

Article Title: ARCHIVE | Criteria | Corporates | Industrials: Criteria For Rating Aircraft-Backed Debt And Enhanced Equipment Trust Certificates Data: (EDITOR'S NOTE: —These criteria have been superseded by "Methodology And Assumptions For Rating Aircraft-Backed Debt And Enhanced Equipment Trust Certificates," published May 26, 2021.) These criteria explain S&P; Global Ratings' approach to "traditional" aircraft-backed obligations (which include secured debt, leases, and notes in leveraged leases, often referred to as "equipment trust certificates") and enhanced equipment trust certificates, which securitize such aircraft-backed obligations to achieve higher ratings. Rating Aircraft-Backed Debt Prior to the mid-1990s, most aircraft operated by U.S. airlines were financed using secured debt and long-term finance leases (usually leveraged leases). These were often referred to as equipment trust certificates (ETCs), borrowing a term from railroad finance, which uses similar debt instruments that benefit from similar legal treatment under the U.S. Bankruptcy Code. Starting in the mid-1980s, these ETCs were often grouped together into trusts that sold pass-through certificates to the public and 144a capital markets. From an analytical point of view, these certificates are equivalent to ETCs and are rated as such, using the criteria explained below. Aircraft leases and secured debt that qualify for special protection under Section 1110 of the U.S. Bankruptcy Code can be rated higher than the corporate credit rating of the airline issuer. Section 1110 excludes certain types of leases and secured debt from the automatic stay-of-creditor claims and substitution of collateral sections of the Code. Creditors may repossess collateral if the debtor does not resume debt service or lease rentals and cure any past-due amounts within 60 days of filing for bankruptcy. This provides a powerful incentive for continued payment under these obligations in bankruptcy if the airline wants to continue using the planes in its bankruptcy reorganization. S&P; Global Ratings' rating enhancement is based on: Section 1110's legal support for continuing payment of interest and principal (thus reducing default risk); Accelerated access to collateral if payment is not made, under provisions of Section 1110; and The relatively good value retention of aircraft over long periods, ease of tracking them, and the ability to realize their value by reselling aircraft to other operators in a global market. To qualify for Section 1110 treatment, creditors must have a security interest in the aircraft (for financing on planes delivered before Oct. 22, 1994, this must be a purchase-money security interest), be a lessor, or be a conditional vendor. Collateral must be aircraft or aircraft parts, and the debtor must be an airline. In addition, S&P; Global Ratings accords the full rating enhancement only when an airline's size and market position make liquidation unlikely, allowing for a reasonable possibility that the aircraft financing will be paid at the contracted rate. Collateral that is technologically or economically less desirable or that is insufficient to cover outstanding secured debt by a comfortable margin would also not qualify for the rating enhancement because a bankrupt airline might allow such equipment to be repossessed rather than continue making debt-service payments. Continental Airlines Inc. and Pan American World Airways Inc. argued in their bankruptcy proceedings in the early 1990s that Section 1110 did not apply to aircraft that had been sold and leased back to raise funds, but only to leases used to acquire new aircraft. Higher courts eventually ruled that all leases are eligible under Section 1110. The circuit court hearing the Continental appeal, however, ruled that sale-leasebacks could be challenged on the grounds that the financing was secured debt in disguise and not "true leases." Because of this potential loophole and remaining uncertainties regarding application of Section 1110, Congress revised that section of the Code (and its sister provision, Section 1168, for railroads) in a Bankruptcy Reform Act passed in October 1994. The revision provided that for planes delivered on or after enactment of the legislation, Section 1110 would apply to any financing secured by aircraft or parts, not just a purchase-money secured financing. In addition, to limit challenges on the "true lease" argument, any aircraft lease would be considered a true lease for purposes of Section 1110 if both parties to the transaction expressed in writing at the time of the financing that it was intended to be a lease. The distinction between secured debt and leases as a condition of qualifying for Section 1110 status is moot because both forms of financing qualify. S&P; Global Ratings requires an issuer seeking a rating on aircraft financing to provide several legal opinions to support the case for Section 1110 treatment: An opinion that creditors will enjoy the benefits of Section 1110 protection if an airline goes bankrupt; An opinion that creditors have a first-priority perfected security interest in the equipment being financed and payments being made by the airline under the related lease, if any, and that the relevant documents have been filed with the Federal Aviation Administration of the U.S. Department of

