Article Title: Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers Data: (EDITOR'S NOTE: —On July 29, 2022, we republished this criteria article to make nonmaterial changes related to the archival of "Guidance: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," Dec. 4, 2019, by adding an Appendix containing the guidance content. See the "Revisions And Updates" section for details.) 1. These criteria present S&P; Global Ratings' methodology for liquidity analysis used when determining stand-alone credit profiles (SACPs) on global corporate issuers. 2. This paragraph has been deleted. SCOPE OF THE CRITERIA 3. These criteria apply to the analysis of corporate issuers globally. These criteria do not apply to project finance ratings because of the contractual cash management protections in place for those credits. SUMMARY OF THE CRITERIA 4. The criteria describe the methodology we use to assess the liquidity position of global corporate issuers, including our approach for evaluating the adequacy of backup repayment sources for outstanding CP, as well as a company's treasury polices and controls regarding intra-year liquidity needs. 5. The quantitative analysis focuses on the monetary flows--the sources and uses of cash--that are the key indicators of a company's liquidity cushion. The analysis also assesses the potential for a company to breach covenant tests related to declines in earnings before interest, taxes, depreciation, and amortization (EBITDA). The methodology incorporates a qualitative analysis that addresses such factors as the ability to absorb high-impact, low-probability events, the nature of bank relationships, the level of standing in the credit markets, and the degree of prudence of the company's risk management. 6. The methodology focuses on the standardization of liquidity descriptors into a five-point scale and a characterization of the features associated with each of the descriptors. The methodology also describes the impact of the criteria on SACPs. 7. This paragraph has been deleted. 8. This paragraph has been deleted. METHODOLOGY 9. Liquidity is an important component of financial risk across the entire rating spectrum (see "Corporate Methodology," published Nov. 19, 2013). Unlike most other rating factors within an issuer's risk profile, a lack of liquidity could precipitate the default of an otherwise healthy entity. Accordingly, liquidity is an independent characteristic of a company, measured on an absolute basis, and the assessment is not relative to industry peers or other companies in the same rating category. 10. The descriptors for liquidity are exceptional, strong, adequate, less than adequate, and weak. Adequate liquidity is ratings-neutral. To avoid the risk of default, a company's liquidity must be sufficiently robust to absorb a moderate level of stress. Accordingly, to receive an SACP (after applying all modifiers) of 'bbb-' or higher, we would have to assess a company's liquidity as adequate, as we define the term, or better. Companies with an assessment of less than adequate, as we define the term, would not receive an SACP (after applying all modifiers) higher than 'bb+'; those with a weak assessment, as we define the term, would not receive an SACP (after applying all modifiers) higher than 'b-'. 11. Our key quantitative liquidity measures (see section A) generally focus on liquidity sources and uses over a prospective 12-month horizon. In addition, under the methodology, we assess whether companies demonstrate prudent liquidity management to meet all forecasted intra-year debt maturities and working capital needs. For liquidity to be assessed as at least adequate, we expect appropriate forms of backup and sources of liquidity to cover at least 100% of intra-year working capital needs and debt maturities, including CP, over the following 12 months, subject to the provisions outlined in paragraphs 38-39 that include guidelines for assessing liquidity over a six-month time horizon if certain criteria are met. Companies will not receive an assessment of higher than less than adequate to the extent we observe liquidity management shortcomings that could lead to intra-year liquidity weakness. Due to the limitations of intra-year disclosure, our analysis generally focuses on general treasury liquidity polices and controls, including those that relate to CP backup coverage. 12. For short-term debt (excluding CP) and intra-year working capital funding needs (e.g. to fund gaps between the highest and lowest amounts of working capital investment) that typically result from seasonal patterns of sales and receivables collection, or from swings in or periodic concentration in taxes, dividend, capital expenditure, or interest payments, appropriate sources of coverage include those outlined in paragraph 23. If a company relies mainly on internal cash flow to meet these needs, as opposed to committed credit facilities and cash and liquid investments, we pay particular attention to the potential for cash flow timing mismatches. 13. For CP, appropriate backup includes committed credit facilities that we believe will be available and cash and liquid investments, as defined in paragraph 24. We expect backup in the form of credit facilities to be contractually committed (e.g. fully documented revolving credit facilities). We do not include uncommitted or verbally committed credit facilities as a form of CP backup or as a source of liquidity within our analysis. We do not expect committed backup facilities to be available exclusively to repay CP, as many credit facilities may be used for general corporate purposes. As outlined in paragraph 28, committed, short-term credit facilities used to backup CP would also be included. 14. If a company mainly relies on cash and liquid investments to backup CP, we pay particular attention to the seasonal level of cash balances in order to identify any potential timing mismatches between periods of peak CP maturities and potentially lower levels of cash and liquid investment availability. Additionally, we assess whether the company's treasury policies and controls provide for adequate coverage of maturing CP and other short-term obligations. This assessment considers whether cash pooling arrangements and committed credit facilities are sufficient to deliver cash on a timely basis in the same currency and same market as the maturing obligations. For CP, it also considers such factors as the size of the company's CP backup lines relative to expected peak CP maturities, and the entities' track record in renewing sufficient backup lines on a timely basis. 15. The benchmarks to achieve strong and exceptional liquidity, as we define the terms, are intended to meet stress scenarios that incorporate steep EBITDA declines from our base-case projections, but all investment-grade companies must have at least adequate liquidity. Strong and exceptional liquidity, by definition, exceed the norm. Exceptional or strong liquidity can raise the anchor by one notch for issuers whose anchor is 'b+' or lower if the issuers' financial policy assessment is positive, neutral, FS-4, or FS-5. While exceptional or strong liquidity does not provide an uplift for companies with an anchor of 'bb-' or higher, it can help differentiate between issuers in a given rating category. In all cases, the basis for the projected continuation of such liquidity for these issuers is rooted in other credit strengths, such as their competitive position and ability to generate strong cash flows. Therefore, the durability of these strengths must be considered in combination with exceptional or strong liquidity in order for issuers to have a higher SACP or be differentiated in a given rating category. 16. By contrast, less than adequate and weak liquidity will cap the issuers' SACP. As noted above, whatever a company's underlying performance, a lack of liquidity could precipitate a default, and ratings will reflect that risk. 17. Short-term ratings are linked to long-term ICRs and liquidity assessments. The assessment of a company's liquidity could translate directly into a higher or lower short-term rating. Accordingly, we incorporate our analysis of an issuer's CP usage and the backup sources for these programs within the context of our liquidity assessment. 18. For companies that benefit from potential extraordinary intervention in periods of stress from a parent, affiliate, or governmental entity for government related entities (GRE), the criteria assess liquidity at the SACP level, which includes ongoing support, but not extraordinary support. As outlined in "Stand-Alone Credit Profiles: One Component Of A Rating," published Oct. 1, 2010, the determination of an SACP incorporates direct support already committed and the influence of ongoing interactions or influence from the government, parent, or affiliate. In the case of GREs, the support can be channeled through government owned or controlled banks or agencies and would typically include ongoing certain and timely cash contributions or access to funding provided to a GRE from a government or another GRE, or government directed funding from government owned or controlled banks or agencies. To be included under our liquidity assessment at the SACP level, such ongoing liquidity or funding support needs to be certain and timely and be demonstrated by a track record and government policy, or an agreed and established process and ongoing interactions by the government and government owned or controlled funding bank (s) or agencies to provide such liquidity or access to funding as required. The short-term rating for a GRE, however, is based on a liquidity descriptor that has been adjusted for extraordinary support (see paragraph 18 of "Methodology For Linking Long-Term And Short-Term Ratings," published April 7, 2017). 