Article Title: Criteria | Governments | U.S. Public Finance: Commercial Paper, VRDO, And Self-Liquidity Data: (EDITOR'S NOTE: —On Aug. 23, 2023, we republished this criteria article to make nonmaterial changes. See the "Revisions And Updates" section for details.) 1. S&P; Global Ratings' U.S. public finance department rates the commercial paper (CP) programs and variable rate demand obligations (VRDOs) of governmental entities and nonprofit organizations (including colleges, universities, and hospitals). CP program ratings can be based on the issuer's creditworthiness or a third-party credit facility. 2. S&P; Global Ratings typically rates the tender obligations on VRDOs based on third-party liquidity facilities, such as letters of credit (LOCs) and standby bond purchase agreements (SBPAs), although some highly capitalized issuers are increasing issuing "unenhanced" VRDOs, where tender obligations on the debt are supported by the issuer's own liquidity sources. 3. Issuers have the option of using their own assets to provide liquidity support as a substitute for traditional liquidity facilities both for CP programs or VRDO tender obligations. An issuer may also choose to use its own liquid assets in combination with liquidity facilities to provide support for liquidity demands. An issuer's assets and other forms of liquidity must be sufficient, liquid and creditworthy enough to meet all payment obligations on time and in full. For VRDOs, self-liquidity must involve at least 100% backup of outstanding principal and interest through a combination of the issuer's assets or credit facilities. Sources to back unenhanced CP programs do not have to account for 100% of CP authorized since ratings reflect the issuer's ongoing ability to provide funds to meet maturing CP. Also, the issuer does not have to provide sources that are rated equivalent to the CP rating. This is not the case, however, with VRDOs. The distinguishing factor between unenhanced CP and VRDOs is the issuer's control over the timing of payment events. CP programs have predictable maturity schedules, whereas VRDOs are subject to tenders at the option of the bondholders at any time. The unpredictable nature of VRDO tenders necessitates a more conservative approach towards the quality and sufficiency of liquidity reserves for VRDOs. Therefore, short-term ratings on VRDOs will reflect the lowest-rated liquidity sources backing the tender obligation. 4. Issuers that elect to issue unenhanced CP or VRDOs and back these obligations with their own liquid assets rather than a credit facility provided by a rated entity, must undergo a formal Liquidity Assessment review by S&P; Global Ratings (see Self Liquidity). Extendible Commercial Paper 5. Extendible commercial paper (ECP) is almost identical to traditional commercial paper, with one major difference: the issuer can choose to extend the maturity date of the CP beyond the initial maturity date of one to 270 days from issuance. ECP allows an issuer to cover the liquidity risk of a failed or potential failed remarketing of its paper and avoid default by exercising its option to extend the maturity date, thus precluding a need for liquidity. ECP is rated the same as traditional CP. The rating does not address the likelihood of extension—only payment in accordance with terms. An extension does not constitute a default of the paper. Extendible CP Extension Period 6. S&P; Global Ratings does not have specific extension period requirements for rating ECP. The extension period for each individual ECP financing will vary on a case-by-case basis. The question is: how much time does an issuer need to arrange financing to retire ECP. The amount of time required will depend, in large part, upon the overall credit strength of the issuer with a track record of market access. A higher-rated issuer is less likely to be denied access to the CP market than a lower rated entity. At the time of the ECP issuance, borrowers should have taken all needed steps to put long-term financing in place, in order to ensure a smooth take out of the CP at the end of the extension period. Partially enhanced CP programs 7. Issuers may provide partial enhancement of CP programs by providing a credit facility for payment of CP principal only. In most partially enhanced structures, the issuer pledges to cover interest only and repay the enhancer bank for CP principal draws. If the issuer has secured a bank facility as partial credit replacement, and is pledging its own credit for interest only, S&P; Global Ratings will rate the CP based on a weak-link approach, using the lower of the bank's short-term rating or the issuer's short-term rating equivalent. The reason for this is due to the fact that both principal and interest of CP must be paid upon maturity and neither the bank nor the issuer is obligated to pay both components. If, however, the issuer is pledging its own credit support as a secondary source of payment for CP principal, S&P; Global Ratings can rate the CP program based on the issuer's short-term rating equivalent, irrespective of the credit bank's rating because the issuer is ultimately obligated to repay both principal and interest upon CP maturity. 