Transportation; When the lessor of the equipment to the airline is a trust, opinions bearing on non-consolidation of the assets in the trust, of which the owner participant is a beneficiary, with the estate of the owner participant in bankruptcy. This opinion addresses the risk that cash payments from the lessee to the debtholder may be delayed or diverted as a result of the owner participant's bankruptcy; and For pass-through certificates, an opinion on the valid formation of the pass-through entity, and that the pass-through trust does not constitute an investment company as defined in the Investment Company Act of 1940 and is not subject to federal or state taxation. Other opinions may be required, depending on the specifics of the transaction. The rating enhancement applied by S&P; Global Ratings depends on the above factors and the issuer's corporate credit rating. Investment-grade issuers receive a one-notch upgrade (e.g., from 'A-' to 'A'), while speculative-grade airlines may receive a two-notch enhancement (e.g., from 'B' to 'BB-') or, for small to medium-size airlines, a one-notch enhancement, reflecting lesser prospects for a successful reorganization. The economic desirability of the aircraft collateral and its importance to the airline is also considered in judging whether a one- or two-notch rating enhancement is appropriate. When an airline is in Chapter 11 bankruptcy proceedings and non-Section 1110 senior obligations are typically in default, the rating on Section 1110 obligations would be based on S&P; Global Ratings' estimate of the likelihood of a successful reorganization and the features of the equipment financing under consideration. Such a rating would typically be in the 'CCC' category, but might fall into the 'B' category if the financing is very well-secured or has been affirmed by the bankruptcy court and the airline seems likely to reorganize successfully. For aircraft financing of airlines outside the U.S., a one-notch enhancement would likely be assigned to obligations that are well-secured with desirable equipment and where the prevailing legal system recognizes the rights of secured creditors and lessors. Although other legal systems rarely have provisions comparable to Section 1110, their insolvency procedures are, in other respects, usually more favorable to creditors than the U.S. Bankruptcy Code. Rating Enhanced Equipment Trust Certificates Ratings on traditional aircraft-backed debt, or ETCs, as discussed above, rely principally on the airline's corporate credit, with a small amount of additional credit given for collateral value and legal protections, which encourage servicing the obligations in a bankruptcy reorganization. Enhanced equipment trust certificates (EETCs), which securitize secured aircraft debt or notes in leveraged leases, build on an airline's corporate credit rating to achieve potentially much higher ratings through overcollateralization and structural enhancements. So far, these have been sold principally by U.S. airlines, but there have been attempts at (and much continuing interest in) applying this approach to financings by non-U.S. airlines. EETCs are structured to allow creditors to use proceeds from the sale of collateral to repay principal and interest on a timely basis. By adding a dedicated source of liquidity support that can cover 18 months of debt service (typically interest only) on the rated securities if a Section 1110 qualifying financing is rejected in bankruptcy, ratings up to three full categories (e.g., 'BB' to 'AA') above the airline's Section 1110 ("unenanced" ETC) rating are possible for specified levels of overcollateralization. To qualify for this rating treatment, a security based on obligations of a U.S. airline must: Qualify for protection under Section 1110 of the U.S. Bankruptcy Code, and Have a dedicated source of liquidity, such as a committed credit facility (the most common liquidity support), letter of credit, or cash collateral account sufficient to cover 18 months of debt service on the rated securities if the aircraft financing is rejected in bankruptcy proceedings (or, conceivably, by mutual agreement outside of bankruptcy). Inasmuch as an airline would owe any interest that has accrued following the last scheduled payment, whether that comes due before or after a bankruptcy filing, the liquidity facility would in practice cover between about 12 months (if the filing occurred one day before a scheduled payment, which is typically made semiannually) and a full 18 months (if the filing occurred one day after a payment date) from the date of filing for bankruptcy. Rating Financing Of Non-U.S. Airlines The EETC approach may be feasible for constructing aircraft financing by airlines outside the U.S. as well. The most important analytical issues in these cases will be legal ones: Does the prevailing legal jurisdiction clearly recognize the rights of lessors or secured creditors to repossess collateral? How many comparable precedents can be cited in that jurisdiction? How quickly can lessors or secured creditors act to enforce their rights? Although the U.S. Bankruptcy Code is sometimes less favorable to creditors than bankruptcy laws of some other nations, Section 1110 is an exception, with its clear 60-day limit on suspension of equipment debt service. If creditors must await resolution of insolvency proceedings,

how long is that likely to take? This could represent an additional period the dedicated liquidity facility must cover, which, in turn, has implications for the effective loan-to-value available to EETC holders. To the extent that a "flag carrier" airline is given credit for potential support from the government of that country, would this same "national interest" work against the interests of equipment creditors?

