Article Title: ARCHIVE | Criteria | Corporates | Recovery: Sizing Up the Creditworthiness of European Leveraged Loans Data: Despite a substantial slowdown in issuance over the past year, with primary issuance plummeting 37% in the six months to March 31, 2002, compared with the same period 12 months earlier, Europe's leveraged loan market remains on track for long-term growth. Bank lending still predominates, but institutional investors--particularly collateralized debt obligation (CDO) managers--are developing an increasing appetite for these assets, especially institutional senior Term "C" tranches (see commentary article entitled "CDO Growth Could Expand Into European Leveraged Loan Market" published on RatingsDirect, Standard & Poor's Web-based credit analysis system, on May 1, 2002). According to Standard & Poor's Portfolio Management Data (PMD), Europe's CDO managers captured a 14% share of the primary market for leveraged loans in the year ended March 31, 2002, up from about 3% in 2000. Furthermore, Standard & Poor's Structured Finance Ratings Group has rated eight CDO transactions in which European leveraged loans constitute at least 30% of the total portfolio. Given the complexity of leveraged loan transactions, however, there is a need to clarify how their creditworthiness is determined. This article, which follows the above-mentioned piece, is the second in a series of three and examines the assessment of such loans, outlining the characteristics of the loan structure and covenants, and identifying the prospects for recovery in a default scenario. Standard & Poor's Structured Finance Ratings Group will subsequently publish the third and final article, presenting its rating methodology for CDOs backed by European leveraged loans. Loan Rating Rules Shadow Leveraged Corporates' Practice To understand the approach taken in analyzing the credit quality of a leveraged loan, it is necessary to outline how Standard & Poor's differentiates between a financially conservative, well-diversified investment-grade corporate and its highly leveraged equivalent. While both credits will be assessed on their business and financial profiles, the prime focus in the case of the leveraged company is on liquidity because its financial profile can deteriorate significantly in a short period of time. As a result, particular attention is paid to underlying cash flow assumptions (including revenue growth), costs, capital spending, and debt service payments. Attractive industry and business fundamentals (moderate competitive pressure; well-established competitive positions in niche markets that offset the potential lack of product or market diversification; and identified sources of cash flow growth, for example) are required to offset risks associated with an aggressive capital structure in the event of a general economic downturn or credit shock. In a recessionary environment, defensive sectors tend to dominate new issuance and the debt multiple on leveraged loans falls: total debt to EBITDA was 4.2 times (x) in 2001, for instance, against 4.4x in 2000 and 4.7x 1999 (see chart 1). This is because investors place greater emphasis on the level of support provided by the business profile, and transaction structures are adjusted accordingly. Chart 1 Capital Structure Adopts a Layered Look The capital structure of LBOs is made up typically of several layers with varying maturities, pricing, and ranking in order to: Optimize the cost of funding while protecting shareholder return; and Appeal to investors with differing needs in terms of liquidity, risk, and rewards. The inclusion of mezzanine or high-yield bonds between senior debt and equity-like finance, for example, affects the structure of future cash outflows (principal repayment schedule, cash versus deferred payments, or floating-versus fixed-interest payments). With equity and quasi-equity instruments such as vendor loan notes usually representing about 40% of total sources of funds, there is often limited interest in conventional capitalization measures such as debt-to-capital ratios at closing. Nevertheless, close attention is paid to the real nature of equity-like instruments (vendor or shareholder loans paying cash interest or being repaid under certain conditions, for instance). The Importance of Cash Flow Adequacy A solid track record in cash flow generation and expected future cash flow growth is a key element when accessing the leveraged loan market successfully. The standard debt and debt service coverage ratios used are based on EBITDA (EBITDA to cash interest expenses and debt to EBITDA) and on cash flow (funds from operations to debt and free operating cash flows to debt), differentiating between levels of protection over time. When amortization falls due, the focus is on free cash flows, which estimate the cash available after interest, taxes, working capital, and capital expenditure payments. Real cash flow adequacy for a given rating category, however, will be measured by the company's ability to withstand the impact of a distressed business environment or moderate credit shocks. In this respect, the rating assessment not only considers the level of flexibility provided by a potential revolving line of credit, but also an in-depth analysis of the various sources and uses of