19. When assessing a company's banking relationships, the criteria consider the history of the specific relationship (including any periods when the company's credit quality was under stress), the variety of lending facilities in place, the degree of legal commitment involved in each facility, the tenor of existing facilities, the amounts involved relative to bank lending limits, and the concentration/diversification of ties with various banks (see "Corporate Methodology," published Nov. 19, 2013). 20. Our analysis seeks to identify and measure risks from concentrated exposure to individual financial counterparties. To the extent we believe that a material bank counterparty would be unable to provide committed financing in a stress scenario, and the counterparty could not be easily replaced on a timely basis, we do not include this portion of committed financing for CP backup or as a source of liquidity within our analysis. For CP, this assessment will play a greater role in cases when CP is a permanent element of the company's funding mix, and where the company primarily relies on committed facilities as opposed to cash and liquid investments for backup, as opposed to CP only being issued when pricing is particularly favorable or where cash and liquid investments are the major source of backup. In addition, when analyzing committed lines for the purposes of liquidity or CP backup, we do not give credit for lines where the credit spread over market indices is not fixed but linked to certain market or issuer variables, such as credit default swap (CDS)-indexed lines, rendering liquidity access extremely costly at the time of a company's greatest need. More specifically, we exclude any market or issuer variable-linked lines where we believe the cost of borrowing would become excessive in a stress scenario. A. Key Quantitative Measures 21. The key indicators of a company's liquidity cushion are: A/B: Liquidity sources (A) divided by uses (B). A-B: Liquidity sources (A) minus uses (B). 22. For this purpose, monetary flows within sources and uses of cash refer to amounts generated or used over the next six to 24 months, with the timeframes identified by each of the liquidity descriptors. The amounts used in the calculations conform to an anticipated base case, assuming no refinancing, and include both internal and external components. The analysis of monetary flows now may include funds from the captive (typically in the form of dividends or intercompany loans) as a source of liquidity for the parent when we consider that transfers from the captive are available to the parent at all times, including during times of stress, and we expect this to continue (see "The Impact Of Captive Finance Operations On Nonfinancial Corporate Issuers," published on Dec. 14, 2015). 1. Sources 23. The criteria consider the following liquidity sources: Cash and liquid investments. Forecasted funds from operations (FFO), if positive. Forecasted working capital inflows, if positive. Proceeds of asset sales (when confidently predictable). The undrawn, available portion of committed credit facilities maturing beyond the next 12 months. Expected ongoing support as outlined in paragraph 18. 24. Cash and liquid investments are included as a source of liquidity and could be discounted in certain circumstances (e.g., haircut for potential repatriation taxes). If a company holds cash to satisfy specific upcoming, short-term obligations, the criteria allow for the netting of cash against these obligations to avoid the appearance of liquidity dilution. This may include hedged or presold commodity trading inventories. Within our liquidity measures, we exclude this cash as a source of liquidity, and within uses of liquidity, only include the net obligation amount. Investments should be able to be quickly liquidated without requiring deep discounts to their carrying value. This does not preclude long-term investments from being included. It does, however, exclude large stakes in non-liquid equity investments. 25. We include our base-case forecasted FFO as a source of liquidity. Forecasted FFO will fluctuate with economic and business cycles. This effect is not smoothed, because the cyclical low point is where most cyclical companies experience liquidity problems. Management's expectation of a cyclical shortage of liquidity and the effectiveness of its measures to counter this risk may affect the calculation of FFO. 26. A contracted sale of a subsidiary or other asset to a creditworthy counterparty is included as a source of cash. Alternatively, the criteria do not include a potential sale of a subsidiary or property as a source of cash. 27. Undrawn portions of committed credit facilities maturing beyond the next 12 months are also included. If covenants are present, we will only include the portion of committed credit facilities that we estimate is available without a covenant breach. If a committed credit facility is contractually exclusive for specific purposes, such as CP backup, we do not include excess availability (e.g. borrowing capacity in excess of peak CP usage) to cover other uses of liquidity. 28. Undrawn portions of committed, short-term bank credit facilities that we believe will be used to meet working capital uses or short-term debt maturities such as CP are also included. We do not include excess borrowing availability beyond our forecasted seasonal working capital needs and any short-term debt maturities such as CP, which are included as uses of liquidity. If covenants are present, we will only include the portion of committed short-term credit facilities that we estimate is available without a covenant breach. 29. Expected ongoing support from a parent, affiliate, or governmental entity for GREs, as outlined in paragraph 18, is included as a source of liquidity. 2. Uses 30. The criteria consider the following uses of cash: Forecasted funds from operations, if negative. Expected capital spending. Forecasted working capital outflows, if negative. All debt maturities either recourse to the company or which it is expected to support (including outstanding CP maturities). Any required cash-based, postretirement employee benefit top-up needs. Credit puts that cause debt acceleration or new collateral posting requirements in the event of a downgrade of up to three notches. Contracted acquisitions and expected shareholder distributions under a stress scenario, including expected share repurchases. 31. When assessing whether liquidity is at least adequate, expected capital spending includes estimated maintenance spending plus expansion project spending with a long lead time that will likely proceed even in a downturn or that have been contractually committed. For the purposes of assessing exceptional or strong liquidity, all capital spending, including estimated discretionary spending, is generally included. 32. To assess forecasted working capital outflows in companies with material intra-year working capital requirements (e.g., companies in seasonal businesses), forecasted intra-year peak working capital outflows are used. In cases where working capital changes are positive over a given period because inflows exceed outflows, the criteria use the intra-year peak working capital outflows forecasted over the period. If a company issues CP to fund all or a portion of its working capital needs, we exclude this amount from forecasted intra-year peak working capital outflows if it is already captured in outstanding CP maturities as described in paragraph 33. 33. Our calculation of liquidity uses includes outstanding CP maturities. We do not include potential future CP issuance as a liquidity source since our liquidity analysis does not assume companies are able to borrow in debt capital markets, including CP markets. 