Article Title: ARCHIVE | Criteria | Insurance | Health: Holding Company Analysis Data: Editor's Note 1: This criteria article has been superseded by the article titled "Holding Company Analysis," published June 11, 2009. Editor's Note 2: This article was last published on June 30, 2005. It has been updated to reflect the various criteria changes and revisions that have been implemented since then. Although much has been written about Standard & Poor's Ratings Services approach to analyzing operating insurance companies, this article presents a comprehensive discussion of insurance holding-company analysis. Much of the criteria used to evaluate insurance holding companies are similar to those used to evaluate other financial institutions and other corporate entities. However, given the unique regulatory and operating environment that insurers operate within, key differences are also identified. In all sectors, Standard & Poor's evaluates the parent companies of insurance organizations relative to the operating insurance company subsidiaries that they own. In the simplest cases, the holding-company evaluation is directly related to the creditworthiness of the subsidiary. This approach is used if the holding company is a true holding company, i.e., if the holding company has no operating characteristics in its own right. It also is used if the structure is direct (no intermediate holding companies) and if there is essentially one subsidiary. The standard gap for holding companies is one category (three notches) lower than the financial strength rating on the operating company. A gap of this size recognizes the dependence on a dividend stream from subsidiaries for debt, preferred-stock servicing, or both. It also recognizes that regulatory intervention can restrict the flow of funds. That being said, there are several aspects of holding-company analysis that Standard & Poor's uses in making its overall evaluation of these organizations. The rating on an insurance holding company is influenced not only by the financial security of its operating subsidiaries but also by the capital structure employed by the organization. The level of financial leverage and coverage of interest and preferred dividends at a holding company ultimately might not only affect the debt and preferred stock ratings on the holding company but also could affect the ratings on the operating companies' financial security. In the case of a holding company with several subsidiaries in diverse sectors—such as a major life insurance subsidiary and a major property/casualty subsidiary—the senior debt rating on the parent could be based on the portfolio of business owned and the quality of those businesses. If the portfolio is well-balanced and complementary and the levels of financial leverage and interest coverage are strong, the senior debt rating is the same as the issuer credit rating (also called counterparty credit rating) on the parent. It also could be equal to the financial strength rating on the subsidiaries or could even be higher than that of one of the subsidiaries. Therefore, it is possible that the gap between the holding company and its wholly owned subsidiary or subsidiaries could be narrowed from the standard one category. This is likely to occur if any one of the three following circumstances is applicable: Earnings and assets are well diversified at the holding-company level. Significant nonregulated operating subsidiaries are deemed able to upstream dividends with limited restrictions. Measures of the holding company's financial strength—such as financial leverage and fixed-charge ratios—are significantly stronger than the standard rating gap would indicate under a variety of scenarios. When a debt issue is judged to be junior to other debt issues of the company and, therefore, has relatively worse recovery prospects, that issue is assigned a lower rating than the issuer credit rating. As a matter of rating policy, the differential is limited to one rating designation in the investment-grade categories. For example, when the issuer credit rating is 'A', junior debt may be rated 'A-'. In the speculative-grade categories, where the possibility of default is greater, the differential is up to two rating notches. Notching relationships between debt issues (or other financial obligations) are based on broad guidelines that combine consideration of asset protection and ranking. The guidelines are designed to identify material disadvantage for a given issue by virtue of the existence of better-positioned obligations. The analyst does not seek to predict specific recovery levels, which would involve knowing the exact asset mix and values at a point well into the future. Notching relationships are subject to review and change when actual developments vary from expectations. Changes in notching do not necessarily have to be accompanied by changes in default risk. Evaluating Management's Financial Policy U.S. insurers continue to access the capital debt markets via a variety of issuances, including traditional securities—such as common equity and debt, hybrid equities like trust preferreds, mandatory convertible securities, and surplus notes—and, more recently, pass-through trust securities. The principal drivers behind this have been: The need to finance growth in light of the improved