liquidity. Four Crucial Pointers to LBO Growth Generally, the key to a successful LBO is a substantial improvement in operating margin and cash generation within two or three years of closing. As a consequence, the following four aspects are crucial: The ability to improve operating profitability. Although bank forecasts are usually more conservative than management budgets, Standard & Poor's will examine the underlying assumptions such as macroeconomic factors, price movements, and cost savings, subjecting these to sensitivity analysis to assess their effect on profitability. One positive influence in the analysis will be management's track record in integrating acquisitions successfully. On the other hand, earnings prospects that rely on turnaround strategies or synergistic acquisitions will be viewed with skepticism. The LBO's competitive position following demerger. The fact that a division is newly divested, as is often the case with LBOs, adds risks. These may include a true cost base, after separation, that is significantly different from that which existed in the larger company, for example. The effects of decreased purchasing power, loss of supply or distribution agreements, or even the eventual change in a product's brand name, will also be evaluated. Future liquidity. The rating assessment includes elements such as capital expenditure forecasts (to ensure that maintenance and growth in capital expenditure support the LBO's growth forecasts) and working capital needs (usually negative in a growth scenario, because the buildup in receivables and inventories may not be fully financed by trade credit). Accounting issues. Recent events have spawned a degree of market skepticism toward financial reporting. Within its analysis, Standard & Poor's examines evidence of previous acquisitions' experience, audited financials, and the reasons for periods of rapid growth, together with available information on guarantees, leases, and capitalization policies. This may result in a more cautious view of an issuer's creditworthiness than might first be apparent. The Role of Covenants Although covenants do not usually play a significant role in assigning an issuer credit rating, mainly because they do not address fundamental credit strength, tight covenants may limit an existing credit's future financial flexibility. Specifically, funding issues can arise from restricted access to financing during difficult market conditions, as well as from the violation of covenants that trigger debt acceleration and, in worst cases, cause a default that might otherwise have been avoided. The return of principal capital and the payment of interest are key considerations for bankers and institutional investors when making lending decisions. For sound, investment-grade credits, there is typically a very low probability of default and lenders will require few protections from the borrower, focusing largely on the returns that can be generated from the facility. Conversely, where the default probability becomes material, the bank lenders will often place restrictions and obligations on the borrower to protect their investments. Furthermore, specific security will normally be required, and the rate of interest charged will reflect the substantially higher risk. To reflect commercial bankers' priorities, syndicated loans are generally senior to other debt classes such as high-yield bonds and mezzanine debt, and are designed to ensure that structural subordination is not an issue. In contrast to loans advanced to speculative-grade companies (that is, those with long-term corporate credit ratings of 'BB+' or below), lenders to investment-grade credits do not generally require security. Nevertheless, 'BBB' rated companies in a market sensitive sector such as telecoms may find it necessary to offer security to raise funds. The covenant package is probably the most important component of a credit agreement, as a breach may trigger obligations to alter the issuer's behavior or require discussions to be held with the banks. At worst, the breach will constitute an event of default. Therefore, covenants will be carefully negotiated to take account of the specific circumstances of the company and the sector in which it operates. Certain nonfinancial covenants are standard for both investment-grade and leveraged loans: Negative pledge, which prevents security over the company's assets being offered to third parties and makes them available to all creditors should the company's financial condition deteriorate. Pari passu, which ensures that no preferential treatment is offered to creditors of the same ranking. For senior secured lenders in leveraged finance, this means that they rank equally with senior unsecured and unsubordinated creditors for any residual claims in the event that their security proves insufficient. Material adverse change, which, given the difficulties in defining "reasonable" and "material", continues to prove controversial as treasurers insist that it provides too much discretion for the bankers. A typical example might be "the occurrence of any event or circumstance that would reasonably [in the bankers' opinion] be expected to have a material adverse effect." Financial covenants, on the other hand, are drawn up differently for investment- and speculative-grade borrowers (see table). Although strong

