CRISIL Ratings

CRISIL Ratings criteria for rating partially guaranteed instruments

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Criteria contacts

Somasekhar Vemuri
Senior Director and Head
Rating Criteria, Regulatory Affairs and Operations
somasekhar.vemuri@crisil.com

Ramesh Karunakaran
Director
Rating Criteria and Product Development
ramesh.karunakaran@crisil.com

Mayank Devpura
Associate Director
Rating Criteria and Product Development
mayank.devpura@crisil.com

Shawn Lopes
Management Trainee
Rating Criteria and Product Development
shawn.lopes@crisil.com

In case of any feedback or queries, you may write to us at criteria.feedback@crisil.com

Executive summary

A partial guarantee structure in a debt instrument refers to a mechanism that enhances the credit quality of the instrument by providing a limited external form of credit support. In a typical partial guarantee structure, a guarantor rated higher than the issuer provides guarantee for payment of part of the cash flows payable on an instrument while leaving the rest of the payment liability exposed to the credit risk of the issuer.

Ratings issued by CRISIL Ratings on partially guaranteed instruments can range anywhere between the borrower's and the guarantor's ratings, based on the extent of guarantee coverage. The rating indicates CRISIL Ratings' assessment of the extent to which the partial guarantee coverage will mitigate the estimated shortfalls in debt service by the issuer, leading to a rating which is higher than the issuer's rating. The key components of CRISIL Ratings' process for rating partially guaranteed instruments are:

- **Assessment of issuer's credit quality** (referred to as the issuer rating): CRISIL Ratings analyses the credit rating of the issuer based on business and financial risks, management quality, and other relevant parameters.
- **Assessment of guarantor:** CRISIL Ratings analyses the credit rating of the guarantor based on business and financial risks, management quality, and other relevant parameters.
- **Linkage of partial guarantee quantum and rating:** CRISIL Ratings estimates the weighted average shortfall in debt service on the underlying instrument based on proprietary default statistics and the issuer's credit rating. CRISIL Ratings determines whether the quantum of partial guarantee is at a level where these shortfalls are commensurate with a plain vanilla instrument of similar rating.
- **Legal aspects and payment mechanism:** CRISIL Ratings undertakes legal due diligence while rating partially guaranteed instruments. The guarantee deed and associated documents are reviewed to validate the terms of the guarantee. CRISIL Ratings also analyses the adequacy of payment timelines for timely payment to investors.

Scope

This article[1] explains the criteria adopted by CRISIL Ratings in rating instruments that benefit from credit enhancement in the form of partial guarantees from a third party. The article does not cover the ratings of debt instruments that are backed by pools of loans (retail or corporate), which may benefit from credit enhancement not covering the entire debt service on the rated instrument. These would be addressed in CRISIL's criteria documents for rating of asset-backed securities (retail non-mortgage loan pools), mortgage-backed securities (residential / commercial mortgage loan pools), and collateralized debt obligations (CDO, corporate debt pools).

This article describes CRISIL Ratings' methodology to estimate the credit uplift for a given partial guarantee coverage. It does not address the evaluation of legal aspects and payment mechanisms. For more details on the same, please refer to CRISIL Ratings' "Criteria for rating instruments backed by guarantees", available on www.crisilratings.com.

[1] For the previous version of this article, please refer to the link below:
https://www.crisilratings.com/content/dam/crisil/criteria_methodology/structured-finance/archive/CRISILs_rating_methodology_for_Partially_guaranteed_instruments-sep2022.pdf

Understanding partially guaranteed instruments

Debt instruments fully guaranteed by third-party guarantors have been popular for a long time in the Indian debt markets. There is limited demand in the Indian market for corporate debt with ratings below 'high safety' ('AA') category. Hence, the use of a partial guarantee, to obtain a higher rating and thereby improve its marketability, has the potential to become a handy tool for corporates, financial institutions, and investors.

CRISIL Ratings has developed a methodology to assess the credit risk of debt instruments that are partially guaranteed. This analyses the individual probability of defaults of the two entities – the borrower and the guarantor – as represented by their credit ratings. It then assesses other critical parameters of the partial guarantee mechanism, such as the extent of guarantee coverage, cash flow recoveries from the project/company, and timing and nature of the guarantee. The results of these analyses form the basis of CRISIL Ratings' credit opinion on the instrument. A partially guaranteed instrument will be assigned a rating with the symbol 'CE' (indicating credit enhancement).

