rating to these transactions, takes into consideration certain possible risks the direct pay LOC structure introduces, such as preference risk and transaction payment mechanics. If there is a risk that payments made by the LOC provider could be recovered as a preference in the case of insolvency of the bank or the transaction's payment mechanics do not support the timely payment of debt service to bondholders by the issuer, the LOC provider's rating will be assigned to the transaction rather than the 'higher of' the LOC provider and the issuer's ratings. The rationale behind this approach is that the assigned rating is intended to reflect the risk of (i) non-payment to bondholders; or (ii) the recovery from bondholders of any previously made debt service payments.

Assessing Which Long-Term Rating Will Apply to the Direct-Pay LOC-Backed Transaction

When an LOC is used to “wrap” a transaction, the letter of credit is typically a direct pay obligation which is used as the first source of payment on the bonds. In this case, the priority of payments for regularly scheduled principal and interest payments are; (i) monies received from a draw on the letter of credit and (ii) debt service payments made by the issuer. The long-term rating assigned to the bonds when an LOC wraps a bond depends upon:

- » the presence of our public ratings on the LOC provider and the issuer;
- » whether payments made by the LOC provider could be recovered due to the bank's insolvency or receivership; and
- » the payment mechanics in the transaction.

For a more detailed discussion of preference risk relating to insolvency of a support provider please see Annex B to this publication (Confirming Letter of Credit Transactions)

Risk of Recovery of LOC Payments

When there is the possibility of recovery of LOC payments from bondholders and the risk cannot be isolated, the long-term rating assigned to the transaction will be the same as that of the long-term deposit obligation rating or 'other senior obligation' rating, as applicable, of the bank providing the LOC.

Transaction Payment Mechanics

If the preference risk of the LOC provider can be mitigated, we will review the transaction's payment mechanics to determine if the fiduciary is instructed to use the issuer's payments to make timely payment to bondholders in the event that the LOC provider fails to provide funds to make a debt service payment. When these mechanics are clearly outlined in the transaction documents, the 'higher of' rating will be assigned. In some circumstances, however, the transaction documents may assume that the LOC provider has honored a draw for payment and direct the fiduciary to use the issuer's funds to reimburse the LOC provider. In this instance, the payment mechanics of the transaction could preclude the use of the "higher of" approach and result in a rating assigned to the bonds equivalent to the long-term deposit obligation rating or 'other senior obligation' rating, as appropriate, of the bank providing the LOC.

OUTDATED
METHODOLOGY

Annex D: Special Rating Considerations when Layering a Letter of Credit on Top of an Existing Bond Insurance Policy

Summary

We have seen a number of restructurings of variable rate debt that have added a direct pay letter of credit on top of an existing bond insurance policy due to the downgrade of certain financial guarantors. This annex addresses the special considerations that arise when both an insurance policy and an LOC support a transaction.

Some of the risks these structures introduce, such as preference risk or that certain payments are covered only by the LOC and not the financial guarantor, will result in our assigning the LOC bank's rating to the transaction rather than the 'highest of' rating among the bank, the financial guarantor, and the obligor.

Assessing Which Long-Term Rating Will Apply to the Variable Rate Demand Obligation (VRDO)

When an LOC is used to "wrap" an insured transaction, the letter of credit is typically a direct pay obligation which is used as the first source of payment on the bonds. In this case, the priority of payments for regularly scheduled principal and interest payments are; (1) monies received from a draw on the letter of credit, (2) debt service payments made by the borrower; and (3) payments made by the bond insurer. As with any LOC-backed transaction, we review the transaction documents and assesses the transaction against our Credit Substitution Methodology for rating these types of securities.

The long-term rating assigned to the bonds when an LOC wraps a previously insured bond depends upon:

- (1) whether payments made by the LOC bank could be recovered due to the bank's insolvency or receivership;
- (2) if there are any principal or interest payments that would not be paid on the date of payment by the insurer, the bank or the borrower; and (3) the presence of public ratings on each of the insurer, bank and the borrower.