Recovery of aircraft could be delayed in such cases by legal maneuvers or pressure from government authorities to keep the airline operating. To the extent that rights of repossession and their application in practice are less clear than in the U.S., S&P; Global Ratings may limit the potential rating enhancement above an airline's equipment debt rating to less than the three full categories possible for U.S. airlines. The asset value analysis, and thus target loan-to-values for various upgrades, would likely not differ from that for a U.S. financing, however. There are ways to help meet these concerns with the structure of the financing, particularly regarding the liquidity facility: Using a longer liquidity facility (although that must be balanced against its effect on collateral recovery for certificate holders); Subordinating liquidity facility repayment to some or all of the certificate holders--a considerable advantage if it can be arranged; Stretching out the repayment period for the liquidity facility so it can withstand a rescheduled lease obligation; Using backstop guarantees of repossession by a highly rated party that would pay off certificate holders if the plane is not recovered within a defined period, and then would take over the creditors' security interest; or Enlisting a dedicated repossession and remarketing agent, to improve prospects of a timely and successful outcome for creditors. Aircraft prices and lease rates have historically been quoted in dollars, no matter where the operating airline was domiciled. However, airlines outside the U.S. generate most of their revenues in currencies other than the dollar and often prefer to raise debt in those currencies. Because the potential divergence in exchange rates between the dollar and any other currency (excluding, perhaps, those currently pegged to the dollar) over a period of up to 20 years or more is significant, that exposure would in most cases have to be covered with a currency swap or similar arrangement. Alternatively, S&P; Global Ratings will consider how much added risk to collateral coverage is introduced by a currency mismatch. Over time, the euro may emerge as an alternative currency for aircraft transactions, but that trend is not yet clear. Asset Value Risk Evaluation Rating enhancements above those tied to the Section 1110 rating are assigned to qualifying securities based on an evaluation of asset value risk, given the aircraft being financed and the amount of debt raised. Asset risk in EETCs is judged based on a series of factors: Technological risk. What is the risk that the aircraft will become economically unattractive during the term of the financing because of advances in technology or regulatory changes? Examples of technological risk include aircraft that does not comply with noise regulations being phased in the U.S. and Europe, and the accelerating replacement of some types of turboprop regional aircraft with regional jets. Typically, the more recently the aircraft model was introduced and the shorter the term of the financing transaction, the less technological risk is perceived. Market liquidity. How liquid is the resale market for this type of plane likely to be in the future? S&P; Global Ratings looks at the number of planes in service and on order, the number of operators, and the breadth of the manufacturer's product line, among other factors. Narrow-body aircraft are typically considered slightly more liquid, other things being equal, than wide-body aircraft. Diversification by aircraft type. If the pool of assets being financed consists of multiple types of planes, the risk of very weak resale values is somewhat reduced because movements of aircraft values are not fully correlated. S&P; Global Ratings looks not only at how many models of planes are in the pool, but also at how different each is from the others. Thus, a pool consisting of one narrow-body and one wide-body would usually be judged more favorably on this factor than a pool of two narrow-bodies. Operator considerations. How important is this type of plane to the operating airline, and thus how likely is the airline to continue paying on the aircraft obligations in a bankruptcy reorganization? How likely is the airline to reorganize successfully? If the plane has to be repossessed, would it likely have been well-maintained? Is the plane likely require expensive reconfiguration to make it attractive to other users? The first two factors are considered the most important, the third factor less so, and the final factor least important. This results in an aircraft risk score, which is important in determining the likely severity of market-value declines in a repossession scenario. Table 1 shows a variety of rated aircraft financings and how S&P; Global Ratings judged those factors. The results of this analysis are loan-to-value guidelines needed to achieve target ratings above the airline's Section 1110 rating. Because the industry conditions in which an investment-grade