CRISIL Ratings' methodology to evaluate partially guaranteed instruments

Prior to development of CRISIL Ratings' methodology, the approach for partial guarantees used by rating agencies all over the world was the weak-link approach, where no credit was given for any coverage less than the full debt-servicing obligation on the instrument. Hence, the rating on an instrument with say a 90% guarantee (that is, 90% of interest and principal payments guaranteed) from a higher-rated entity would be identical with the rating on the same instrument without a guarantee. Under this approach, the instrument's rating got no benefit from the partial guarantee.

The methodology pioneered by CRISIL Ratings addresses this issue and is an improvement over the traditional approach. CRISIL Ratings' approach factors in the benefits the investor derives from even a partial guarantee. The rest of this document highlights the criteria adopted by CRISIL Ratings in rating instruments carrying partial guarantees.

CRISIL Ratings' rating methodology is scientifically designed to simulate all the possible default scenarios of the instrument due to default by either the issuer or the guarantor, based on CRISIL Ratings proprietary default statistics[2]. This simulated default and corresponding shortfall in debt service on the partially guaranteed instrument is then compared with that of plain vanilla instruments at various rating levels. The rating on the partially guaranteed instrument will be based on the rating of the plain vanilla instrument demonstrating the closest similarity to that of the partially guaranteed instrument.

[2] Default rates are critical inputs in assessing the credit uplift for a given guarantee coverage. Partially guaranteed instruments have tenors that could range from 10 to 20 years or more. Observed default rates over such long tenors may not be robust considering constraints on data sufficiency to compute such long-term default rates. Hence, CRISIL Ratings extrapolates its observed default and transition rates over medium term to longer tenors.

Illustration: Partial guarantee evaluation - determining the expected shortfall in debt service

For instance, for a three-year bond of an issuer rated 'BBB' with annual debt service (principal and interest) of Rs 10, there are four mutually exclusive and exhaustive scenarios. (For the purpose of this analysis, the default is assumed to be an absorbing state. That is, an issuer in default rate is assumed to remain in default forever.)

The first scenario represents the possibility of the issuer defaulting on the very first installment of debt service. The second scenario represents the issuer successfully servicing the first instalment but defaulting on the second instalment and so on. The last scenario (fourth) represents the possibility of the issuer servicing all three years of debt successfully. Each scenario is associated with a probability that is derived from CRISIL Ratings' proprietary default statistics. Also, each scenario represents a particular estimate of the shortfall in debt service on the rated instrument.

The table below illustrates the scenario based analysis for the above example for an entity rated 'BBB', with no recoveries assumed post default and no benefit of any partial guarantee.

Scenario #	Probability of Scenario**	Shortfall
1	4%	30= (3 payments*Rs.10)
2	5%	20=(2 payments*Rs.10)
3	6%	10=(1 payment*Rs.10)
4	86%	0
		2.8 (=30*4%+20*5%+10*6%+0*85%) represents 9.3% (=2.8/30) of cumulative debt service obligations on the instrument

*** For this example, the cumulative default rates of BBB are assumed as 4% for year one, 9% for year two, and 15% for year three, solely for illustrative purposes.*

For a partially guaranteed instrument, the scenario- based approach assumes that each debt servicing instalment can exist in one of two states- it is either paid fully on time or there is a default. In the event of default, the shortfall in debt service on instrument depends on the extent of the cash-flow-based recoveries that can be assumed from the issuer and the extent of guarantee coverage available based on the guarantee structure defined upfront.

The weighted average shortfall in debt service across scenarios for the partially guaranteed instrument is benchmarked with that of a vanilla bond (without guarantee) to arrive at the rating of instrument.

The rating on a partially guaranteed instrument can range anywhere between the issuer's and the guarantor's ratings, based on the extent of cash-flow-based recoveries expected from the issuer and the guarantee coverage.

Cash flow-based recovery levels

The recovery rate reflects the expected post-default recovery of cash flows for the defaulted bond or loan. A recovery rate of 30% indicates that in the event of default, although the cash flows generated would not be sufficient to meet the scheduled debt service payments, the issuer would be able to generate enough cash flows from continued operations to service 30% of the scheduled debt payments.

Typically, CRISIL Ratings does not give any credit in its analysis for recovery from liquidation or sale of assets post default for most issuers. When an entity is not able to service its term loan obligations in full, it will constrain the entity's continued access to working capital funds from banks, which might reduce their sanctioned limits or refuse to take further exposure. This, in turn, adversely impacts the entity's operations and its ability to generate cash flows. The primary driver of recoveries in such a scenario would be the security that has been provided for the debt. CRISIL Ratings' analysis reveals that such recoveries have been very low and quite time consuming in the past. CRISIL Ratings ignores recoveries from security enforcement in its rating analysis of partially guaranteed instruments.