investment-grade credits usually avoid incorporating financial covenants into their credit agreements. many facilities include rating pricing grids in their structure. Under this mechanism, the spread margin that the borrower pays will move in line with the borrower's credit rating. Speculative-grade companies, on the other hand, generally will be required to negotiate detailed financial covenants, designed to restrict management from operating outside agreed guidelines. Covenant Characteristics for Investment- and Speculative-Grade Issuers INVESTMENT-GRADE SPECULATIVE-GRADE TYPICAL FACILITY Senior unsecured Senior secured NONFINANCIAL COVENANTS Pari passu Pari passu with other unsecured and unsubordinated obligations Negative pledge (occasional carve-out) Negative pledge Limitations on disposals Limitations on disposals Material adverse change Material adverse change Limitations on debt Limitations on debt Change of control Change of control N/A Restrictions on dividends FINANCIAL COVENANTS Often none, but may include: Normally include: Net debt/EBITDA Net debt/EBITDA grid Interest coverage Interest coverage grid Gearing Fixed-charge coverage ratio Net worth Capital expenditure limitations N/A--Not applicable. Typical financial covenants include: Restricting excessive leverage through advisory limits on net consolidated debt to EBITDA and capital expenditures. Maintaining sufficient revenues to service the debt burden through EBITDA to net interest coverage. Maintaining value and assets within the borrowing company through dividend and net worth restrictions. A common feature of leveraged loans is that pricing is often linked to performance, with performance being judged on the company's ability to meet specified cash flow ratios at various agreed dates. These cash flow tables are known as grids (not to be confused with rating pricing grids). Experience shows that the main financial covenants (apart from interest coverage) are more widely applied in Continental Europe than the U.K. (see chart 2). In part, this reflects the preference of European lenders in seeking early notice of a potential default. As a result, all avenues can be explored with the business before resorting to the legal uncertainties associated with bankruptcy. Chart 2 Default Probability Accelerates in Years Two to Four The default studies conducted by Standard & Poor's focus on rated issuers, but exclude structured finance transactions, as well as public sector and sovereign issuers. With the majority of European ratings assigned since 1996, the cumulative average default rates have only recently started to fall in line with those of the global default study. Nevertheless, the data reveals some interesting observations with regard to speculative-grade credits that are directly relevant for leveraged loans. The latest study of ratings performance in Europe (see commentary article entitled "European Default Rates Inch Closer to the Global Average," published on RatingsDirect on April 9, 2002) includes the 14 rated issuers that defaulted in 2001. Although this figure approaches the 19 cumulative defaults in all previous years, it continues to compare favorably with the 216 defaults recorded worldwide in 2001. An examination of the cumulative average default data for 'BB' and 'B' rated entities over a three-year period shows the probability of default for a 'BB' credit is 3.4% (see chart 3). This figure is significantly lower than the equivalent 6.1% calculated in the global study, reflecting the shorter history and the relatively benign economic slowdown experienced in Europe so far. Chart 3 The prospects for 'B' rated issuers, however, are significantly different. In Europe, the cumulative default probability for this category over a three-year timeframe is 19.1%, very close to the 18.3% calculated in the global study and almost six times higher than at the 'BB' level. Furthermore, the probability of default continues to rise sharply for 'B' rated issuers for the first three-to-four years. As more data becomes available, it is expected that the default rate will slow in line with the global study. Issuers in the 'B' rating category are particularly vulnerable to the economic cycle. Favorable credit conditions worldwide between 1986 and 1988 and 1996 and 1999, for example, encouraged a sharp increase in new speculative-grade issuers. Three-to-four years later, as economic conditions deteriorated and monetary policy tightened, default rates, especially for the lower rated entities, picked up sharply (see chart 4). Chart 4 This cycle appears to be repeating itself in 2001-2002, with the proportion of new issuers in Europe below investment-grade peaking at 39% in 1998 before slipping back to 33% in 2001. Consequently, in current market conditions, investors are expressing a strong preference for 'BB' rather than 'B' rated assets, and this is reflected in the sharp fall in 'B' rated high-yield bonds (see chart 5). Chart 5 Strong Links Between Recovery and Initial Credit Rating While the probability of default is well documented in the corporate default study and credit rating migration tables, there is limited aggregate data available on the post-default recovery of LBOs or, more generally, on debt markets. In the U.S., Standard & Poor's PMD has gathered information on more than