8. If a partially enhanced CP program rating is ultimately based on the bank's short-term rating, all conditions of the LOC backed CP criteria discussed above will apply. If the CP program rating is to be based on the issuer's short-term rating equivalent, all conditions of the unenhanced CP criteria should be met as described above. Additionally, if the issuer is serving as a source of payment for CP principal, S&P; Global Ratings will determine whether the credit facility and bond documents meet its criteria for "confirming" LOCs (see "Additional LOC-Supported Debt Structures And Methodologies: Confirming LOCs" section of "Methodology For Analyzing Letter Of Credit And Bank Liquidity-Supported Transactions," March 20, 2023). 9. Evaluation of an issuer's CP reflects S&P; Global Ratings' opinion of the issuer's fundamental credit quality. Therefore, there is a direct link between the short-term and long-term ratings (see "Methodology For Linking Long-Term And Short-Term Ratings," April 7, 2017). 10. This paragraph has been deleted. 11. When an obligor has multiple lien positions, S&P; Global Ratings will look to the long-term rating on the intended takeout financing to evaluate the correlation between the short- and long-term ratings. For example, if an obligor issues subordinate lien CP but intends to ultimately retire the CP using senior lien debt, it is the long-term rating on the senior lien debt that will determine the short-term rating (see "Methodology For Linking Long-Term And Short-Term Ratings," April 7, 2017). 12. This paragraph has been deleted. Backup Policies 13. S&P; Global Ratings deems it prudent for obligors that issue commercial paper to make arrangements in advance for alternative sources of liquidity. This alternative, backup liquidity protects an obligor from defaulting if they are unable to roll over their maturing paper with new notes, because of a shrinking overall CP market or investor concerns about the obligor that might make CP investors reluctant to extend additional credit to the obligor. Many developments affecting a single obligor or group of obligors--including bad economic conditions, a lawsuit, management changes, a rating change--could make commercial-paper investors flee the credit. 14. This paragraph has been deleted. 15. This paragraph has been deleted. 16. Available cash or marketable securities are ideal to provide backup, although it will likely be necessary to "haircut" their apparent value to account for potential fluctuation in value. Marketability of liquid assets is also critical. The vast majority of commercial paper issuers rely on bank facilities (lines of credit) for alternative liquidity. 17. This high standard for back-up liquidity has provided a sense of security to the commercial-paper market--even though backup facilities are far from a guarantee that liquidity will, in the end, be available. For example, an obligor could be denied funds if its banks invoked "material adverse change" clauses. Alternatively, an obligor with insufficient liquidity might draw down its credit line to fund other cash needs, leaving less-than-full coverage of paper outstanding, or issue paper beyond the expiration date of its lines. 18. This paragraph has been deleted. Issuers Can Provide Self-Liquidity 19. Creditworthy municipalities and nongovernmental organizations with good liquidity and a strong investment management function can use their own assets to provide liquidity support for CP programs and VRDOs. Rather than relying on external dedicated bank facilities, these issuers demonstrate they have both sufficient fixed income investments and the policies and procedures necessary to cover either outstanding commercial paper or variable rate demand obligations. The rating process involves an assessment of the quality and sufficiency of investments that would be used to cover the variable rate debt or commercial paper and the issuer's demonstration that they have adequate policies and procedures in place to act as a bank facility would under the same circumstances. Therefore an issuer should demonstrate that it could liquidate sufficient investments and cash when necessary under the bond documents in order to meet either a remarketing failure of commercial paper or an optional put for variable rate demand obligations. 