34. Collateral posting requirements related to derivative contracts are not considered under liquidity uses. Potential uses in stress-case scenarios related to derivative contracts are analyzed separately (see "Commodities Trading Industry Methodology," published Jan. 19, 2017). B. Liquidity Categories 1. Exceptional 35. Companies with exceptional liquidity should be able to withstand severe adverse market conditions over the next two years while still having sufficient liquidity to meet their obligations. To have exceptional liquidity, an entity would have to meet the ratio test for A/B (see first bullet point below) and at least four of the other supportive characteristics listed below. Few companies qualify for this category. The first three characteristics refer to quantitative measures that apply in most industries. In exceptionally stable or volatile industries, however, the "Sector-Specific Considerations" section in the Appendix may specify different standards. Characteristics of a company with exceptional liquidity include: A/B of 2x or more projected each year over the next two years. Positive A-B, even if forecasted EBITDA were to decline by 50%. Few covenants. If covenants are present, headroom under these is such that forecasted EBITDA could fall by 50% without the company breaching covenant test measures, and debt is at least 30% below any covenant limits. The likely ability to absorb, high-impact, low-probability events (such as market turbulence, sovereign risk, or the activation of material-adverse-change clauses) without refinancing. Well-established and solid relationships with banks. A generally high standing in credit markets. This can be assessed from equity, debt, and CDS trading data relative to peers' and market averages. Generally prudent risk management. To meet this assessment, the company needs to show evidence that its management anticipated potential setbacks and took the necessary actions to ensure continued exceptional liquidity, as well as demonstrate sufficient intra-year liquidity management as outlined in paragraphs 11-14 (see the "Comprehensiveness of enterprise-wide risk management standards and tolerances" section of "Methodology: Management And Governance Credit Factors For Corporate Entities," published Nov. 13, 2012). 2. Strong 36. Companies with strong liquidity should be able to withstand substantially adverse market circumstances over the next 24 months while still having sufficient liquidity to meet their obligations. To have strong liquidity, an entity must meet the ratio test for A/B and demonstrate at least four of the other supportive characteristics listed below. The first three characteristics concern quantitative measures that apply in most industries. In exceptionally stable or volatile industries, however, the "Sector-Specific Considerations" in the Appendix may specify different standards. Characteristics of a company with strong liquidity include: A/B for the upcoming 12 months of 1.5x or more and remaining above 1.0x over the subsequent 12-month period. Positive A-B, even if forecasted EBITDA declines by 30%. Sufficient covenant headroom for forecasted EBITDA to decline by 30% without the company breaching coverage tests, and debt is at least 25% below covenant limits. The likely ability to absorb high-impact, low-probability events without refinancing. Well-established, solid relationships with banks. A generally high standing in credit markets. This can be assessed from equity, debt, and CDS trading data relative to peers' and market averages. Generally prudent risk management. To meet this assessment, the company needs to show evidence that its management anticipated potential setbacks and took the necessary actions to ensure continued strong liquidity, as well as demonstrate sufficient intra-year liquidity management as outlined in paragraphs 11-14. 3. Adequate 37. Companies with adequate liquidity should be able to withstand adverse market circumstances over the next 12 months while maintaining sufficient liquidity to meet their obligations. Adequate liquidity is ratings-neutral, rather than an enhancing or detracting characteristic. To have adequate liquidity, an entity must meet the ratio test for A/B and demonstrate at least four of the other supportive characteristics listed below. The first three characteristics concern quantitative measures that apply in most industries. In exceptionally stable or volatile industries, however, the "Sector-Specific Considerations" in the Appendix may specify different standards. Characteristics of a company with adequate liquidity include: A/B of 1.2x or more over the upcoming 12 months. In particular, any upcoming debt maturities should be manageable. Positive A-B, even if forecasted EBITDA declines by 15%. Sufficient covenant headroom for forecasted EBITDA to decline by 15% without the company breaching coverage tests, and debt is at least 15% below covenant limits (or, if not, the related facilities are not material). The likely ability to absorb high-impact, low-probability events, with limited need for refinancing. Liquidity is supplemented by the perceived flexibility to lower capital spending or sell assets, among other actions. Sound relationships with banks. A generally satisfactory standing in credit markets. This can be assessed from equity, debt, and CDS trading data relative to peers' and market averages. Generally prudent risk management. To meet this assessment, the company needs to show evidence that its management anticipated potential setbacks and took the necessary actions to ensure continued adequate liquidity, as well as demonstrate sufficient intra-year liquidity management as outlined in paragraphs 11-14. 38. For the purposes of calculating adequate liquidity, the debt maturities and the undrawn, available portion of committed credit facilities are based on a six-month time horizon for companies with certain strong credit characteristics. The A/B and A-B tests for the adequate category use debt maturities within the next six months as a use of liquidity and include the undrawn, available portion of committed credit facilities that matures beyond the next six months as a source of liquidity when: The company's anchor is at least 'bbb-'. All three of the following qualitative characteristics--normally associated with strong liquidity--apply: (1) Well-established and solid relationships with banks, (2) A generally high standing in credit markets (this can be assessed from equity, debt, and CDS trading data relative to peers' and market averages), and (3) Generally prudent risk management. To meet this assessment, the company needs to show evidence that its management anticipated potential setbacks and took the necessary actions to ensure continued adequate liquidity. 39. If the A/B and A-B tests do not meet the requisite levels outlined in paragraph 37 using a six-month time horizon, the company may still receive a liquidity assessment of adequate if it meets all other characteristics outlined in paragraph 38 and it has a credible plan that will result in the A/B and A-B tests meeting the minimum levels specified in paragraph 37 at least three months before the refinancing date. However, in this event, the SACP on the company will be no higher than the 'a' category. Characteristics of credible plans generally include advanced discussions with lending groups or bond underwriters with clear timetables for proposed refinancings or new debt issues, which would not extend beyond the next three months. 4. Less than adequate 40. A company with less than adequate liquidity has an SACP no higher than 'bb+'. To have a level of liquidity that is less than adequate, an entity would have one or more of the negative characteristics described below or would not qualify for an adequate or weak liquidity assessment. Characteristics of a company with less than adequate liquidity include: A/B of less than 1.2x over the next 12 months. This level offers scant protection against unexpected adverse developments. A-B of about zero or below. Covenant headroom so tight that coverage tests could be breached if forecasted EBITDA were to decline by just 10%. (A covenant breach on any related facilities would likely have a significant impact because the debt containing the covenants in question could not easily be repaid.) The likelihood of the company not being able to absorb low-probability adversities, even factoring in capital-spending cuts, asset sales, and cuts in shareholder distributions. No particular core bank relationship and indications of a poor standing in credit markets, such as wide CDS trades for several consecutive weeks or share price declines. 