1,800 defaulted debt instruments (covering bonds and loans) over the past 15 years (see commentary article entitled "Higher Ratings Linked to Stronger Recoveries," published on RatingsDirect on March 11, 2002). Three conclusions can be drawn from this data, namely: There is a strong correlation between the initial credit rating and the recovery price emerging from bankruptcy. The "debt cushion" (that is, the percentage of the company's debt that is inferior to a particular claim) is a key predictor of recovery values. Collateralized debt, as expected, fares better than unsecured debt in insolvency proceedings. The weighted average ultimate recovery in the U.S. is just above 50%, although the recent spate of defaults and attendant scant recovery prospects in the telecoms sector could lower the average. Average recovery expectations are about 30% for unsecured debt, with little in terms of a debt cushion (see commentary article entitled "Ultimate Recovery Remains High for Well-Structured Debt, Dropping for Poorly Structured Debt," published on RatingsDirect on Jan. 24, 2002). The average, however, is close to 90% for well-collateralized debt, with a significant amount of lower ranking debt. Emergence from bankruptcy is well within 24 months. To assess recovery prospects, Standard & Poor's considers four main aspects: the insolvency regime, debt ranking, the quality and liquidity of asset and collateral, and the track record of investors' recovery procedures post default, usually referred to as the workout process. Debtor-friendly versus creditor-friendly insolvency regimes. In France and Italy, insolvency regimes favor the debtor, with courts controlling insolvency procedures. The Netherlands and U.K., however, allow creditors to take charge of the process. Under the former regimes, creditors have little control over the insolvency proceedings and the collateral, unless a particular type of collateral is segregated by law. Conversely, a fixed and floating charge under U.K. law ensures that creditors are able to take rapid control of the collateral in cases of insolvency. (Detailed reports on key European insolvency regimes are expected to be published in the second half of 2002.) Debt ranking. In terms of seniority, secured creditors will be in a better position than those holding unsecured or subordinated debt. In the case of mezzanine debt, the situation is more complex. Mezzanine financing usually refers to a type of financing where creditors benefit from a second lien or security on the assets, such as a second mortgage. Although there is no statistically robust data available, anecdotal evidence tends to show higher recovery rates for mezzanine financing than for unsecured debt. The quality and liquidity of assets and collateral. Each debt instrument will be assessed to determine the most likely course of events in an insolvency situation, be it a liquidation or a restructuring. In the case of discrete assets, a distressed value of the collateral will be estimated and a loan-to-value ratio derived. When the collateral covers an entire business, Standard & Poor's will use stressed cash flows and an equity multiple to establish an enterprise value. In that instance, the hypothetical point of default will be deemed to occur when EBITDA no longer covers interest charges. This distressed EBITDA figure is then multiplied by an equity multiple, usually about 5x, which is representative of many industries over time. (For further details, see Corporate Ratings Criteria on Standard & Poor's public Web site at www.standardandpoors.com; select Resource Center and under Ratings Criteria select Corporate Finance. The relevant information can be found on p61-p76.) Workout experience. Investors in general, and banks in particular, have varied workout track records. In deteriorating credit situations, some proactively transfer the relationship to special teams of experienced credit professionals and lawyers. Others prefer to sell their exposures at the earliest opportunity. The remainder react on an ad-hoc basis, with no predetermined course of action. Although it is less important in assessing the ultimate recovery expectations, the evaluation of an investor's workout experience is particularly important in rating CDOs, and Standard & Poor's expects the investor to substantiate their track record. Analytical E-Mail Addresses paul_watters@standardandpoors.com blaise_ganguin@standardandpoors.com gregoire_buet@standardandpoors.com irene_homoore@standardandpoors.com juancarlos_martorell@standardandpoors.com dominic_crawley@standardandpoors.com miller@pmdzone.com varzandeh@pmdzone.com CorporateFinanceEurope@standardandpoors.com