20. S&P; Global Ratings will evaluate an organization or municipality's fixed income investments that can be used to support short-term ratings if the issuer's assets are sufficient, liquid, and creditworthy to meet all debt obligations on a full and timely basis. Because the ability to access sufficient moneys when necessary is not related to bank performance, commercial paper ratings and any short-term ratings assigned to variable rate demand bonds, are thus tied to the issuer's long-term credit rating, rather than to external bank liquidity support (see "Methodology For Linking Long-Term And Short-Term Ratings," April 7, 2017). Self-Liquidity For Commercial Paper And Variable Rate Demand Obligations 21. Commercial paper ratings are a function of market access and long term credit quality, the rating on the commercial paper reflects the market access ability of the issuer to either take out the financing with long-term paper or new commercial paper notes. In general, commercial paper is more predictable and flexible than variable rate demand obligations, because it is the issuer who decides on the maturity of the commercial paper. Therefore, while there is remarketing risk, the issuer itself manages the remarketing risk. On the day that remarketing proceeds must be settled, however, the issuer will still need to have sufficient, liquid funds on hand to cover any potential remarketing failure. S&P; Global Ratings looks for an issuer to have on hand sufficient liquid resources, in any combination of revolving credit agreements or liquid fixed income investments available, to cover the amount of the commercial paper outstanding, as well as the ability to cover up to 270 days of interest. 22. Because the investments may be called on to meet market events, such as a failed CP rollover or a VRDO tender, using these investments should not impair an issuer's ability to meet ongoing operating expenses. Therefore issuers who provide self-liquidity should generally have a high level of liquidity available for debt and operations. 23. S&P; Global Ratings will evaluate an issuer's ability to provide self-liquidity through an assessment of investment management policies and practices, and (2) an analysis of the fixed income portfolio. Some institutions, such as heavily endowed colleges and universities may be able to demonstrate overwhelming coverage of commercial paper or VRDOs with treasury securities and cash alone. If their portfolios are sufficiently large, or the amount of debt being covered is very small, the analysis of the fixed income portfolio is narrower in scope. 24. However, even in cases where the entire portfolio does not need to be evaluated, S&P; Global Ratings still evaluates the capacity of management to provide self liquidity and still asks for a liquidity procedures letter to indicate that the cash and high quality fixed income securities can be available when needed and to identify the steps that the institution will take to meet its obligations. S&P; Global Ratings expects issuers to demonstrate their capacity and willingness to make short-term debt payments by submitting a detailed written liquidation plan. The procedures letter should conform to the timing in the legal documents such as when the institution or municipality receives notice that there is a shortfall and when the funds are due to the paying agent or tender agent. The letter should also identify the individuals who are responsible for taking these steps. 25. In an evaluation of management's capacity, S&P; Global Ratings asks the institutions themselves and not their financial advisors or underwriters to prepare the procedures letter. Additional documentation such as operating cash flows and investment balances available for operations throughout the year may be necessary, depending on the nature of cash flow for the issuers. Ultimately, S&P; Global Ratings will evaluate whether the issuer's long and short-term credit quality is sufficiently robust to withstand a call on its assets pledged for liquidity purposes. 26. An issuer may also choose to use a combination of its own assets and third-party liquidity (for example, a bank liquidity facility) to provide liquidity support. Strong lines that more closely resemble standby bond purchase agreements may be used to reduce the amount of available assets to cover maturing CP or VRDOs and still allow the issuer to pledge its own self-liquidity (see "Methodology For Analyzing Letter Of Credit And Bank Liquidity-Supported Transactions," March 20, 2023). In cases where a strong line is being used to substitute for self-liquidity, S&P; Global Ratings will evaluate the strength of the line. Weak lines, which include looser events of termination, have historically been used to cover commercial paper programs, and because of the predictable nature of commercial paper, S&P; Global Ratings accepts weak external liquidity facilities as a source of backup for maturing commercial paper if they are dedicated to the program. 