Risks when the LOC-bank is a State Chartered or Foreign Bank

LOC payments made by state chartered and foreign banks may be subject to recovery upon the insolvency of the bank under applicable state or foreign law. If the risk of recovery of a previously made bond payment exists upon the insolvency of the bank, bondholders are exposed to the credit risk of the bank. In this situation, we assign the LOC bank's rating to the transaction even if the insurer's or borrower's rating is higher.

To determine whether the risk exists that LOC payments are subject to recovery, we will ask for a legal opinion outlining if, and when, LOC payments may be subject to recovery under the applicable state or foreign law. When recovery of LOC payments is not a possibility or when the circumstances that would render a payment recoverable can be isolated, it is possible that the highest applicable public rating of the bank, borrower or insurer may be applied to the transaction.

When there is the possibility of recovery of LOC-payments, the long-term rating assigned to the transaction will be the same as that of the long-term deposit obligation (or 'other senior obligation') of the bank providing the LOC.¹⁵

Risk of Recovery of LOC-Payments Mitigated When LOC-Bank is a National Bank

If the letter of credit bank is a nationally chartered, domestic bank, we believe the possibility of recovery of bank payments made under the letter of credit upon the insolvency is extremely unlikely.

Based on this assumption, when a direct pay LOC from a national bank wraps an insured transaction, the long-term rating assigned will reflect the highest applicable public rating of the insurer, the bank and the borrower, provided that all payments of principal and interest are due from or supported by each of the parties on the payment date.

Principal and Interest Payments Should be Made When Due by All Parties When the 'Highest of' Analysis is Applied

For Moody's to assign the 'highest of' the applicable insurer, bank and borrower rating to the long-term rating of the VRDO, we expect all payments of principal and interest to be due from or fully supported by each of the parties on the payment date.

Typical bond insurance policies cover payments of regularly scheduled principal and interest as well as sinking fund payments. Most bond insurance policies do not cover other mandatory redemption payments or accelerated payments. Therefore, if the bond documents provide for a mandatory redemption (i.e. for an event of taxability or any other event) of the bonds, then the rating of the bond insurer would not be reflected in the long-term rating assigned to the VRDO.

Additionally, bond structures involving LOC support typically provide provisions that enable the bank to effect certain actions, such as redemption, tender or acceleration of the bonds, following an event of default under the reimbursement agreement or upon its election to not reinstate the interest component under the LOC. However, in insured transactions, acceleration of the bonds can usually only occur with the bond insurer's consent. Since this consent is required prior to acceleration of the bonds and failure to give such consent, which is discretionary, could result in the termination or insufficiency of the LOC to support the bonds, we do not believe that the use of acceleration as a remedy by the LOC bank would be consistent with our approach to rating LOC backed bonds.

There are transactions in which the acceleration of the bonds could occur without the bond insurer's consent. However, in these circumstances the documents specifically stated that the insurer would not be obligated to make any accelerated payments. This structure does not, in our view, support the factoring of the insurer's rating into the assessment of the applicable rating on the bonds, since the rating speaks to the likelihood of full and timely payment in all scenarios permitted under the financing documents. Similarly, if the bank's notice of non-reinstatement or notice of default under the reimbursement agreement was to result in a mandatory redemption of the bonds, we would not incorporate the bond insurer's rating into the long-term rating assigned to the bonds since the insurer would not be responsible for timely payment of this redemption.

¹⁵ For illustrative purposes we have not addressed the application of the joint default analysis. For further information on this approach, please see Annex A

Annex E: Key Characteristics of Strong Guarantee Agreements

The following summarizes the types of provisions in guarantees that would support complete credit substitution absent other incentives for a supporting entity to provide support. This list is intended to describe the principles-based approach that we use globally to evaluate credit substitution. However, if a guarantor or other supporting entity has incentives to provide support irrespective of an explicit guarantee, not all of the provisions summarized here are necessarily required for the provision of complete credit substitution.¹⁶ The list of provisions is not intended to be an exhaustive list of industry, transaction type, asset class or jurisdiction-specific features that must be present as a matter of law or market practice for credit substitution. Rating teams interpret these principles in the context of individual transactions. They assess the extent to which the terms of a guarantee satisfy these principles, as well as the relative importance of the risks addressed by the principles. In some transactions credit substitution depends solely on the guarantee. In other transactions, such as where a rating on the underlying instrument is possible, other structural and contractual features may be considered to establish the extent to which an uplift from the rating of the underlying issuer or instrument is justified.