However, for infrastructure assets such as toll roads, renewable power projects, ports, or airports in the post commissioning phase, there is very little impact on the asset's ability to continue to generate cash flows even if those cash flows are not sufficient to service the entire debt obligations. For such assets, CRISIL Ratings may consider recoveries from the entity's cash flows even after it defaults on its debt obligations.

How do cash-flow-based recoveries differ across industries?

Consider the example of a textile company. A default by the company on its debt obligations will constrain its access to funds and potentially disrupt its entire operations. Hence, for manufacturing companies, the post-default recovery rate for debt holders will be very low.

Similarly, the major expenses of information technology (IT) companies are salaries payable to employees. Hence, default by these companies will be accompanied by insufficient funds to pay salaries and could result in large scale employee exits and consequently, sizeable impact on revenues. Hence, the recovery rate of debt from post default cash flows of IT companies will also be low.

In contrast, consider a default scenario by a player operating in the infrastructure space, say an airport operator. Given the strategic importance of the sector to the government, the slim likelihood of an alternative airport being developed quickly, and lower cash requirement for its operations, the expected post-default recovery rate from the operational cash flows would be much higher than those of manufacturing or service sector industries.

Also, for a wind power project, if there is a default scenario due to a lower plant load factor (PLF), there can be cash flow recoveries from the project due to favourable wind pattern in subsequent years, which may lead to a better PLF and thereby higher cash flows from the asset.

Guarantee coverage

The extent of coverage is the most crucial input in assessing the level of rating enhancement. A higher guarantee cover would take the rating closer to the guarantor's rating; of course, full coverage would equate the instrument's rating with the guarantor's rating.

A guarantee for a specific debt instalment mitigates the default probability of that instalment to the extent that the guarantor's credit risk profile is superior to that of the issuer's. Thus, as the extent of guarantee coverage (in terms of the number of instalments covered) increases, a larger number of debt instalments will carry lower default probabilities, thereby reducing the instrument's overall default risk. This has been scientifically measured using CRISIL Ratings' proprietary default statistics, which are a crucial input in arriving at the instrument's final rating.

Timing of guarantee

The projected cash flows of a company often carry varying risk levels at different points in time due to company specific reasons such as project implementation and anticipated capital infusions, or industry specific reasons such as cyclicality. A guarantee for debt repayment obligations during the weakest expected period of a company's future cash flows reduces the credit risk more than a guarantee available during a period when the issuer is expected to have strong cash flows and easy access to funds. For instance, in a toll-road project, the initial period might carry the highest risk, whereas in most other companies, the cash flows generated in future years can carry the highest risk of default. Thus, the timing of the guarantee is also important in assigning a rating based on a partial guarantee.

Nature of guarantee

A variant of the partial guarantee, which can effectively address the timing effect, is called a rolling guarantee. A rolling guarantee is one that, if not invoked, rolls over to cover the subsequent repayment obligation. For a given extent of guarantee coverage, a rolling guarantee is far better than a fixed payment partial guarantee. This rolling guarantee will, in effect, address the weakest period in a company's future cash flows, and will provide a curing period for the company to recover and commence regular payments on the instrument. Guarantee can also be in the form of an amortizing guarantee which reduces based on the principal repayment on the instrument.

Conclusion

CRISIL Ratings believes the ratings assigned through its methodology for partially guaranteed instruments meet the highest standards of rigor and convey value to investors. With lenders and investors in the Indian markets preferring to invest only in highly rated instruments, CRISIL Ratings expects this concept to be a powerful financing tool in the hands of issuers, while adequately addressing the concerns of the investing community.

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CRISIL Ratings pioneered the concept of credit rating in India in 1987. With a tradition of independence, analytical rigour and innovation, we set the standards in the credit rating business. We rate the entire range of debt instruments, such as, bank loans, certificates of deposit, commercial paper, non-convertible / convertible / partially convertible bonds and debentures, perpetual bonds, bank hybrid capital instruments, asset-backed and mortgage-backed securities, partial guarantees and other structured debt instruments. We have rated over 35,000 large and mid-scale corporates and financial institutions. We have also instituted several innovations in India in the rating business, including rating municipal bonds, partially guaranteed instruments and infrastructure investment trusts (InvITs). CRISIL Ratings Limited ("CRISIL Ratings") is a wholly-owned subsidiary of CRISIL Limited ("CRISIL"). CRISIL

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For more information, visit www.crisilratings.com.

About CRISIL Limited

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It is India's foremost provider of ratings, data, research, analytics and solutions with a strong track record of growth, culture of innovation, and global footprint.

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