27. Variable rate demand bonds, however, carry an element of unpredictability because investors can choose to put their bonds. In these cases, weak lines might not be an acceptable substitute for self-liquidity and the presence of the line may not reduce the issuer's liquidity on a dollar per dollar basis. S&P; Global Ratings will evaluate lines, and strong lines that more closely resemble standby bond purchase agreements, even if they are not part of the bond transaction, may be used to reduce an issuer's self liquidity. Asset-To-Debt Coverage Requirements 28. An issuer must ensure, on an ongoing basis, that its available assets (whether they are cash and fixed income investments or dedicated liquidity facilities) are sufficient, safe, and liquid enough to meet at least 100% of maturing CP or the full amount of a potential VRDO tender. The 100% requirement provides a minimum of 1.0x coverage of debt by available assets and assumes assets are available in the event of a failed remarketing or optional tender. In cases where a combination of an issuer's own assets and bank liquidity facilities (provided they are strong enough to provide support for the program) provide liquidity support, the minimum coverage requirement remains 1.0x. 29. When evaluating fixed income investments in a portfolio, S&P; Global Ratings uses different coverage levels of different types of investments to take into account the nature of the specific assets available and the speed with which the assets can be liquidated without significant market losses. An issuer providing self-liquidity must indicate its willingness to sell assets in a down market and incur a potential loss if S&P; Global Ratings is to be comfortable with their ability to provide self-liquidity. 30. When an issuer chooses to use its own assets, the amount of assets necessary to cover maturing CP or a potential VRDO tender depends upon the asset's credit quality, volatility, and weighted average maturity. Generally, the lower the credit quality of the fixed income security, the longer the weighted average maturity, and the greater the volatility and market risk of the assets, then the higher the coverage requirement such as 1.50 for investment grade corporate notes becomes. Logically, the reverse holds true. As the asset's weighted average maturity and market risk declines and credit quality increases, the lower the asset coverage requirement. Generally, S&P; Global Ratings will discount U.S. Treasury debt obligations and highly rated money market funds using a coverage ratio of 1.10x and will use a coverage ratio of 1.15x for U.S. Treasury Inflation-Protected Securities (TIPs). We apply coverage ratios of 1.20x and above for all other securities. 31. The discount ratio is also a function of how frequently an issuer plans to have assets valued in the market. While monthly valuations for high quality assets such as U.S. Treasuries may be adequate, daily or weekly valuations are recommended for assets that have greater volatility due to poor credit quality and longer maturity. Market valuation periods greater than weekly will lead to larger discount factors for most assets. S&P; Global Ratings also needs to understand the actions an issuer will take if the valuation falls short of expected level. Once collateral levels and valuation periods are determined, including these requirements in the legal debt documents will be viewed positively in the assignment of ratings. What Are Available Assets? 32. Available assets are defined as cash and fixed-income investments that are not needed to meet daily operating needs. Should an issuer need to liquidate its assets to cover a failed commercial paper rollover or VRDO tender, the reduction in the issuer's liquidity position should not impair the issuer's ongoing ability to meet its daily cash flow needs, including the payment of long-term debt obligations. In short, the liquidation and use of investments should not result in a liquidity crisis for the institution or municipality. Therefore, assets available for liquidity support must be above and beyond the assets needed to meet its daily ongoing obligations. Issuers should not have to delay the payment of obligations in the event of asset liquidation to meet tenders. In light of the cyclical nature of many portfolios, S&P; Global Ratings' analysis will start at the historically lowest asset point during the year to determine the level of excess liquidity available to the obligor (Since many obligors do not have "excess" liquidity, only a select group of highly creditworthy, and liquid, obligors are able to use their own assets to support their variable-rate debt. What types of assets are eligible for liquidity support? 