airline would fail are likely to be more unfavorable than those for speculative-grade airlines, the market-value declines (and thus loan-to-value ratios) assumed are slightly more conservative (typically about 5% lower required loan-to-value) for airlines whose Section 1110 rating is in the 'BBB' category, and more conservative still for an airline whose Section 1110 rating is in the 'A' category. Table 1 EETC Collateral AIRLINE AND SERIES NUMBER AIRCRAFT COLLATERAL TYPE AND NUMBER OF PLANES TECHNOLOGICAL RISK MARKET LIQUIDITY AIRCRAFT DIVERSITY OPERATOR CONSIDERATIONS Northwest Airlines Inc. 1999-2 14 A319, 7 A320 Modern-technology aircraft financed for up to 20 years Popular, liquid aircraft Very little; two similar aircraft Core aircraft, likely retained in bankruptcy American Airlines Inc. 2001-1 32 MD83, 10 B737-800, 4 B777-200ER Mix of most current technology and earlier-generation planes Very good to fair liquidity Moderate, with two midsize narrow-bodies and one midsize wide-body Mix of core aircraft and model that will be phased out Delta Air Lines Inc. 2001-1 16 B737-800, 13 B757-200, 7 B767-300ER Mix of current technology and 1980s generation, financed for 10 years Popular, liquid aircraft Moderate, with one midsize and one large narrow-body, one small wide-body Core aircraft, likely retained in bankruptcy The required loan-to-value ratios resulting from estimated asset risk in these sample transactions are shown in table 2. The table shows the loan-to-value ratios of the senior ('A' class) certificates for the transactions listed in table 1 and the rating enhancement above that airline's (unenhanced) ETC rating. Table 2 EETC Ratings And Loan-To-Value Ratios 'A' CERTIFICATE INITIAL LOAN-TO-VALUE (%) ORIGINAL RATING ENHANCEMENT ABOVE ETC RATING Northwest Airlines 1999-2 44 'AA' +2 1/3 American Airlines 2001-1 41 'AAA' +2 2/3 Delta Air Lines 2001-1 46 'AAA' +2 2/3 The criteria assume the provider of the dedicated liquidity facility would have first claim on proceeds from the sale of the collateral, and the guideline loan-to-values account for that arrangement. Typically, 18 months of scheduled interest payments equal 5% to 10% of collateral value throughout the life of the transaction. Liquidity facilities for EETCs do not cover scheduled principal payments, as all principal is due at the final, legal maturity date (usually 18 months after the expected maturity). Most EETCs carry fixed-rate interest coupons, but some have been structured with floating rates. EETC that carry floating coupons are more difficult to analyze, and the structures are more complex. Because the interest rate will vary, it is impossible to say for sure what 18 months of interest payments covered by the liquidity facility would equal, and therefore what effect such draws would have on the effective loan-to-value. This problem can be addressed through interest rate caps or other mechanisms that transfer the risk of higher rates to appropriately rated parties. Alternatively, any amount of interest payments that would exceed 10% of the collateral value could be subordinated to bondholder claims. The investor should be aware that, although the chance of default on an EETC is typically less than that on a simple unenhanced aircraft financing, the recovery on the EETC declines more rapidly with a deterioration in asset values. For example, a junior tranche of an EETC might represent \$10 million of an \$80 million financing and have a loan-to-value of 70% of the \$100 million aircraft value. The value of the aircraft could decline to \$70 million without causing any shortfall to these certificate holders (ignoring, for simplicity, the claim of the liquidity provider). However, that junior certificate bears all of the next \$10 million decline in asset value, so the certificate holder receives no recovery of principal by the time the asset value has declined to \$60 million. This relationship is shown in more detail in chart 1, which shows the range of potential recovery for each class of certificates and for the liquidity provider in a multi-tranche EETC. The most junior tranche (at a 65% loan-to-value) falls short of full recovery first and declines rapidly with further deterioration in collateral value. The other tranches suffer the same fate, in order, as greater declines in collateral value are assumed, with the liquidity provider affected only when the asset recovery is less than 10% of the expected value. Aircraft Appraisals S&P; Global Ratings typically requires underwriters of an EETC to arrange for "desktop" appraisals (i.e., without physical