5. Weak 41. Weak liquidity represents an overarching credit risk. In all cases, such an assessment will translate into an SACP of 'b-' or lower. To have weak liquidity, an entity would display the first characteristic listed below and typically one or both of the two subsequent characteristics. Characteristics of a company with weak liquidity include: A/B or A-B reflecting a material deficit over the next 12 months. The likelihood that material covenants will be breached unless there is a very credible plan to avert such a breach in a timely fashion or lenders appear likely to provide a covenant waiver or amendment (assuming that the related facilities are material). Only low-probability, unforeseen positive events would allow the company to regain a level of liquidity better than weak. Indications of a poor standing in the credit markets, such as very wide CDS trades or a serious share price decline. APPENDIX General Considerations 42. For companies in more volatile sectors, we assess the resiliency of liquidity through a cycle. If we do not believe the resulting descriptor reflects sustainable liquidity characteristics, we could adjust our liquidity assessment downward. For example, we could lower our liquidity assessment on a volatile company to strong from exceptional if we believe key quantitative measures typical of exceptional liquidity are not sustainable over the forecast period. This could especially be true if we believe there is a higher prospect of ratios weakening from the peak of an economic cycle. Liquidity sources 43. Cash and liquid investments.If we believe a company would use cash trapped at a foreign subsidiary to meet debt maturities or other liquidity uses at that foreign subsidiary, we would include this cash as a source of liquidity up to the amount of the corresponding use. We generally haircut the cash to be included under sources when a material proportion of a group's cash is held in a different part of the structure than where the debt is located, and we believe the cash may not be fully fungible within the group (due to the presence of minority shareholders, for example). 44. We do not exclude cash that the company needs to maintain to run the business and meet potential working capital requirements. Since working capital outflows are included under uses (B) of liquidity, system-related cash needed to run the business should be included in sources, along with items such as customer advances. 45. Funds from operations (FFO).We derive projected FFO from forecasted cash flow from operations (CFO) before change in working capital and after lease payments, when assessing a company's liquidity. This differs from the FFO definition in our "Corporate Methodology: Ratios And Adjustments," used in our base-case forecasts, where adjusted FFO is reduced by only the lease-interest component. This is because our quantitative liquidity analysis focuses on the monetary flows--the sources and uses of cash--that are the key indicators of a company's liquidity cushion. At the same time, we do not include lease repayments in debt maturities under uses of liquidity. 46. Committed credit facilities.When calculating sources of liquidity, we only include the undrawn, available portion of committed bank lines maturing beyond the specified time horizon for each liquidity descriptor. For example, when assessing liquidity as adequate, we only include a committed revolving credit facility as a source if it matured beyond the next 12 months. Similarly, given that our liquidity assessment looks out over two years when assessing liquidity as strong or exceptional, we only include a facility maturing beyond 24 months as a source of liquidity. 47. If, for example, a facility matured in 18 months, we could include the borrowing availability as a source of liquidity in year one, but exclude the amount in year two under the exceptional and strong descriptors (as well as include any drawn portions as debt maturities under uses of liquidity). This is because we do not assume an extension of bank lines--regardless of the company's perceived credit strength or issuer credit rating. For instance, whether the issuer credit rating on the company is speculative grade or investment grade, we do not assume bank lines will be extended beyond the current stated maturity. 48. Additionally, we exclude revolver borrowing availability that we believe would be inaccessible due to covenant constraints. For revolving credit facilities with extension options, we include the extension period(s) under sources of liquidity only if the option is at the discretion of the borrower. If lenders have the option to terminate commitments at each extension point, we only include the borrowing availability under the facility up to the first extension date. 49. Commercial paper and factoring programs.While the existence of a CP program can provide companies with alternative sources of short-term funding, such a program would not be considered a committed source of liquidity. Additionally, we do not require the presence of a committed facility to back up the full size of the CP program. For liquidity to be at least adequate, an issuer would need sources of liquidity (for example, committed facility and/or cash balances) to cover at least 100% of expected intra-year debt maturities, including CP, over the next 12 months. 50. Given that it can be difficult to identify outstanding CP at any point in time, when considering coverage, we may include our expectations for peak outstanding CP during the year as opposed to CP balances as of the last filing date, especially if we believe reported balances are not reflective of typical borrowing patterns. 51. Likewise, we do not consider factoring programs under sources of liquidity. Unlike asset-based lending (ABL) facilities, factoring is more of a sales transaction and not a loan. In addition, these transactions tend to be very short term. For this reason, we would not consider them a committed source of future liquidity over a 12-month period. 52. Planned or potential future debt issuance.We do not include potential future debt issuances as a source of liquidity because of the uncertainty of a company's ability to access debt markets in times of financial stress, even for investment-grade issuers. For instance, in the case of a proposed financing, with the intended use of proceeds to repay existing debt, we will assess a company's liquidity excluding the proposed financing until it's obtained or fully underwritten. 53. In this scenario, we would still include the existing debt maturity as a use of liquidity in our A/B and A-B calculations, if the debt matures within the corresponding liquidity horizon. The rationale is that our liquidity assessment is essentially a stress test against a sudden and severe loss of capital markets access availability. 54. For new issuers, while our ratings are prospective, we will not include proposed financing as a source in our liquidity calculations until the financing has been obtained or is fully underwritten. Similarly, we would not include rights issues as a source of liquidity for a company, unless the rights issue is irrevocably guaranteed (for example, an underwriter agrees to buy any securities not taken up by existing holders). 55. Given that we exclude proposed "best efforts" or potential financings as a source of liquidity, we also exclude from uses of liquidity acquisitions and other discretionary spending that are contingent on the successful issuance of new financing to support the proposed transaction. 56. Shared facilities with captive finance entities.When an issuer has a shared revolving credit facility with a captive finance entity, for purposes of calculating the issuer's liquidity sources, we net outstanding commercial paper at the captive from the revolver's borrowing availability. In these cases, we generally use an estimate of peak CP borrowings at the captive to avoid potentially overstating sources available to the issuer over a 12- to 24-month period. 57. Asset divestitures.We do not include asset sales as a source of liquidity unless they are contracted and proceeds will be received in the time period being measured under the liquidity descriptor (even when the disposed assets are reported under discontinued operations in a company's financial statements). Liquidity uses 58. Capital spending.When assessing whether liquidity is at least adequate, the level of capital expenditures will be lower than estimates in our base-case forecast to determine an issuer's financial risk profile, particularly for companies that are pursuing discrete growth projects that have not been committed or can be easily curtailed in case of a need to preserve cash. 59. When assessing strong or exceptional liquidity, we include all forecasted capital expenditures over the next 24 months, including discretionary growth capital spending. 60. Dividends and share repurchases.Our liquidity uses include dividends and share repurchases that we expect under a stress scenario. Unlike other potential uses of liquidity, such as debt maturities or maintenance capital spending, we view dividends and share repurchases as more discretionary, although more so for the latter. For this reason, when evaluating a company's liquidity position, we may use a lower estimate of dividends and shareholder repurchases than in our base-case forecast based on our views of management and the company's track record in terms of shareholder returns and maintaining a certain minimum level of liquidity. 61. More specifically, we exercise judgment on the extent to which management would likely curtail dividends and share repurchases in a challenging economy. Companies' behavior in past recessions may be a useful indicator. 62. Debt maturities and put options.When evaluating uses of liquidity, we include all debt maturities over the liquidity horizon that are either recourse to the company, or nonrecourse that we believe the company will support even in times of stress. In cases where the debt includes a put option held by debtholders, we will consider the date of the put option the effective debt maturity--i.e., we will assume the debt will need to be repaid/refinanced on the day the put can be first exercised. 