33. The bulk of the assets intended for liquidity-supported programs include investment-grade fixed-income securities that are highly liquid and have a low-market-risk profile. Examples are highly rated short-term securities (securities rated 'A-1+' or 'A-1' that mature in one year or less) or long-term paper of equivalent credit quality such as U.S. governments and agencies, 'AAA', 'AA', or 'A' S&P; Global Ratings rated fixed-income securities. Longer-maturing assets (one year or greater) and U.S. domestic equities are eligible for inclusion, but coverage requirements will be higher. All securities should be marked-to-market frequently (at least monthly) and depending on price volatility daily valuations may be recommended. Monthly surveillance asset reports (see Exhibit A) to be submitted to S&P; Global Ratings will include the market and par values of each security, the security identifier (CUSIP number), and the security's rating, if applicable. In addition to the types of assets eligible to be used for liquidity support, an issuer must ensure that it has the legal authority to use its own assets for liquidity support. In some cases, state constitutions or state and local statutes may not permit an issuer to use its own assets for liquidity support. S&P; Global Ratings may require a legal opinion if necessary from the appropriate counsel--whether it is bond counsel, a state attorney general, or other legal representative--as to an issuer's legal authority to use its own assets for liquidity support. 34. The "Suggested Documentation" box outlines the information issuers submit to initiate a portfolio evaluation for a liquidity assessment. If S&P; Global Ratings has already evaluated their investment portfolio, no further action is required. Issuers that have complex investment portfolios may be referred to S&P; Global Ratings' Fund Services Group for liquidity evaluation and ongoing surveillance requirements indicated in Exhibit A. However, the liquidity review and surveillance requirements are substantially the same and issuers must be prepared to discuss plans for the portfolio's ongoing management and surveillance. Asset management and documentation requirements 35. The ability of an issuer's investment management team to liquidate assets or raise cash on a same day basis (if necessary) are key factors in the evaluation of an issuer's ability to provide its own liquidity support. Very specific written liquidation procedures are required and should detail: Persons responsible for executing the asset liquidation; The sequence of steps that must be undertaken by all parties to effect liquidation (including any third parties such as the tender or paying agents acting on the issuer's behalf); If particular investments, such as fedwire securities, are custodied securities must be liquidated by a certain time to qualify for same day monies, these deadlines should be identified in the liquidation procedures letter; The timing of notifications to the appropriate parties to ensure that sufficient funds are available to pay CP and VRDO investors on a same-day basis, if necessary. 36. The liquidation procedures must mirror timing requirements specified in CP resolutions and VRDO trust indentures for full and timely payment of debt service. The chain of events to liquidate assets will be evaluated. The evaluation starts with a bond trustee's receipt of a tender notice from a bondholder or the stop issuance order executed by the CP issuing and paying agent to an issuer's broker-dealer. The chain of events ends with the deposit of liquidated assets in immediately available funds, with the tender or paying agent to pay the purchase price of tendered bonds or maturing CP. The investment management team will be evaluated based on its documented procedures to provide the required funds by the end of the day that the trade is initiated. This liquidation letter (see sample) should be updated annually and should be prepared by the institution or municipality rather than by a financial advisor or underwriter. 37. Capable monitoring, frequency of portfolio valuation and oversight are vital to a successful program. An obligor's success or failure in providing self-liquidity depends on their ability and willingness to take on these proactive roles. Liquidation letter 38. Each issuer of unenhanced VRDOs will be asked to provide a letter from its management addressed to S&P; Global Ratings describing its liquidation procedures in detail with the major players named and their roles defined. The procedures described by the letter must indicate a strong likelihood of same-day liquidation. 