inspection) from three recognized appraisers. The resulting appraisals provide an estimate of the base value, which should represent the long-term value based on various restrictive (and optimistic) assumptions. S&P; Global Ratings asks also for current market value appraisals and considers those as well (these appraisals are usually not disclosed in the offering document). Usually, the value used to calculate an initial loan-to-value as shown in the offering document is the lesser of the average or median of the three appraised base values. S&P; Global Ratings realizes that these appraisals are often somewhat inflated relative to actual market transactions and has factored this into the loan-to-value guidelines. Furthermore, S&P;

Global Ratings will compare the six values provided (three base values and three market values) with other sources of information and choose the values it believes to be most plausible. Generally, base values are more likely to be used for desirable planes whose values may be depressed in the current adverse environment, but which are expected to recover in value over time, while current market value appraisals are more often used for planes whose long-term prospects are less favorable. The values chosen for analysis depend also on how generous or conservative the appraisers are judged to be relative to others and to S&P; Global Ratings' other sources of information. For example, in transactions rated during 2002, the appraisal analysis resulted in S&P; Global Ratings using values that tend to be 5% to 10% lower than those in the offering documents.

Depreciation Assumptions The specified levels of overcollateralization must be maintained throughout the life of the rated security, with debt being paid down in proportion to the declining aircraft value. S&P; Global Ratings in the past year adopted a more differentiated approach to calculating depreciation of aircraft values for the purpose of projecting future loan-to-values. Rather than differentiating depreciation rates by broad groups of aircraft (e.g., modern-technology passenger planes), each aircraft model now has a set of depreciation assumptions. These can vary further by date of delivery, as planes delivered toward the end of a model's production tend to have a shorter useful economic life. Whereas an accelerated depreciation schedule was used previously (the rate of depreciation increased over time), straight-line depreciation to various residuals is now assumed. For example, a newly delivered B737-800, a popular narrow-body passenger plane, will be depreciated at 3% per year over 25 years to a 25% residual value. A newly delivered B777-200, a successful wide-body passenger plane will be depreciated at 3.4% per year over 25 years to a 15% residual value. Wide-body planes tend to have slightly more rapid depreciation rates, not because they cannot fly as long (they could probably last longer because they take off and land fewer times per year than a narrow-body), but because technology changes and introduction of derivative variations tend to make them lose their economic value more rapidly. Freighter aircraft, by contrast, can last very long (many are converted passenger planes that begin carrying cargo at 15 years or older), and the advantages of modern technology are less pronounced because they fly fewer hours per day than passenger planes. Models that are farther into their production life and have been or will likely be replaced tend to have more rapid depreciation rates. Thus, a B757-200, a widely used narrow-body passenger plane introduced in the early 1980s, will be depreciated at 4% for 20 years to a 20% residual. The examples above are for planes that had been newly delivered. For those delivered earlier, the depreciation rates have to be adjusted to account for part of the aircraft's useful life having been used up prior to the beginning of the EETC financing, and the appraised value is on a partly depreciated aircraft. If a 10-year-old plane initially worth \$100 million is depreciated at 4% per year (\$4 million) over 20 years to a 20% residual, 40% of its assumed original value has already been depreciated (i.e., it is now worth \$60 million). Depreciating that \$60 million current value at 6.67% per year (4% divided by 0.6) will produce the same \$4 million annual depreciation rate in the future. The depreciation schedule that results from these S&P; Global Ratings assumptions is not intended to be a prediction of future prices, but rather an approximate trend line from which assumed market value declines are applied. It incorporates the interaction of economic depreciation of the asset and the partly offsetting effect of gradually increasing prices for new planes, which influence indirectly the market price of older aircraft.