1. **The guarantee states that it is irrevocable and unconditional.**¹⁷ In our view, a guarantee that is offered as a substitute of the guarantor's rating for that of an unrated participant (or one with a lower rating than the guarantor) would create an irrevocable and unconditional obligation to pay or perform on the part of the guarantor. In such case, the guarantee functions in a similar fashion to any other third-party demand instrument, such as a letter of credit or bond insurance policy, where the credit enhancer must simply pay on demand without recourse to any defenses, including fraud in the underlying transaction. The guarantee directly benefits the intended beneficiaries of the guaranteed obligation and their fiduciary in the specific transaction – for example, the trustee and the bondholders in a securitization or any other bond issuance where the rights of the bondholders are effectively held on trust or by an agent. Unless the agreement states that there is joint and several liability among multiple guarantors, or the applicable law provides for this in any event, we will look for contractual allocation of this liability amongst the guarantors.
2. **The guarantee promises full and timely payment of the underlying obligation.** We analyze the timing of payment specified by the terms of both the underlying obligation and the guarantee, with a normal expectation that the guarantee will provide for payment on the due date of the guaranteed obligation. Our rating of the guarantor represents our assessment of its ability to meet its own obligations. To assign this rating to a guaranteed obligation solely on the basis of the guarantee, we must be able to view the risk of payment not being made on the due date as not being materially different than the risk of the guarantor meeting its own obligations.

A guarantee that achieves credit substitution also covers the full amount of the principal and interest due on the debt obligation as well as any other amounts that are contractually owed to noteholders, such as a redemption premium or penalty interest. In addition, there should be no material additional costs to the noteholder as a result of relying on the guarantee that are not otherwise covered or alleviated by the transaction structure. For example, payments may need to be grossed-up for taxes or

¹⁶ Undertakings under financial guarantor policies that meet established industry standards qualify for credit substitution despite some deficiencies relative to a third-party guarantee that satisfies all the core principles described in this report. For example, financial guarantor policies typically do not cover amounts other than interest and principal (such as make-whole or redemption premia, acceleration payments or penalty interest), expressly reserve to the guarantors a right to be subrogated and/or counter-indemnified, and may allow a one-day grace period for payment. These long-standing features are intended to preserve ongoing payments to bondholders as originally scheduled and are well-known and accepted by investors in this space.

¹⁷ We note that under English law, language stating that the guarantee is "irrevocable and unconditional" is extremely common but may not be necessary, provided that all the applicable grounds on which a guarantor can avoid or limit liability are otherwise expressly addressed and waived in satisfaction of our remaining principles.

other regulatory costs if the terms of the underlying transaction promise to reimburse investors for these costs.

3. **The guarantee covers payment – not merely collection.** Guarantees of collection require that the creditor first exhaust all judicial remedies against the principal obligor before demanding payment from the guarantor. Such guarantees do not provide credit substitution; they merely provide a possible recovery at the end of two litigations (first against the principal obligor, then against the guarantor). Guarantees of payment, in contrast, require the guarantor to pay upon demand from a beneficiary or automatically pay when payment becomes contractually due according to the terms of the underlying obligation. The beneficiary does not have to first demand payment from the principal obligor, nor does the beneficiary have to take any action against the principal obligor in order for liability to arise on the part of the guarantor. We expect a guarantee offered for credit substitution to explicitly state that the guarantee is one of payment and not of collection, or to contain functionally equivalent language.¹⁸ We also critically assesses any other procedural impediments contained in the guarantee that could have the practical effect of converting the guarantee promise into one of collection, or that could, in any way, delay the payment of the debt obligation when due.
4. **The guarantee covers preference payments, fraudulent conveyance charges, or other payments that have been rescinded, repudiated, or “clawed back.”** A guarantee that achieves credit substitution covers any payment from the principal obligor that a court rescinds, sets aside, or requires noteholders to give back, either as a result of the principal obligor’s bankruptcy or otherwise. While claw-back or disgorgement most typically occurs as the result of a judicial order from a bankruptcy court, a regulatory agency or court appointed official will sometimes have similar statutory powers.