property/casualty pricing market conditions. Recapitalization in light of significant loss-reserve recognition and World Trade Center–related losses. Restoring capitalization because of increased invested asset volatility, mergers, and acquisitions (most notably in the life and health sectors). Making the most of the low interest environment. Standard & Poor's attaches great importance to management's philosophies and policies toward financial risk and its appetite for financial risk tolerances, especially in light of prior actions. More sophisticated business managers have thoughtful policies that recognize cash flow parameters and the interplay between business and financial risk. Many firms that have set goals do not have the wherewithal, discipline, or management commitment to achieve these objectives. A company's leverage goals, for example, need to be viewed in the context of its past record and the financial dynamics affecting the business. If management states, as many do, that its goal is to operate at 35% debt-to-capital, Standard & Poor's factors that into its analysis only to the extent it appears plausible. For example, if a company has aggressive spending plans, that 35% goal would carry little weight unless management has committed to a specific program of asset sales, equity sales, or other actions that in a given time period would produce the desired results. Standard & Poor's does not encourage companies to manage themselves with an eye toward a specific rating. The more appropriate approach is to operate for the good of the business as management sees it and let the ratings follow. Certainly, prudence and credit quality should be among the most important considerations, but financial policy should be consistent with the needs of the business rather than an arbitrary constraint. If opportunities are foregone merely to avoid financial risk, the firm is making poor strategic decisions. In fact, it could be sacrificing long-term credit quality for the facade of low risk in the near term. One financial article described a company that curtailed spending expressly "to become an 'A' rated company." As a result, "...the company's business responded poorly to an increase in market demand. Needless to say, the sought-after 'A' rating continued to elude the company." In any event, pursuit of the highest rating attainable is not necessarily in the company's best interests. A 'AAA' rating is the highest rating, but that does not suggest that it is the most appropriate rating for a particular company. Typically, a company with virtually no financial risk is not optimal with respect to meeting the needs of its various constituencies. An underleveraged firm is not minimizing its cost of capital, thereby depriving its owners of potentially greater value for their investment. In this light, a corporate objective of having debt rated 'AAA' or 'AA' is, at times, suspect. Whatever a company's financial track record, an analyst must be skeptical if corporate goals are implicitly irrational. A firm's conservative financial philosophy must be consistent with the firm's overall goals and needs. Ratios Used To Evaluate Holding Companies Standard & Poor's primarily uses eight ratios to analyze the risks associated with insurance holding companies' financial leverage. These ratios are calculated excluding the effects of FAS 115 (unrealized gains/losses on fixed-income assets) for U.S. insurers but will value fixed-income instruments at market value in countries where regulatory accounting uses market-to-market valuation for these assets. Unrealized gains/losses on equity assets are included. In addition, these ratios are adjusted to exclude debt that is part of the working capital of financial services subsidiaries as opposed to debt used to capitalize operations or debt used to fund more speculative activities. In conducting an analysis of an insurer's capital structure, including hybrid equity, Standard & Poor's first attempts to understand management's goals regarding the various forms of capital present in a group's structure. For example, is the capital permanent, or will it eventually be replaced? The more that funds are perceived as permanent and not putting an unnecessary strain on the group regarding servicing requirements, the more favorably they are viewed. For example, stock insurance groups can issue debt at senior holding-company levels and downstream it to insurance operating subsidiaries as equity, a process using double leverage (a figure long used in assessing the capital structure of financial institutions such as banks), where it receives full credit as capital available to support insurance operations under both Standard & Poor's and regulatory risk-based capital models. Analytically, an issue arises if servicing and/or repayment of part or all of the holding-company debt is dependent on a continuing flow of funds from the insurance operating subsidiaries. In that circumstance, the holding-company debt becomes, in effect, a call on the capital of the operating insurance subsidiaries and brings into question the permanency of such equity in the latter's capital structure. In Standard & Poor's opinion, this downstreamed debt, when combined with its legally subordinated and technically bankruptcy-remote nature to policyholder claims, takes on more characteristics of a form of hybrid

equity similar to a surplus note. Double leverage helps determine the quality of capital when analysis is conducted at the operating-company level. Double leverage calculations are based on Standard & Poor's view of the local regulatory enforcement of structural subordination. In light of a growing trend by regulators to limit the use of debt and hybrids to fund insurance operating-company capital, double leverage calculations are expressed as a percentage of total enterprise consolidated capital, which better captures these regulations. Where the level of structural subordination is high and regulators allow holding-company debt to fund operating-company capital, Standard & Poor's double leverage tolerances are greater. Where the level of structural subordination is low and regulators disallow holding-company debt to fund operating-company capital, Standard & Poor's double leverage tolerances are lower. Although the maximum double leverage tolerance for 'Category 1' and 'Category 2' hybrid equity is 10% greater in Europe and Canada than it is for the U.S. and Bermuda, Standard & Poor's still views this incremental amount of hybrid funding as debt like when evaluating the insurance holding company. These jurisdictions have low enforcement of structural subordination and regulators disallow holding-company debt to fund operating-company capital. The allowance of the higher amount of hybrid equity in double leverage calculations treats the incremental hybrid funding as debt like from an analytic perspective while recognizing that regulators accept this higher