Rating Rationale EETCs achieve ratings well above the airline's corporate credit rating because a default on rated securities would occur only if: 1) the airline entered bankruptcy, 2) the airline were liquidated or rejected the lease underlying the rated security during reorganization, and 3) proceeds from the sale of the aircraft within 18 months were insufficient to repay principal due on the rated securities. The chance of these three events happening in succession is obviously less than that of a bankruptcy filing of the airline issuer. Holders of EETCs, particularly the senior class in a series, could also be repaid if the airline agrees with them on a restructuring plan that lowers payments but still pays enough to cover the senior EETCs. In the case of EETCs that securitize leveraged lease notes, the equity investor in the leveraged lease could also choose to pay off the leveraged lease debt to obtain control of the plane and preserve the tax benefits of ownership. Although this last scenario has in fact occurred, it is difficult to give material rating credit for that possibility when an EETC is first rated. Equity investors in leveraged leases are not disclosed in public offering documents, and they can subsequently sell the investment (although tax considerations make that rare). More important, when

aircraft values are particularly depressed, the equity investment will have been wiped out and the incentive to pay off the leveraged lease debt eliminated. Note that the rating assigned on an EETC is not S&P; Global Ratings' estimate of the chance that bondholders will recover their investments through the sale of collateral alone. A rating based on the aircraft value alone, with no support from the airline, would be considerably lower. S&P; Global Ratings has rated various structured transactions in which bondholders must look to proceeds from the sale of planes to cover a balloon payment or rely on re-leasing of planes. However, those transactions finance a fairly diverse portfolio of planes, somewhat limiting the risk of market value declines of any one model. Furthermore, the portfolios are actively managed by experienced equipment lessors. Lastly, the transactions derive cash flow from lease payments made by a globally diverse group of airline lessees. A transaction in which bondholders must bet on the residual value of a single aircraft type years in the future is considerably riskier.

Role Of The Liquidity Facility The 18-month liquidity facility is crucial to the EETC structure because it provides time for bondholders to repossess and sell aircraft collateral in an orderly fashion and realize proceeds to cover outstanding principal. The 18-month period was chosen based on a study of aircraft sales following liquidation of entire airline fleets, for example, the case of Braniff Airways Inc. in 1983. Although resale of used aircraft sometimes takes longer than 18 months, that period still allows a reasonable amount of time to seek buyers, even in depressed markets. The liquidity facility also covers pre-bankruptcy accrued interest and any bond payments that fall in the 60-day grace period following a bankruptcy filing before accrued rentals and debt payments under Section 1110 must be cured. The provider of the liquidity facility must have a short-term debt rating at least consistent with the highest rating sought on the relevant EETC. For example, a short-term rating of 'A-1+' is needed for EETCs rated 'AA-' or above. The short-term rating on the liquidity provider must, in any case, be at least 'A-1'. If the liquidity provider is downgraded below the level required on EETCs it supports, it must find a suitably rated replacement provider or fund a cash collateral account with the full amount committed. If the liquidity provider is unable to do that (which is contractually required in the liquidity agreements), the affected EETCs will likely be downgraded.