Under the insolvency rules of most jurisdictions, payments by a borrower that meet certain tests can be clawed back.¹⁹ For example, in many jurisdictions the bankruptcy estate is entitled to recover payments made by the company during the period up to the onset of bankruptcy or after it has formally entered proceedings. To eliminate this and similar risks, a guarantee should provide for the guarantor’s continuing or reinstated liability under the guarantee in the event that payments to creditors are required to be returned to the principal obligor’s bankruptcy estate.

5. **The guarantor waives all defenses.** As mentioned previously, a guarantor may be able to invoke various defenses to payment, either with the effect that its liability does not match the amount of the outstanding underlying principal obligation, or as justification for avoiding payment liability altogether. In its legal capacity as guarantor under the guarantee contract, the guarantor can raise what are sometimes called suretyship defenses. In addition, the guarantor may have the benefit of almost all the defenses available to the principal obligor under the guaranteed debt contract. Unless all these defenses have been expressly waived, collection from the guarantor could require complex fact-based litigation, thus increasing the risk that debt service payments may not be made on a timely basis.

In general, we view suretyship defenses as inconsistent with the purpose and function of a guarantee offered as credit substitution. It is therefore important that all suretyship defenses be explicitly waived. However, because suretyship defenses are specific to a guarantor, language merely stating that “all suretyship defenses are waived” may not be sufficient; courts in certain jurisdictions have required

¹⁸ Certain guarantees include performance obligations (such as the delivery of collateral or the provision of other services when required) in addition to payment obligations by the guarantor. These performance obligations should also be due upon demand of the guarantee beneficiary or when contractually due.

¹⁹ For example, “preference” payments under the U.S. Bankruptcy Code and both “preferences” and “transactions at an undervalue” under the insolvency regimes of England and Wales. Many other jurisdictions have similar concepts, particularly in relation to payments that are made to creditors with the intention of putting them in a better position relative to others of the same ranking.

specific waivers of particular suretyship defenses, or clear language encompassing all categories of legal effect.

Depending on the applicable law, suretyship defenses can include: (i) assertions of amendment, waivers or forbearance affecting the underlying agreement or collateral supporting the original transaction; (ii) the principal obligor's lack of authorization to enter into the underlying guaranteed agreement or the principal obligor's disability or bankruptcy; (iii) incomplete performance of the guaranteed contract; (iv) delay by the beneficiary in making a claim; (v) lack of complete disclosure of matters relevant to the guarantor; and (vii) failure to notify the guarantor.

If a guarantor pays a guaranteed obligation, general principles of surety law entitle the guarantor to collect reimbursement from the principal obligor and/or to be subrogated to the claims of the creditors against the principal obligor. To achieve credit substitution, in most cases the guarantor should have either waived, or the effect of the applicable law is to deny the guarantor, all such "rights of subrogation" and other claims until the underlying obligation has been paid in full. This avoids coincident lawsuits brought against the principal obligor whereby the guarantor is competing with beneficiaries for payment.²⁰

Suretyship defenses do not cover defenses that the principal obligor or guarantor could assert against its creditors, and which most jurisdictions allow the guarantor to in turn raise to a claim under a related guarantee – which can include set-off, counterclaim, recoupment, fraud, duress, failure of consideration, breach of representations and warranties or other agreements, payment, statute of frauds, statute of limitations, accord and satisfaction, failure to deliver notices, or usury. In addition to satisfactorily waiving all of its suretyship defenses, guarantees achieving credit substitution expressly waive all contractual and other defenses available to the guarantor on the basis that they are available to the principal obligor.

When a guarantee is silent about any of the defenses that either the guarantor may "borrow" in this way, a guarantor could conceivably assert these defenses. If successful, the guarantor can dispute and delay payment, or at worst, renounce its payment obligations altogether.²¹ As with surety defenses, "blanket" waivers of such defenses may not ensure enforceability of the waivers. Ideally, the principal obligor will also separately waive its own defenses, especially those of set-off, recoupment and counterclaim.

