

Article Title: Criteria | Corporates | Project Finance: Methodology For Assessing Project Finance Debt Instruments With Deferrable Features, Such As Those Issued Under TIFIA Data: (EDITOR'S NOTE: —This article has been superseded by "General Project Finance Rating Methodology," published Dec. 14, 2022, except in jurisdictions that require local registration.) OVERVIEW AND SCOPE 1. S&P; Global Ratings is publishing its methodology for rating project finance debt issues with deferrable principal or interest features, or both. These can be: In relation to funding assets under the Transportation Infrastructure Finance and Innovation Act (TIFIA) or Other debt instruments that we view as similar to TIFIA debt. These would be issues with terms and conditions that provide for full amortization by the final legal maturity of the issue as well as the ability to defer interest, principal, or both. 2. These criteria do not apply to instruments such as Term Loan B facilities (which depend on cash flow sweep structures), deferrable embedded loan derivative structures, amortizing index bond, and zero-coupon bond instruments. 3. The U.S. Congress established TIFIA in 1998 as a U.S. federal credit program for eligible transportation projects. Under this program, the U.S. Department of Transportation is authorized to provide secured loans and other forms of credit. 4. There are two primary TIFIA loan structures. These criteria cover TIFIA and similar debt with deferability features, as mentioned in the first bullet below: For volume-exposed infrastructure projects—such as toll roads and managed lanes that rely solely on usage fees to repay debt—the TIFIA program offers a loan that allows a portion of the debt service to be repaid under flexible terms in certain circumstances. The key feature is that a pre-specified portion of the TIFIA debt service can be deferred without triggering a default. If an infrastructure project's revenues are availability-based (it relies on regular committed payments subject to adequate performance under a long-term concession), the TIFIA debt amortizes on a fixed schedule, with customary events of default and payment requirements and no ability to defer debt service when due. 5. The interest and principal due under the deferrable TIFIA and similar loans in the scope of these criteria are separated into mandatory and scheduled debt-service obligations with the following features: Mandatory debt service (interest and principal) obligations must be paid when due under an instrument's terms and conditions, and interest and principal cannot be deferred. A failure to pay such interest and principal in full and on time would constitute an event of default. In contrast, scheduled debt service (interest and principal) obligations can be deferred without triggering a default if there is insufficient cash flow to meet the scheduled payment. If the TIFIA scheduled interest or principal is deferred, the timing of the payment on the deferred amounts depends on the deferral period allowed in the transaction documents. At a predefined number of years before the loan maturity, as defined in the transaction documents, all interest and principal payments, including any deferred amounts, become mandatory and must be paid by the instrument's final legal maturity. Projects with deferrable TIFIA debt commonly have other nondeferrable senior debt present in the capital structure. We include such senior debt as part of the mandatory debt service in our calculations. Generally, the project's cash waterfall establishes that TIFIA debt is paid after senior debt prior to a bankruptcy-related event. However, the presence of a springing lien would lead us to consider TIFIA debt to be pari passu to senior debt in our analysis, as it would rank pari passu post default. 6. Our evaluation of TIFIA financing structures (or similar structures with deferability of interest, principal, or both) focuses on assessing a project finance entity's ability to service mandatory and scheduled debt-service obligations under a transaction's financing terms and conditions by the debt issue's final legal maturity. In making this assessment, we will: Apply our project finance framework methodology and related supporting methodologies to evaluate and assign a preliminary operations-phase stand-alone credit profile (SACP); and Apply these criteria to size the benefit of a TIFIA's or similar instrument's ability to defer interest, principal, or both during a specified deferral period while meeting any mandatory debt-service obligations as well as to fully amortize such deferred debt by its final legal maturity. This analysis uses a number of financial ratios outlined in these criteria, including the mandatory debt-service coverage ratio (MDSCR), total debt-service coverage ratio (TDSCR), and loan-life coverage ratio (LLCR). These ratios will be used as substitute debt-service coverage ratios in determining the adjusted preliminary operations-phase SACP and issue credit rating under the project finance methodologies and, more specifically, in the application of Table 15 and other relevant sections under the Project Finance Operations Methodology. 7. The benefits of the TIFIA debt with a debt-service deferral option only affect our assessment of the operations phase, as it is in this period that any deferral could occur. We

would also assign a construction-phase SACP, if applicable, as outlined under our project finance construction methodology.

IMPACT ON OUTSTANDING RATINGS 8. Based on our preliminary testing, we expect that the adoption of these criteria will not affect current project finance issue credit ratings involving TIFIA (or TIFIA-like) financing structures with a debt-service deferral option.

METHODOLOGY 9. As illustrated in the chart, the criteria predominantly rely on the analytical frameworks from our project finance methodologies (see the articles listed in the Related Criteria section). The text in red represents changes from our existing Project Finance Operations methodology.