Legal Considerations Because the assets of a special-purpose entity issuing EETCs are Section 1110-qualifying transactions (in the U.S.), the opinions required for unenhanced ETCs would be required for EETCs as well. S&P; Global Ratings must be confident that this structure will not interrupt cash flows or compromise the EETC holders' rights if either equity investor files for bankruptcy. S&P; Global Ratings also reviews the various documents specific to the EETCs for issues relating to the liquidity facility, inter-creditor rights, priority of payments, and other matters. The securities in EETC transactions rated by S&P; Global Ratings have been various classes of pass-through certificates issued by pass-through trusts that hold corresponding series of equipment notes, or debt securities issued by a single trust that holds all the equipment notes. For pass-through certificates, the legal considerations discussed above for equipment notes and pass-through trusts are relevant. If the rated securities are debt securities issued by a single trust, the same legal considerations are relevant, except that the review of the issuing trust's ownership usually results in identification of additional risks to be addressed in the legal opinions. In this respect, the issuer's analysis is more like the analysis of the trust that is the nominal issuer of equipment notes. In addition, if the EETCs are debt securities, legal opinions will be required confirming the validity and enforceability of the securities, and confirming that the note holders have the benefit of a first-priority perfected security interest over the equipment notes and any other trust property. If the underlying equipment financing in a proposed EETC transaction includes Japanese or other cross-border leveraged leases or other double-dip features designed to obtain tax benefits for investors in more than one country, S&P; Global Ratings must conclude that cash flows would not be interrupted and the EETC holders' rights would not be compromised by these features or if any equity investor or other party to these arrangements filed for bankruptcy. Transaction counsel should conduct or coordinate the due diligence, including legal advice in the relevant jurisdictions, necessary to support these conclusions. S&P; Global Ratings reviews the results of this due diligence. As discussed above, debt tranching to achieve various overcollateralization levels and a dedicated liquidity facility to maintain payments on the rated securities during the projected repossession period are required to achieve enhanced ratings. Typically, debt tranching is achieved through consensual subordination in an inter-creditor agreement among the issuer or issuers of the rated securities, the liquidity provider, and a

subordination or collateral agent. Subordination agreements are expressly recognized under the U.S. Bankruptcy Code. If, even in an issuer's bankruptcy, none of the parties to the subordination agreement could negate the effect of the subordination provisions, the incentive to commence bankruptcy proceedings against an issuer would be greatly diminished. The effectiveness of the subordination provisions thereby also supports the conclusion that an issuer is a bankruptcy-remote entity. Legal opinions are required confirming that the inter-creditor agreement is enforceable under its governing law and against the parties to the agreement. If the governing law is not a U.S. jurisdiction, an opinion is generally required confirming that the subordination provisions will be enforceable, even in an issuer's bankruptcy. A legal opinion also should confirm that the equipment notes held by the subordination or collateral agent on behalf of the parties to the inter-creditor agreement would not be considered property of the agent if the agent became insolvent. For EETCs rated by S&P; Global Ratings, dedicated liquidity facilities have been in the form of committed credit facilities, cash collateral accounts, and letters of credit. Legal opinions are required confirming that the liquidity facility is enforceable under its governing law and against the liquidity provider. If the liquidity provider is not a U.S. bank, an opinion is required confirming that the provider's obligations have at least the same priority as the provider's unsecured and unsubordinated debt. For non-U.S. liquidity providers, the legal opinions should address the recognition of the choice of law in the agreements, the submission to jurisdiction clauses, and the enforceability of U.S. judgments. The legal review for EETC transactions frequently is a time-consuming part of the total analysis and should start as early as possible. For non-U.S. EETCs, a more general review of the relevant legal jurisdictions (including any conflicts of law analysis, if necessary) as applied to the underlying equipment note financing and the securitization structure require additional time. The jurisdictional legal review usually can proceed concurrently with the economic analysis on the basis of a detailed term sheet or transaction summary and the relevant jurisdictional surveys. Rating Surveillance Of EETCs S&P; Global Ratings raises or lowers its ratings on EETCs when the rating of the issuing airline is changed, usually by the same amount. When an airline approaches bankruptcy, the ratings on EETCs are lowered, but other factors become increasingly important and affect the rating: The