Guarantees that achieve credit substitution also state that action or inaction, including any non-performance or failure to satisfy any condition precedent by the guaranteed party (i.e., the principal obligor) does not affect the guarantor's obligations. In addition, guarantees that achieve credit substitution explicitly state that the guarantor remains obligated to pay even if the underlying contract is void, unenforceable, illegal, or has any other defect that prevents the beneficiary from obtaining payment.

²⁰ This waiver of subrogation is a market standard provision, and its absence raises uncertainty about the impact of potential competition between creditors and guarantor(s) on credit substitution. That said, we recognize that some instruments that take the form of guarantees, such as monoline insurance policies and their like, contain an express entitlement for the guarantor to be subrogated and counter-indemnified. In such cases, we would consider whether the commercial intention to create an ongoing flow of payments to the bondholders under the credit support instrument based on the original bond schedule, effectively makes subrogation and counter-indemnity irrelevant.

²¹ Moody's notes that courts in many jurisdictions are often hard to persuade that agreements that are on their face suretyship obligations are to be characterized as primary, on demand undertakings which require payment from the guarantor without any defense to payment other than fraudulent demand or further proof of principal obligor default. We would expect to review guarantees against the background of the applicable law to understand the extent to which the waivers and other terms of the guarantee do in fact eliminate the ability of the guarantor to dispute or avoid payment.

6. **The term of the guarantee extends as long as the term of the underlying obligation.** A guarantee that does not remain in force for the entire life of the guaranteed obligation, including any bankruptcy or other regulatory preference periods, or that can be terminated prematurely at the guarantor's sole option, raises the possibility of a downgrade or withdrawal of the rating of the guaranteed bonds, even in the absence of a payment or other default.

A guarantee that achieves credit substitution remains a continuing obligation even if there is a partial settlement or intermediate payment, and terminates only after the final payment due under the guaranteed obligation has been received, any related liabilities have been satisfied, and any bankruptcy or other regulatory preference periods have expired. Alternatively, if the guarantee terminates before the underlying obligation, we expect the guarantor to remain expressly obligated on guaranteed obligations that are outstanding as at or prior to the effective date of the termination unless the guarantor has provided funds sufficient to pay the guaranteed obligation if the principal obligor defaults.

Similarly, provisions that allow the guarantor to unilaterally terminate its obligations should include adequate alternate safeguards for beneficiaries, such as a requirement that the guarantor first deliver a satisfactory replacement guarantee. We therefore carefully assess any contractual "outs" available to the guarantor to ensure that these are consistent with credit substitution.

7. **The guarantee is enforceable against the guarantor.** A guarantee that achieves credit substitution is one that is not only signed by the guarantor, but is enforceable against the guarantor as well. To confirm such enforceability, we review legal opinions similar to those prepared in connection with other credit enhancement instruments like letters of credit. Legal opinions addressing the enforceability of guarantees should adhere to the same standards that apply for opinions on other credit enhancement instruments.

Many transaction structures, including those for which the rights under the guarantee are to serve as collateral for the noteholders, may not achieve credit substitution without the acknowledgment and agreement of the guarantor that the benefit of the guarantee may be assigned or transferred and may be granted as security.

8. **The transfer, assignment or amendment of the guarantee by the guarantor does not result in a deterioration of the credit support provided by the guarantee.** We have also encountered guarantees that allow the guarantor to transfer, assign or delegate its obligations to another party. The guarantor's right to transfer, assign or amend the guarantee may be express or implied; unless the guarantee expressly prohibits such actions, we assume that the guarantor retains these rights unless compelling evidence is presented to us that this would not be the legal effect under the applicable law.

While we recognize that assignment in and of itself will not necessarily release the guarantor from its obligations, an assignment preserving credit substitution also provides written confirmation from the guaranteeing assignor at the time of assignment that it retains ultimate liability.