39. The acceptability of the obligor's proposed liquidation mechanics, especially with regard to timing, will be based on S&P; Global Ratings' follow-up investigation into the procedures described by the letter. The chain of events—starting with the bond trustee's sell order to the obligor's broker-dealer account representative and ending with the deposit of liquidation proceeds in immediately available funds with the tender or paying agent to pay the purchase price of tendered bonds—will be scrutinized for its ability to generate the required cash by the end of the day that the trade is initiated. 40. Among the factors that will be considered in analyzing the obligor's proposed liquidation procedures are the number of steps and parties in the liquidation process, a reasonable time frame in which to accomplish the liquidation, the experience level of the parties involved, whether the party holding the securities has direct access to FedWire, and the FedWire closing time. 41. The credibility of the obligor's management on the issue of its ability to liquidate its available assets within the timing requirements of the VRDO structure is extremely important. Management's experience in managing and liquidating its assets will be considered in S&P; Global Ratings' evaluation of the obligor's proposed liquidation procedures. Frequently Asked Questions What type of short-term debt obligations fall in scope of these criteria? 42. Short-term obligations of U.S. public finance obligors which are not in scope of "Bond Anticipation Note Rating Methodology," published Aug. 31, 2011, or "Short-Term Debt," published June 15, 2007, fall in scope of these criteria. For more information about what S&P; Global Ratings considers a short-term obligation, see "S&P; Global Ratings Definitions," published Jan. 5, 2021. 43. This paragraph has been deleted. Are there any legal requirements permitting issuers to provide self-liquidity? 44. In some cases, state constitutions or state or local statutes may not permit an issuer to use its own assets for liquidity support. S&P; Global Ratings may require a legal opinion from the appropriate counsel, such as bond counsel, state attorney general, or other legal representative, as appropriate, to provide evidence of an issuer's legal authority to use its own assets for liquidity support. For non-state and local government issuers, S&P; Global Ratings will review the issuer's investment policies and guidelines to determine whether the issuer has the ability to purchase its own securities or invest in the adequate amount of tax-exempt securities. What are available assets? 45. Available assets are defined as investments that are not generally needed to meet daily operating needs or construction costs that are on the horizon. Should an issuer need to liquidate its assets to cover a failed CP rollover or VRDO tender, the reduction in the issuer's liquidity position should not impair the issuer's ongoing ability to meet its daily cash flow needs, including the payment of long-term debt obligations. In short, the liquidation and use of investments should not result in a liquidity crisis for the institution or municipality. Therefore, assets available for liquidity support should be above and beyond the assets needed to meet its daily ongoing obligations. Issuers should not have to delay the payment of obligations in the event of asset liquidation to meet tenders. In light of the cyclical nature of many portfolios, S&P; Global Ratings' analysis will start at the historically lowest asset point during the year to determine the level of excess liquidity available to the obligor. Are all equity securities eligible? 46. The following guidelines should be applied to all equity investments to determine eligibility: The portfolio's composition should be composed of a minimum of 15 different U.S. equity holdings. We typically expect a diversified portfolio to contain a maximum of 30% in any one stock, with the remaining 70% of the portfolio divided equally among 14 stocks at 5% each. The equity portfolio generally should not have more than 25% of its value in any one industry. Using a separate account composed of a basket of equity investments, generally, the issuer can hold no more than the average monthly trading volume over the past month. Each stock should have a minimum market capitalization of at least $100 million. Master limited partnerships or limited liability partnerships are generally not considered eligible. Restricted stocks (144a securities) or any pink sheet stocks (generally, stocks that are not carried in daily over-the-counter newspaper listings) are generally not considered eligible. Eligible equities should be listed on an exchange or traded for more than one year and one quarter, or 15 months. Eligible stock exchanges include the New York Stock Exchange, American Stock Exchange, Philadelphia Stock Exchange, Boston Stock Exchange, Washington Stock Exchange, Midwest Stock Exchange, Pacific Stock Exchange, NASDAQ, and National Market Quotations. Non-U.S. equity investments including individual stock, separate accounts, and mutual funds are generally not considered eligible. Hedge funds and alternative investments are generally not considered eligible. How much coverage should an issuer provide for debt supported by self-liquidity? 