current estimated loan-to-value of each tranche in an EETC series, The likelihood that the airline will seek to maintain control, and The market prospects for the aircraft collateral. Thus, when Midway Airlines entered bankruptcy and subsequently rejected the aircraft leases underlying two rated series of EETCs, the ratings on those securities (particularly ratings on the senior classes) were not lowered by as much as the corporate credit rating was. That is because the market prospects of the aircraft collateral remained fairly good, despite the adverse aviation environment; loan-to-values still provided comfortable collateral protection; and there was some prospect that the equity investors in the leveraged leases would pay off the debt (which, in fact, subsequently occurred). EETCs are overcollateralized to provide asset protection in the event of a repossession and sale of the aircraft financed. Accordingly, ratings are not usually adjusted as aircraft market values change. However, when aircraft values have changed materially, as during the industry downturn that started in 2001, ratings may be reviewed. S&P; Global Ratings announced numerous downgrades on Oct. 23, 2001, following an extensive review of its ratings on EETCs. Issues that were downgraded tended to be those with less desirable aircraft (e.g., MD80 series) whose values were not expected to recover fully from the downturn, and EETCs issued in the mid- to late 1990s whose collateral protection had deteriorated materially due to aircraft value erosion (e.g., for B747-200s, B747-400s, and B757-200s) that was not fully offset by debt amortization. In addition, junior tranches of EETC series were more likely to be downgraded or downgraded to a greater extent because of their greater vulnerability to declines in collateral protection. For series of EETCs that had two senior tranches with different maturities (usually a bullet with a shorter maturity, and amortizing debt with a longer maturity), the rating on debt with a longer maturity was lowered in some cases. Such debt is at added risk from the paydown of more junior debt over time, reducing or eliminating the "cushion" to absorb losses if aircraft is sold at depressed prices. In addition, there is greater risk that similar planes with newer technology may be introduced during the longer time period, making the model in the EETC less desirable. This review also incorporated modifications in certain aspects of S&P; Global Ratings' criteria: Greater differentiation in depreciation schedules used, based on aircraft model and date of delivery; Changes in the qualitative factors used to judge the potential volatility of aircraft value, with

greater emphasis on resale liquidity and technology risk; and Greater focus on appraised current market values in addition to appraised base values of aircraft. Although S&P; Global Ratings does not expect such industrywide review to be frequent, rating actions based on changes in asset value or in an airline's perceived commitment to maintain a particular aircraft model in its fleet are expected to be more frequent than in the past, particularly if the airline industry experiences a downturn. Revisions And Updates This article was originally published on Sept. 12, 2002. The section "Applicability To Other Equipment Financing" was deleted because it stated that S&P; Global Ratings has not rated any railroad equipment financing using an "enhanced" approach. On April 23, 2015, S&P; Global Ratings classified as criteria the article "Industrials: Railroad Equipment Trust Certificate Rating Criteria," published Sept. 4, 2002. This article states that secured railroad debt and leases that qualify for special protection under Section 1168 of the U.S. Bankruptcy Code or under Section 106(5) of the Canada Transportation Act are secured by equipment meeting certain economic standards receive higher ratings, although not typically "enhanced" by a liquidity facility as described above. The rating requirements for liquidity providers in the section titled "Role Of The Liquidity Facility" have been superseded by the provisions of "Counterparty Risk Framework: Methodology And Assumptions," published March 8, 2019. Changes introduced after original publication: Following our periodic review completed on April 11, 2017, we removed outdated sections related to the original publication of the criteria. Following our periodic review completed on April 5, 2018, we updated the contact information. On June 3, 2019, we republished this criteria article to make nonmaterial changes to outdated text. On May 26, 2020, we republished this criteria article to make nonmaterial changes to update criteria references. Related Criteria And Research Related Criteria Counterparty Risk Framework: Methodology And Assumptions, March 8, 2019 Principles Of Credit Ratings, Feb. 16, 2011 Railroad Equipment Trust Certificate Rating Criteria, Sept. 4, 2002 These criteria represent the specific application of fundamental principles that define credit risk and ratings opinions. Their use is determined by issuer- or issue-specific attributes as well as S&P; Global Ratings assessment of the credit and, if applicable, structural risks for a given issuer or issue rating. Methodology and assumptions may change from time to time as a result of market and economic conditions, issuer- or issue-specific factors, or new empirical evidence that would affect our credit judgment.