If assignment can result under any circumstance in the release of the assignor or constitute a novation, significant credit substitution issues may arise. For example, the new guarantor may not be rated or may not be rated as highly as the prior guarantor, or the terms of the new guarantee may vary from those of the original guarantee. Similarly, any subsequent amendment of a guarantee may alter the nature of the guarantor's obligation, possibly weakening the guarantee's effectiveness as a credit substitution mechanism. In such cases, our analysis evaluates the substantive impact of the actual or potential assignment, amendment or transfer to determine if a reduction or withdrawal of the rating on the guaranteed obligation could be or is warranted.

9. The guarantee is governed by the law of a jurisdiction that is hospitable to the enforcement of guarantees. Legal systems around the world vary in their approach to the liability of guarantors, their rights to avoid payment and the extent to which these rights can be waived through express agreement between the guarantor and creditors. Courts often require clear and unambiguous language as evidence that the guarantor has clearly altered its position from that under the general law.²² Some jurisdictions, while generally respecting an agreement by the guarantor as to the terms on which it will meet its obligations, have some provisions built into their laws that cannot be waived or amended.²³

We believe that the approach in jurisdictions in which guarantors' rights are limited and in which the drafting of guarantees tends to be interpreted in the interests of creditors clearly provides more protection. However, in all cases, we seek to understand, perhaps through discussions or opinions from outside counsel (particularly in respect of guarantees issued under legal systems that are not generally as protective of creditors), that the guarantee document includes those waivers and other provisions customarily needed to mitigate the effect of legal principles in relevant jurisdictions that protect the guarantor and limit its liability.²⁴

²² Some states in the U.S., such as California, give guarantors a wide range of rights and defenses, and interpret guarantors' waivers narrowly. Other U.S. states, such as New York, have historically been more willing to read waivers broadly and enforce guarantees in a way that is more likely to be consistent with the expectations of the parties. Similarly, the English courts allow creditors to rely on express agreements by guarantors to reduce their scope for avoiding liability, and generally respect the intention of the parties reflected in the express language of the guarantee.

²³ In France, for example, for a beneficiary to be able to claim under a guarantee without the guarantor being able to raise typical defenses to liability, the agreement should be structured as an "autonomous guarantee", i.e. a *garantie autonome* governed by article 2321 of the French civil code (essentially a primary payment undertaking payable on first demand). If a guarantee is offered which is similar in nature to a suretyship guarantee in other jurisdictions, known as a *cautionnement*, the terms are unlikely to validly include the waivers of defenses necessary for credit substitution. This is primarily because beneficiaries would not want to take the risk, if a primary undertaking is what they require, that the obligations of the guarantor are re-characterised as a suretyship. Also, if waivers are included in the terms of the *cautionnement*, they may be considered unenforceable on the basis that they are incompatible with the "accessory" nature of the agreement as a *cautionnement/suretyship*. An exception to this is the right of the guarantor to require beneficiaries to first proceed against the principal debtor – this can be waived, as can the right for guarantors to limit their obligations and require claims to be made against co-guarantors. Similarly, under Russian law, while it would appear that the right to require proceedings against the principal debtor can be waived, a number of other defenses, including the right to rely on defenses available to the principal debtor, cannot.

²⁴ Generally speaking, subsidiaries guaranteeing the debt of a parent can be subject to various additional constraints, including whether the support is in the corporate interests of the subsidiary, the extent to which it reduces capital for the subsidiary's own creditors and the extent to which the local law prohibits subsidiaries providing financial assistance to the purchase of its own shares. While most jurisdictions have variations on these constraints, some can apply them more strictly than others. Moody's understands that England and Wales are among the least restrictive environments in Europe for issuing upstream guarantees such as these, in contrast to, for example, France.

Moody's Related Research

The credit ratings assigned in this sector are primarily determined by this credit rating methodology. Certain broad methodological considerations (described in one or more credit rating methodologies) may also be relevant to the determination of credit ratings of issuers and instruments in this sector. Potentially related sector and cross-sector credit rating methodologies can be found [here](#).

For data summarizing the historical robustness and predictive power of credit ratings assigned using this credit rating methodology, see [link](#).

Please refer to Moody's Rating Symbols & Definitions, which is available [here](#), for further information.

OUTDATED
METHODOLOGY

Report Number: 1068154

Authors
Joann Hempel

Production Specialist
Wing Chan

Production Associate
Gijo James

© 2017 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.