63. Under debt maturities, we also include outstanding CP maturities. Given that it can be difficult to identify outstanding CP at any point in time, we may include our estimates for peak outstanding CP during the year, as opposed to CP balances as of the last filing date. 64. We do not assume future debt refinancing or the rolling over of CP, regardless of the company's perceived credit strength or issuer credit rating. For instance, even for investment-grade issuers, we do not assume future debt maturities are refinanced with potential uncommitted capital raises. We could, however, consider a shorter time horizon (such as three to six months) when including debt maturities for stronger issuers, as outlined in paragraphs 38 and 39 of the criteria. 65. We do not treat repayments of leases as debt maturities (even if International Financial Reporting Standard 16 shows them as such in the cash flow statement) because we already have reduced FFO by such lease cash outflow. 66. Working capital outflows and reverse factoring.For companies that engage in reverse factoring--where accounts payable (AP) days are extended beyond the term customary for the industry and supply chain--we assess the likelihood and potential impact on liquidity of these arrangements ceasing to exist. In such a scenario, a company could be subject to material working capital outflows if AP days with its suppliers revert back to industry norms. Accordingly, we exclude these arrangements from sources of liquidity. 67. However, given that these arrangements are typically conducted through proprietary relationships with multiple banks, an immediate unwinding of these arrangements in a stress scenario would be unlikely. Accordingly, if we are unable to quantify the risks of unwinding over a specified time period, we may account for these risks under qualitative liquidity factors, such as a company's ability to withstand high-impact, low probability events and within its general risk management. This would be in addition to any debt adjustments we make for reverse factoring, as outlined in paragraph 11 of "Corporate Methodology: Ratios And Adjustments." 68. Hybrid capital instruments.Regardless of the equity content applied to a given hybrid security, for the purposes of our liquidity analysis, we attempt to capture any potential calls on cash under uses of liquidity. Such uses might include preferred dividends, maturities, or potential puts of the instrument back to the issuer. 69. When evaluating these potential uses, we include payments that are due and payable in cash. Where such uses can be met through the issuance of equity, we use judgment based on our view of management, our assessment of the factors involved, and the likelihood that the company will meet these obligations through equity issuance. 70. If the security is mandatorily convertible to equity, we would not include this under uses of liquidity. In addition, if payments have deferability features, we use judgment on whether we believe these obligations would be deferred, particularly in a stress scenario. 71. Acquisitions.We exclude acquisitions that are not contracted or fully committed, but we could consider the impact of any break-up fees or other costs that will have to be funded regardless of whether the financing and acquisition closes. These costs would still be included under uses of liquidity and, if large enough, could hurt a liquidity assessment. 72. Collateral calls.Analyzing potential liquidity requirements due to derivative contract positions is a complex topic. Potential liquidity calls depend on how far out-of-the-money the derivative contracts become and can be further exacerbated if a company is downgraded below a certain threshold. With the exception of commodity trading operations, we do not include such contingent cash calls in our liquidity assessment, given the uncertainty about whether any liability will occur. Material deficit 73. For liquidity to be weak, an entity would display a material deficit in either A/B or A-B over the next 12 months. Generally, we view a material deficit as A/B well below 1x or A-B well below zero (relative to the company's size), but we also consider other qualitative factors when distinguishing between less than adequate and weak liquidity. As an example, this may be a result of insufficient sources to cover an upcoming debt maturity or an inability to meet fixed charges (interest and capital spending) over the next year. Covenant headroom 74. Our liquidity assessment on all companies is forward-looking. As a result, the analysis emphasizes future covenant headroom, as opposed to headroom as of the latest quarter results. 75. However, failure to meet required covenant headroom does not necessarily translate into less than adequate liquidity. In paragraph 37, we also clarify that to have adequate liquidity, an entity must meet the ratio test for A/B and demonstrate at least four of the other six supportive characteristics. Therefore, we use analytical judgment to determine whether the decreased covenant headroom warrants a less than adequate assessment, or if a company has enough financial flexibility to offset this factor, such as a track record of waivers or strong interest coverage. 76. While the criteria address EBITDA-based maintenance covenants, we may include non-EBITDA-based covenants as part of our analysis using a similar framework. We may also factor in negative covenants, such as incurrence tests and distribution restrictions, to the extent that we believe these covenants could affect sources and uses. For example, if we believe a debt incurrence test would limit revolver availability in a stress scenario, we could haircut available revolver balances under sources of liquidity. Qualitative liquidity factors 77. High-impact, low-probability events.In our qualitative analysis, we look at how high-impact, low probability events could affect a company's liquidity. Examples of such events include adverse litigation rulings, realistic disaster scenarios (natural or man-made catastrophic events), regulatory changes, cyber threats, loss of confidence in confidence-sensitive sectors, unwinding of reverse factoring arrangements, and extreme pricing variations in commodity sectors and sovereign risk. We consider events that are reasonable in context and size relative to the issuer. 78. Factors that could benefit a company's ability to withstand such events without or with only limited need for refinancing include the presence of excess liquidity, strong asset coverage, and strong discretionary cash flow generation. To achieve exceptional or strong liquidity, an issuer would need to absorb such events without refinancing, which would imply the ability to meet all debt maturities over the specified time horizon with internally generated cash flow and/or cash and revolver availability, even under a stress scenario. 79. Conversely, companies that have high debt leverage, low ratios of free operating cash flow (FOCF) to debt, tight financial covenants, and steep debt maturity walls could have difficulty absorbing high-impact, low-probability events without external capital. 80. Banking relationships.The nature of banking relationships is generally evidence-based. Under exceptional and strong liquidity, we characterize banking relationships as well established and solid, while the criteria cite sound relationships when characterizing adequate liquidity. We distinguish between these descriptors based on analytical judgment and consider the length and nature of relationships, as well as the turnover in the lender group. 81. Generally, a solid business relationship is key to determining whether a bank will stand by its client. The concentration of lenders and the dollar amount of participation can also be revealing. Dependence on just one or a few banks or less financially sound lenders heightens risks in times of economic stress. 82. Concentration of banking facilities also tends to increase the amount of an individual bank's participation. As the amount of the exposure increases, the bank may be more reluctant to meet its commitment. On the other hand, a company will not benefit if it spreads its banking business so thinly that it lacks a substantial relationship with any of its banks. Generally, we expect investment-grade issuers to have well-established and solid relationships with their banks, absent contrary evidence. 83. For speculative-grade entities, we might also consider the history of the banking relationship through periods of credit stress. Key inputs might include a company's historical ability to receive waivers or negotiate credit amendments on relatively favorable terms, though this does not ensure companies will be able to obtain future waivers, especially if they are repeatedly violating covenants. At the opposite end of the spectrum, any history of litigation between the issuer and lenders, or difficulty obtaining waivers and amendments, could be evidence of a strained banking relationship. 