47. The amount of assets required depends on the identified asset's quality, volatility, liquidity, and maturity. For example, the lower the credit quality of a fixed-income security, the longer the weighted average maturity, and the greater the volatility and market risk of the assets, then the higher the coverage requirement, such as 1.50x for investment-grade securities. As the asset's weighted average maturity and market risk declines and credit quality increases, the lower the asset coverage requirement. The amount of coverage required for each asset class is outlined in table 1. Table 1 Required Coverage (x) Cash and cash equivalents* 1.00 Standard & Poor's-rated money market funds 1.00 Highly rated (at least A-1) bank lines 1.00 Highly rated money market instruments (< 1 year) 1.10 U.S. Treasury debt obligations (> 1 year) 1.10 U.S. TIPs 1.15 U.S. agencies (> 1 year) 1.20 Investment-grade debt 1.50 Equities 2.00 Speculative-grade debt 2.50 *Covers only cash/bank deposits with 'A-1' or 'A-1+' rated entities and U.S. government securities maturing in under one year. A 1.00x coverage ratio can be used for cash/bank deposits with entities rated less than 'A-1' that are less than $250,000. Do assets need to be legally segregated in order for an entity to provide self-liquidity? 48. No, S&P; Global Ratings looks for assets to be clearly identified and maintained and not legally segregated. If an issuer is interested in using self-liquidity on bonds with a put or tender date that is longer (i.e., three months, six months, nine months, or one year) than traditional liquidity options, do assets need to be set aside from day one? 49. The identification of pledged assets from day one is necessary so S&P; Global Ratings' short-term ratings are and remain current and accurate. Regardless of the mode of bonds (e.g., weekly demand or one-year put/tender), assets need to be identified and maintained at all times in an amount sufficient to cover a failed remarketing based on the levels outlined above. The only item that may change based on the tenure of the demand feature is the amount of funds needed for same-day liquidity. How does a liquidity assessment take into account a line of credit? 50. As indicated above, an issuer may also choose to use a combination of its own assets and third-party liquidity (for example, a bank liquidity facility). Weak lines might not be an acceptable substitute for self-liquidity, and the presence of the line may not reduce the issuer's liquidity on a dollar-per-dollar basis. Weak lines, which include looser events of termination, have historically been used to cover CP programs, and because of the predictable nature of CP, S&P; Global Ratings typically accepts weak external liquidity facilities as a source of backup for maturing CP and VRDOs if the lines are dedicated to the self-liquidity backed debt. Strong lines that more closely resemble standby bond purchase agreements (SBPAs) may be used to reduce the amount of available assets to cover maturing CP or VRDOs and still allow the issuer to pledge its own self-liquidity, even if that SBPA is not a part of the bond transaction. We generally expect that strong lines will meet the automatic termination event requirements established in the Standby Bond Purchase criteria. S&P; Global Ratings will review "weak" or "strong" lines to determine their acceptability toward self-liquidity coverage of the issuer's short-term debt obligation. Table 2 Liquidity Assessment Coverage Calculation Spreadsheet ASSET ALLOCATION (SECURITY TYPE) (A) $ (B) % (C) TIMES COVERAGE (D) DISCOUNT FACTOR (%) (E) CONTRIBUTION TO COVERAGE RATIO Cash and cash equivalents 1.00 100 Standard & Poor's-rated money market funds (> 'Am') 1.00 100 Highly rated (A-1 or better) dedicated bank line 1.00 100 Highly rated money market instruments (< 1 year) 1.10 91 U.S. Treasury debt obligations (> 1 year) 1.10 91 U.S. TIPs 1.15 87 U.S. agencies (> 1 year) 1.20 83 Investment-grade debt 1.50 67 Equities* 2.00 50 Speculative-grade debt 2.50 40 Totals (F) ESTIMATED BONDS OUTSTANDING (G) REQUIRED RATIO - - (H) CURRENT RATIO - (I) +/- *See "Are all equity securities eligible?" in