10. To rate projects with TIFIA debt, we apply our existing Project Finance Operations Methodology with two key substitutions (see Paragraph 12 for further detail): Substitution 1. Determine the preliminary operations-phase SACP based on the weaker of the minimum MDSCR or the minimum LLCR. This substitutes for the minimum DSCR. Substitution 2. Apply the average DSCR notching based on the average TDSCR.

11. Using the base-case and downside-case financial projections as determined using our project finance methodologies, we calculate the following financial ratios (refer to definitions in the Appendix) for senior debt, including deferrable debt with a springing-lien feature, on each payment date: MDSCR TDSCR LLCR

12. Based on a project's operations-phase business assessment (OPBA) as determined using our Project Finance Operations methodology, we then continue our analysis as follows: We apply Table 15 in our Project Finance Operations Methodology to determine the preliminary operations-phase SACP. We do this by combining the project's operations-phase business assessment (OPBA)--calculated under the Project Finance Operations Methodology--with the lower of the minimum forecasted MDSCR and the minimum forecasted LLCR. We use the MDSCR to take into account and size the flexibility of the ability to defer any TIFIA scheduled principal and interest during a deferral period. The use of LLCR captures both mandatory and scheduled debt service, irrespective of deferability. We determine the project's resilience under the downside analysis (see Table 16 of the Project Finance Operations Methodology), using the lower of the minimum MDSCR or minimum LLCR. This will be used to calculate any notching adjustments, as described in the Project Finance Operations Methodology, to a project's preliminary operations-phase SACP. If the average TDSCR maps to at least one rating category higher in Table 15 of Project Finance Operations Methodology than the lower of the minimum MDSCR or minimum LLCR, we may adjust a project's preliminary Operations Phase SACP upward by one notch. Any other notching adjustments--such as debt structure and liquidity--to determine the adjusted preliminary operations-phase SACP as outlined under the project finance operations methodology, and other relevant project finance methodologies to arrive at the operations-phase SACP.

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APPENDIX: GLOSSARY 13. Mandatory debt service. The amount of senior or pari passu debt-service obligations (interest and principal) that must be paid when due (cannot be deferred) under an instrument's terms and conditions.

14. Mandatory debt service coverage ratio (MDSCR). A measure of financial performance that addresses coverage of the payment of mandatory debt service for a period. The MDSCR is equal to the cash flow available for debt service (CFADS) divided by the mandatory debt service plus any other senior debt service (interest and principal) payable and not deferrable in the payment period.

15. We will consider payments as mandatory debt service and will therefore include them in the MDSCR calculation if any of the following apply: From the beginning of the transaction, such payments do not meet the definition of scheduled debt service below. During the life of the financing, a scheduled payment is not actually met when there are sufficient funds and that triggers an event of default that could lead to acceleration of senior or pari passu debt. During the life of the financing, a cash flow lock-up trigger is projected to be breached that interrupts the ability to defer any scheduled payments or capitalize interest.

16. Period. This is a specified payment period (for example, semi-annually) of the debt under the terms and condition of a transaction's financing documents. For detail on the time periods used in the calculation of the coverage ratios included in this criteria, please refer to the

Frequently Asked Questions in the Project Finance Operations Methodology. 17. Scheduled debt service. The amount of debt-service obligations (interest and principal) that can be deferred over a deferral period under an instrument's transaction documents without triggering an event of default, acceleration, or cross-default of senior or pari passu debt, if there is insufficient cash flow to meet the scheduled payment. Typically, interest is capitalized so that it is added to debt outstanding. All amounts capitalized or deferred accrue interest according to terms and conditions. 18. Springing lien. TIFIA's springing-lien feature preserves TIFIA lenders' rights, remedies, security, and payment priority if the project experiences significant financial stress. TIFIA loans rank subordinate in priority to senior obligations if the project is performing, but they spring to the position of senior debt if the project triggers a bankruptcy-related event. 19. Total debt service coverage ratio (TDSCR). A measure of financial performance that addresses coverage of the payment of scheduled and mandatory debt service for a period. The TDSCR is equal to CFADS divided by the scheduled debt service and mandatory debt service plus any other senior debt service payable in the payment period. 20. Loan life coverage ratio (LLCR). The LLCR measures the present value of CFADS (discounted at the cost of debt) from a specified point in time through the loan's maturity divided by the opening senior and pari passu debt balance. The use of the LLCR captures both mandatory and scheduled debt service, irrespective of deferability. 21. The LLCR is calculated as: The net present value (NPV) of CFADS on each debt service period or payment date, divided by the opening senior and pari passu debt balance in that period. We calculate the debt balance in each period by subtracting from the prior period balance any principal amount that was repaid and adding to the prior period balance any amount deferred or capitalized. The discount rate used in the NPV calculation is the weighted average cost of TIFIA and other senior debt. Generally, the discount rate we use would match the frequency of the debt service payment periods. These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as S&P's Global Ratings assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.