84. Standing in credit markets.To assess an issuer's standing in the credit markets, we may look at factors such as equity, debt, and credit default swaps (CDS) trading levels, where available, relative to peers and market averages. For example, lower-than-average debt trading levels or widening rating-adjusted spreads relative to market averages may indicate decreasing market confidence about a company's prospects and ability to meet its debt maturities. As a result, the company could have increased difficulty accessing the capital markets. 85. Other factors we consider include a company's frequency of debt issuance and market access, especially during times of company-specific stress or credit market turbulence. 86. For exceptional and strong liquidity assessments, we characterize standing in the credit markets as generally high, and for adequate liquidity, we view standing in the credit markets as satisfactory. We distinguish between these descriptors based on analytical judgment and mainly consider the diversity of funding sources available to an entity. 87. Larger, investment-grade issuers that have access to both public and private debt markets have greater flexibility than companies that depend solely on private bank loans. In addition, we consider whether a company can borrow on an unsecured basis, has access to the commercial paper markets, and issues debt in multiple geographies. It is more costly to raise debt in the public bond markets and often requires a company to establish a track record among investors. These costs and information asymmetry issues sometimes make it impractical for smaller, speculative-grade issuers to raise small amounts of debt in public markets. 88. In addition, a speculative-grade company's access to the credit markets during times of stress, such as the financial crisis, is often a function of the capital market's appetite for risk. Accordingly, it would be rare that we would characterize a speculative-grade company as having a generally high standing in the credit markets, and even low-investment-grade companies may not have access to a diversity of funding sources required for this assessment. 89. Risk management assessment.In determining how prudent a company's risk management is, we look for evidence that management has historically anticipated potential company-specific or market-related setbacks and has taken necessary actions to ensure sufficient liquidity. 90. Under times of stress, such actions could include dividend cuts, suspension of share repurchases, or maintenance of minimum cash balances. This is particularly relevant for exceptional and strong assessments, where issuers are required to carry higher levels of excess liquidity even during times of stress. For example, when assessing liquidity, we would generally expect companies to be able to cover the full amount of dividends and share repurchases included in our base-case forecast, while still maintaining excess liquidity and achieving the required A/B and A-B measures under a stress case. 91. Our view of a company's financial policy is an important input when assessing its current and future liquidity position. For instance, we assess whether a company has historically had a higher risk appetite and an aggressive acquisition strategy that has strained its liquidity position, or whether it has taken actions to preserve liquidity in past downturns. 92. While we only include contractual acquisitions when calculating A/B and A-B, when evaluating qualitative factors, we focus more on a company's track record and our expectation for financial management. In this respect, the quantitative and qualitative factors under the liquidity criteria are meant to complement each other and produce a more comprehensive view of a company's future liquidity position. 93. Size and issuer credit strength.The various qualitative factors in the criteria help to identify strengths and weaknesses within a company's future liquidity position that numerical ratios might not fully capture. While there is no size bias in our liquidity assessment, generally, lower-rated entities might meet the quantitative requirements for strong or exceptional liquidity but fail to meet corresponding qualitative factors. 94. For example, smaller, speculative-grade companies with lower amounts of excess cash, and less access to the debt markets or alternative sources of liquidity, might not be able to withstand high-impact, low probability events or have a high standing in the credit markets. As a result, these issuers might be subject to more volatility among their sources of liquidity, including funds from operations, which is not fully captured in A/B and A-B ratios. Additionally, a well-established, solid relationship with banks can often be influenced by the size of the bank's commitment and amount of business it does with the company. 95. For these reasons, although the criteria establish no rating threshold for liquidity, we typically expect: Instances of 'B+' and below rated issuers achieving liquidity descriptors higher than adequate to be rare. Few companies to qualify for the exceptional category, and these entities to typically have issuer credit ratings of 'BBB-' or above. 96. Generally, when deciding between exceptional and strong liquidity, we use our analytical judgement to distinguish between many of the qualitative factors. Sector-Specific Considerations 97. In our assessment of a company's liquidity, we also consider the impact of unique industry characteristics. Agribusiness and commodity foods 98. Given the earnings volatility grain processors, meat processors, and produce companies experience, we have specified for these issuers a more stringent decline in EBITDA percentage for each liquidity category to the extent our cash flow forecasts are not already assuming a downside scenario. 99. The EBITDA declines companies would have to withstand and still have sources cover uses are as follows for each liquidity descriptor: Exceptional: Positive A-B, even if forecasted EBITDA declines by 60%. Strong: Positive A-B, even if forecasted EBITDA declines by 50%. Adequate: Positive A-B, even if forecasted EBITDA declines by 30%. Less than adequate: A-B of about zero or below if forecasted EBITDA declines by about 15%. Weak: A/B or A-B reflecting a material deficit over the next 12 months. 100. For calculating the liquidity uses for companies with significant commodity trading activities (more than 10% of expected normalized EBIT, EBITDA, or gross margin), we apply the same adjustments for ARMI (adjusted readily marketable inventories) as we do for commodities traders (see paragraphs 86 and 87 of "Commodities Trading Industry Methodology," published on Jan. 19, 2017). Agricultural cooperatives 101. To calculate liquidity uses for cooperatives with significant commodity trading activities (more than 10% of expected normalized EBIT, EBITDA, or gross margin), we apply the same adjustments for ARMI as we do for commodities traders (see paragraphs 86 and 87 of "Commodities Trading Industry Methodology"). Health care equipment 102. Health care equipment companies generally have more stable revenues and profitability than most other corporate issuers. Therefore, we may assess a covenant cushion of 10% as the minimum for adequate liquidity, rather than our standard 15%, provided other aspects of the company's liquidity meet our criteria for adequate liquidity. Homebuilder and real estate developers

103. One supplementary metric we consider useful in assessing homebuilders' liquidity is cash plus inventory/ reported debt. In our experience, this metric has been important for lenders and other constituents, and where lenders have viewed this measure as relatively high, it has enhanced a homebuilder's ability to raise capital. 104. We believe that when a company is viewed as being on the cusp between two liquidity descriptors and has higher-than-average cash plus inventory/unadjusted debt compared with similarly constituted peers, that helps support the better liquidity assessment. However, in the case of a nonresidential developer, given that its inventory is typically less liquid (and the greater potential for inventory to suffer value erosion in a downturn), we do not consider this measure as pertinent. 105. In considering the liquidity of a non-residential real estate developer, we generally assume that investment related to properties under construction or under contract with its third-party builders will not be deferred or curtailed. 106. Also, given the high capital requirements related to development projects, a key qualitative factor is the extent to which a company has well-established, solid relationships with construction lenders and a high standing in the credit markets. As part of this assessment, we consider the terms and conditions of existing construction loans, including guarantees and recourse provisions, the circumstances under which loans could be called, and how potential cost overruns and completion delays are provided for. 107. Some homebuilders and developers operate in seasonal markets, which can lead to substantial intra-year working capital requirements. For these companies, we treat forecasted intra-year peak working capital outflows as a use of cash, in accordance with our global corporate criteria. 