this FAQ. What is the required coverage ratio? Is there a minimum amount of excess required? What happens as the excess liquidity coverage ratio decreases to zero? 51. S&P; Global Ratings' initial and monthly review of self-liquidity providers will check that the current ratio (i.e., box H of table 2) is greater than zero. While no stated minimums of excess coverage exist, we feel it is prudent for issuers to operate with some cushion so that any unexpected short-term asset fluctuations do not negatively affect the issuer's ability to provide liquidity support. Lastly, and preferably outlined in the liquidation procedures letter, S&P; Global Ratings also needs to understand the actions an issuer will take if the coverage ratios is approaching zero or falls short of expected levels. Revisions And Updates This article was originally published on July 3, 2007. Changes introduced after original publication: On Oct. 5, 2015, we added a "Frequently Asked Questions" section (paragraphs 42-43). On Feb. 5, 2016, we republished this article to correct an error in paragraph 33. Specifically, U.S. domestic equity securities are eligible for inclusion as liquidity support. Related to this correction, we added paragraphs 44-51 to the "Frequently Asked Questions" section. We also updated the contact information. The article titled "Methodology For Linking Long-Term And Short-Term Ratings," published on April 7, 2017, supersedes in these criteria charts or text describing the correlation of our long-term ratings with our short-term ratings, mostly for the purpose of rating commercial paper. Otherwise, the criteria remain effective. Following our periodic review completed on Aug. 5, 2016, we updated the criteria references in the article. Following our periodic review completed on July 31, 2017, we deleted commentary as well as text superseded by "Methodology For Linking Long-Term And Short-Term Ratings," published on April 7, 2017. We also updated the contact information. Following our periodic review completed on July 31, 2018, we updated the contact information and "Related Publications" section. Effective on Sept. 28, 2018, we also implemented nonmaterial changes in paragraphs 1, 6, 14, and 22, where we removed outdated text and commentary. In paragraph 1, we removed text that discussed trends in VRDO issuance, possible reasons for such trends, and potential drivers that might have impacted issuers' desires to use one type of debt over a different type. In paragraph 6, we removed text related to market access. We deleted in entirety paragraph 14 because it was outdated text and did not speak to credit factors or the determination of credit ratings. In paragraph 22, we removed outdated text related to self-liquidity. In addition, in table 2, we revised incorrect references to the discount for the first three values listed in column D. For these values, we previously had referenced a rate of zero instead of 100. On Sept. 16, 2019, we republished this criteria article to make nonmaterial changes. We clarified the scope in paragraph 1 and updated our contact information and references to related criteria. We also clarified terminology in paragraphs 2, 5, and 6. On Sept. 11, 2020, we republished this criteria article to make nonmaterial changes to update references to related criteria. On Sept. 16, 2021, we republished this criteria article to correct an error and make nonmaterial changes. We corrected the presentation of the ratios in paragraph 30. Separately, we clarified that the ratios are coverage ratios and included a reference to U.S. TIPs. These changes align with the information provided in table 1 and table 2. We also updated references to related research and the contact information. On May 5, 2022, we republished this criteria article to correct an error. We corrected the footnote in table 1 to reflect the current Federal Deposit Insurance Corp. limit. On March 13, 2023, we republished this criteria article to make nonmaterial changes. We clarified our intent about what it means for a strong line to closely resemble SBPAs in paragraphs 26, 27, and 50. We also added a criteria reference to our SBPA criteria in paragraph 26 and updated the related criteria section. On Aug. 23, 2023, we republished this criteria article to make nonmaterial changes to update references to related criteria and contact information. Related Publications Related Criteria Methodology For Analyzing Letter Of Credit And Bank Liquidity-Supported Transactions, March 20, 2023 Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017 Bond Anticipation Note Rating Methodology, Aug. 31, 2011 Principles Of Credit Ratings, Feb. 16, 2011 Short-Term Debt, June 15, 2007 Related Research S&P; Global Ratings Definitions, updated from time to time