108. In some jurisdictions, homebuilders and developers must provide letters of credit and/or surety bonds for certain performance-related obligations (for example, to municipalities, government agencies, and utilities related to the construction of roads, sewers, and other infrastructure). If unable to obtain letters of credit and surety bonds from third parties, the company must provide cash collateral, reducing cash available for other liquidity uses. If we expect that a company will have to post cash collateral, we treat this as a use of cash in our liquidity assessment. 109. Our liquidity criteria specify certain tests for defining each liquidity category. Because we view the homebuilder/developer industry as volatile, we apply standards that are tougher than those we utilize for most other industries in determining the following liquidity assessments: Exceptional: Positive A-B, even if forecasted EBITDA were to decline by 70%. Covenant leeway sufficient to sustain at least a 70% decline in EBITDA. Strong: Positive A-B, even if forecasted EBITDA were to decline by 50%. Covenant leeway sufficient to sustain at least a 50% decline in EBITDA. Adequate: Positive A-B, even if forecasted EBITDA were to decline by 30%. Covenant leeway sufficient to sustain at least a 30% decline in EBITDA. Less than adequate: The criteria above list five conditions that could indicate that liquidity is less than adequate, rather than adequate. Two of the five conditions--A-B of about zero or below and covenant headroom so tight that coverage tests could be breached if forecasted EBITDA were to decline by 10%--are applied in a modified form in the case of homebuilders/developers. First, we use the A-B and the covenant headroom tests to differentiate a less-than-adequate liquidity assessment from a weak liquidity assessment (rather than from an adequate assessment). Second, we look for 1) A-B to be positive even if forecasted EBITDA were to decline by 20%, and 2) the covenant headroom to be sufficient to sustain at least a 20% decline in EBITDA. 110. These EBITDA leeway standards are most relevant in the midpoint to peak of a real estate cycle as sales growth trajectories (up or down) are moderate and internally generated cash can fund most inventory replenishment. EBITDA can be negligible at the bottom of a cycle, so further stressing this metric is typically not meaningful. 111. In jurisdictions (such as China, for example) where homebuilders and developers operate a presale model that involves a significant timing mismatch between non-escrowed, unrestricted cash receipts (cash flow) and revenue recognition (income), we adapt our liquidity analysis in two ways: We calculate cash flow from operations (CFO) using the direct cash flow method (rather than calculating FFO by adjusting EBITDA). We run the stress scenarios provided for in paragraph 15 based on cash EBITDA, as explained below. 112. For homebuilders and developers in these jurisdictions, we forecast CFO by summing cash receipts from sales, rental income, and other cash-based operating inflows, and deducting construction costs; selling, general, and administrative expenses; tax; interest expenses; and other cash-based operating outflows. We also include committed land expenditure as a use of liquidity. 113. This method allows us to reflect more accurately actual operating conditions since, in these jurisdictions, the accounting practices of revenue

recognition at the delivery of completed property can cause distortions because FFO derived from EBITDA would lag by a number of years. As per the Key Quantitative Measures section above, FFO and working capital variations are either sources or uses of funds, and calculating CFO using the direct method is the same as calculating FFO using our usual method and adding or subtracting working capital variations. 114. Likewise, in these jurisdictions, to apply the stress test described above, we calculate cash EBITDA by starting from the calculated CFO and adding back working capital variation, interest, and taxes. Midstream energy 115. In the more stable subsectors of midstream energy, such as interstate pipelines and highly contracted storage assets, we allow for more lenient ratios relative to the general guidelines. Specifically, to meet our definition of adequate liquidity, we consider a sources-to-uses ratio (A over B) of 1.1x, instead of the standard 1.2x from the Liquidity Categories section. We also consider covenant cushions of 10% instead of the standard 15%. 116. For subsectors with more meaningful volume and price risks, such as the larger diversified midstream energy companies and the gathering, processing, and fractionation sector, we use the benchmarks outlined in our general liquidity criteria. Oil refining and marketing 117. Working capital constitutes a significant use of liquidity for many refiners, and needs can change within a year and even within a month. But supply and offtake intermediation agreements may partially offset such swings. 118. Because we view refining and marketing companies' earnings and cash flows as relatively volatile, we generally apply more stringent standards. Specifically: To have adequate liquidity, refining companies' liquidity sources must exceed uses even if forecasted EBITDA declines by 30%. To have strong liquidity, sources must exceed uses even if forecasted EBITDA declines by 50%. To have exceptional liquidity, sources must exceed uses even if forecasted EBITDA declines by 67%. 119. However, if we project trough-like market conditions for the following year, we do not apply this harsher standard, but rather the standards in the Liquidity Categories section above. Real estate 120. Because we view real estate companies as exceptionally stable, we use the following guidelines for the EBITDA declines companies would have to withstand for each of the liquidity descriptors: Exceptional: 30% Strong: 15% Adequate: 10% Less than adequate: 5% Weak: -- 121. In applying the global corporate liquidity criteria to real estate companies, we generally treat real estate investment trusts' (REITs') common dividends as a use of cash, given the relative inflexibility of REITs' dividend payout policies. We generally do not include maturities related to nonrecourse property-level secured debt--such as minority-owned joint ventures and properties included in commercial mortgage-backed securitizations--as a use of cash unless we have a specific expectation that the company will support this debt. 122. In the real estate sector, companies regularly walk away from the debt of underperforming properties, without incurring the market stigma such an action might create in other sectors. However, we will only exclude the debt of ailing affiliates from our liquidity calculations if we believe the failure to support the affiliate will not limit the issuer's access to capital markets. 123. While our cash flow and leverage ratio calculations incorporate all debt (including nonrecourse, property-level debt), we exclude nonrecourse property-level debt from our calculation of uses of liquidity for the real estate sector. This is based on our expectation that performing properties will refinance their nonrecourse debt, or that the REIT can dispose of or walk away from underperforming properties and it will not have to support associated nonrecourse debt. 124. In the real estate industry, companies may have substantial unencumbered assets, which can be a critical source of financial flexibility, given the very large and liquid market for property-specific mortgages. If we view a company as being on the cusp between two liquidity descriptors, the amount of unencumbered assets compared with potential liquidity uses can be a deciding factor. Regulated utilities 125. The relative certainty of financial performance by utilities operating under relatively predictable regulatory monopoly frameworks makes these utilities more attractive to investors, even in times of economic stress and market turbulence, than conventional industrials. Also, recognizing the cash flow stability of regulated utilities, we allow more discretion when calculating covenant headroom. When determining whether utilities with business risk profiles of at least satisfactory meet our definition of adequate liquidity, we use slightly lower thresholds: A ratio of sources to uses higher than 1.1x (compared with the standard 1.2x); Positive sources over uses even if forecast EBITDA declines by 10% (compared with a 15% decline for corporate issuers); and No covenant breach even if forecast EBITDA declines by 10% (compared with a 15% decline for corporate issuers). Transportation cyclical 126. Since we view cyclical transportation companies' earnings and cash flows as relatively volatile, we generally apply more stringent standards when assessing liquidity: Adequate liquidity: Cyclical transportation companies must be able to sustain an EBITDA decline of more than 30% (rather than the standard 15%), with liquidity sources still exceeding liquidity uses. Strong liquidity: Cyclical transportation companies must be able to sustain an EBITDA decline of more than 50% (rather than the standard 30%), with liquidity sources still exceeding liquidity uses. Exceptional liquidity: Cyclical transportation companies must be able to sustain an EBITDA decline of more than 75% (rather than the standard 50%). 127. However, if we project trough-like market conditions over the next year, we do not apply these harsher standards, but rather the standards in the Liquidity Categories section above. Also, we do not apply these harsher standards for companies that are consistently and materially less cyclical than other companies in this industry--either because of the subsegments they operate in or because of their specific characteristics. Examples include: Shipping companies in the U.S. domestic market whose regulations do not permit competition from non-U.S. companies and that have long-term contracts with their customers; Other shipping companies that generate a high proportion of their revenues from long-term contracts with minimum volume commitments and fixed pricing, such as certain companies that operate natural gas tankers serving utilities; Bus companies that operate under government-granted franchises that greatly limit competitive entry; and Other bus companies that have a strong market position, significant scale, and largely flexible operating costs. Financial market infrastructures 128. Within the financial market infrastructures (FMI) sector, international central securities depositories (ICSDs) typically have large varying amounts of deposits that appear on their balance sheets but are dedicated to client settlement activity and are invested in highly liquid, highly creditworthy instruments, rather than being available to support the corporate activity of the ICSD. Similarly, clearinghouse (CCP) balance sheets substantially consist of client-related assets and liabilities, such as initial margins and the replacement value of some types of unsettled trades. 129. Consistent with our leverage analysis, for ICSDs, CCPs, and groups that own CCPs or ICSDs, we do not include clearing or settlement assets or obligations, or client deposits and related investments (for ICSDs) as sources or uses in our liquidity assessment. Instead, we assess the adequacy of stressed liquidity resources for clearing and settlement purposes in our analysis of clearing and settlement risk. 130. "Clearing obligations" typically refer to clearing liabilities that are usually non-debt and may include initial or variation margin postings. "Settlement obligations" typically refer to member deposits lodged at ICSDs. Similarly, we tend to exclude the movement in these assets and liabilities from our cash flow analysis. Companies that borrow from Brazil's Banco Nacional de Desenvolvimento Economico e Social (BNDES) 131. For all rated entities in Brazil that have any group members that borrow from BNDES, such borrowings can expose the group to risk related to cross-default clauses. That is because all BNDES loans contain cross-default clauses by virtue of the BNDES rules, or general terms and conditions. In case an entity defaults on a BNDES obligation, BNDES may immediately accelerate the debt it has lent to entities that are members of the same economic group as the defaulting entity. For entities related to a government, BNDES may accelerate debt at the related entities, though not debt contracted directly by a government. 132. The BNDES cross-default clause creates potential liquidity risk, particularly for groups where weaker subsidiaries borrow from BNDES. In case of financial stress at a subsidiary that has borrowed from BNDES, the group has the choice of: Supporting the subsidiary sufficient to avoid default, Supporting the subsidiary to avoid default on only BNDES debt, or If it does not support the subsidiary, it has the risk of acceleration on all group BNDES debt--essentially, BNDES holds a contingent put option on all group BNDES debt, with a trigger equivalent to the default risk of the weakest BNDES borrower in the group. 133. When assessing a group's liquidity, we take into account the BNDES financings within the group that may need to be supported by the group/parent and treat such financing as an immediate use of liquidity. Such financings would be those of the entities that we consider weak links of the group with respect to the BNDES cross-default clause. In particular, these entities are not core or highly strategic to the group, their debt is material to the group, and: Their SACPs are 'bb+' or lower and are lower than the GCP (prior to considering the impact of such iteration on the GCP), Their ICRs are 'BB+' or lower and are lower than the GCP, or Their ICRs are 'BBB-' and are lower than the GCP, on a judgmental basis. 134. For example, we may add a special liquidity stress for 'BBB-' rated subsidiaries that are entities not otherwise included in the standard GCP liquidity analysis for sources and uses due to being off-balance-sheet and/or due to higher transition risk (such as bank subsidiaries, which rely on confidence-sensitive funding). If the SACP or ICR of a group member cannot be determined, for instance due to insufficient information about that group member, the BNDES debt of such entity should also be included in the group's liquidity analysis. REVISIONS AND UPDATES This article was originally published on Dec. 16, 2014. These criteria became effective on the date of publication. Changes introduced after original publication: Following the release of "Methodology: The Impact Of Captive Finance Operations On Nonfinancial Corporate Issuers," published Dec. 14, 2015, we updated paragraph 22 of these criteria to reflect guidance in the "Funding And Liquidity Assessment" section. As a result, the analysis of monetary flows no longer categorically excludes the sources and uses of cash from captive finance operations. Following our periodic review completed on Dec. 17, 2015, we updated the author contact information and references to superseded criteria. We republished this article on Dec. 14, 2016, to reflect the publication of "Key Credit Factors For The Operating Leasing Industry," reflecting that the entities covered by these criteria are now in scope of the Liquidity criteria. Following our periodic review completed on Dec. 15, 2016, we deleted paragraphs 2, 7, and 8, which were related to the initial publication of the article. Following our periodic review completed on Dec. 12, 2017, we updated criteria references. On Dec. 4, 2018, we republished this criteria article to make nonmaterial changes to update the contact information. On May 2, 2019, we republished this criteria article to make nonmaterial changes. Specifically, we clarified how we derive FFO for the purpose of the liquidity criteria in paragraph 43. We also updated criteria references. On Dec. 4, 2019, we republished this article to make the following nonmaterial changes: we deleted section C, which is now republished as part of the guidance document, and we made other nonmaterial changes to reflect the new guidance document. On July 29, 2022, we republished this criteria article to make nonmaterial changes by adding an Appendix. As announced in "Evolution Of The Methodologies Framework: Introducing Sector And Industry Variables Reports," published Oct. 1, 2021, we are phasing out guidance documents over time. As part of that process, we have archived "Guidance: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers," Dec. 4, 2019. We moved the guidance content to the Appendix of these criteria without any substantive changes other than the deletion of duplicative content already in the criteria article. In addition, we made the following nonmaterial changes to these criteria: We updated contact information; we removed references to a guidance document in paragraphs 1, 35, 36, and 37 and instead refer to the Appendix; and we updated the "Related Publications" section. RELATED PUBLICATIONS Related Criteria Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021 Group Rating Methodology, July 1, 2019 Corporate Methodology: Ratios And Adjustments, April 1, 2019 General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017 Commodities Trading Industry Methodology, Jan. 19, 2017 Methodology: The Impact Of Captive Finance Operations On Nonfinancial Corporate Issuers, Dec. 14, 2015 Methodology For Rating General Trading And Investment Companies, June 10, 2015 Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015 Methodology: Management And Governance Credit Factors For Corporate Entities, Nov. 13, 2012 Principles Of Credit Ratings, Feb. 16, 2011 Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010 Related Guidance ARCHIVE: Guidance: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 4, 2019 Related Research Evolution Of The Methodologies Framework: Introducing Sector And Industry Variables Reports, Oct. 1, 2021