level of hybrid funding of operating capital when evaluating insurance groups. Table 1 Maximum Tolerances For Double Leverage And/Or Hybrid Equity Usage —CASES WHERE ENFORCEMENT OF STRUCTURAL SUBORDINATION IS HIGH AND REGULATORS ALLOW HOLDING-COMPANY DEBT TO FUND OPERATING-COMPANY CAPITAL (E.G., U.S. AND BERMUDA)— —CASES WHERE ENFORCEMENT OF STRUCTURAL SUBORDINATION IS LOW AND REGULATORS DISALLOW HOLDING-COMPANY DEBT TO FUND OPERATING-COMPANY CAPITAL (E.G., EUROPE AND CANADA)— CATEGORY MAXIMUM TOLERANCE CATEGORY MAXIMUM TOLERANCE Total double leverage tolerance Up to 45% of capital Total double leverage tolerance Up to 35% of capital Debt-funded double leverage Up to 20% of capital Debt-funded double leverage 0% ‘Category 1’ hybrid tolerance (three-year mandatorily convertible) Up to 25% of capital ‘Category 1’ hybrid tolerance (three-year mandatorily convertible) Up to 35% of capital Sub-limit ‘Category 2’ hybrid equity Up to 15% of capital Sub-limit ‘Category 2’ hybrid equity Up to 25% of capital If a group's double leverage ratio is in excess of these maximums, the difference necessary to reduce it to the threshold level will be treated as debt and, as such, subtracted from the operating insurance group's total adjusted capital used for Standard & Poor's risk-based capital measurement purposes. Debt includes both long- and short-term debt, and total capital includes all debt, preferred stock, hybrid capital, and common stock. These ratios are calculated on a consolidated company basis, and capitalized leases should be included in debt. When consolidated company leverage is analyzed, hybrid equity raised at the operating company will be treated as debt, and the servicing of this capital will be included in the debt-coverage ratios. The logic for this is that the servicing of operating-company hybrid equity is usually at least pari passu with holding company debtholders and is often senior to these debt obligations. There are several income-statement and cash flow-based ratios that are used to evaluate an insurer's debt-servicing capabilities. The primary measure would be GAAP-based where: The interest expense is adjusted to include the amortization of interest in any sale/leaseback of property or equipment or any other type of lease. The interest expense should always be the gross interest expense before subtracting capitalized interest. Where a company issues zero coupon or discounted interest bonds, some or all of the interest is capitalized rather than being paid out as periodic cash interest. This capitalized interest expense needs to be considered in the calculation of interest coverage, as one of the goals of the ratio is to measure how well economic earnings cover economic interest expense. There is a benefit to the firm's flexibility in being able to defer interest payments, as in the cases of zero-coupon debt, income bonds, or intercompany debt. When evaluating a preferred stock rating, Standard & Poor's would uses GAAP fixed-charge coverage instead of interest coverage, where: The interest expense is adjusted to include the amortization of interest in any sale/leaseback of property or equipment or any other type of lease. Both of these coverage ratios would be calculated on a consolidated company basis. Fixed-charge coverage should also include any regular contractual costs that are payable regardless of operating performance. Fixed-charge cover indicates the margin of comfort for lenders and bondholders that their debts can be serviced by the borrower. Fixed-charge cover is a key factor in determining a company's

financial flexibility—its ability to service existing fixed-cost funding and borrow more if necessary. Of all the ratios considering debt, this is the most important. A high fixed-charge coverage ratio implies that the company has extra debt-finance capacity. Statutory interest coverage measures the various sources of cash available for upstreaming to the holding company as well as the net cash being generated at the holding company, and compares these sources with the interest expense. Statutory interest coverage is viewed as an important differentiation of investment-grade companies versus noninvestment-grade companies, though it is not as useful in differentiating among the higher rating categories. This is because Standard & Poor's evaluates insurers as ongoing enterprises, which are better covered under GAAP accounting, while statutory accounting is liquidation-based. Higher-rated firms are expected to have greater flexibility to meet interest payments as they become due. Still, insurance holding companies need to pay their bills while operating within statutory restrictions on their insurance subsidiaries, and companies that are expected to maintain low statutory interest coverage on an ongoing basis will be viewed as speculative. In addition, Standard & Poor's analyzes the insurance company equivalent of funds from operations to total debt. This ratio evaluates the cash flow available in relation to debt outstanding, the theory being that the inverse of this ratio calculates the number of years needed for a company's cash flow to equal its debt outstanding. Given the multi-tiered structures of insurance holding companies owning operating companies and that available cash flow to the holding company is more relevant than cash flows at the holding company, Standard & Poor's will analyze funds available from operations to total debt. This ratio is calculated as: Total debt is on a consolidated company basis. Noncash expenses would include such items as depreciation, capitalized interest, and deferred taxes. Standard & Poor's recognizes that healthy, growing insurance companies might need to be evaluated somewhat differently on this measure, given the issue of statutory strain on earnings. With primary emphasis on GAAP coverage in this analysis, Standard & Poor's focuses on the statutory coverage centers on funds available for dividending up to the parent rather than numbers purely derived from statutory income. This means that companies operating in states with dividend restrictions in the form of "the lesser of 10% of the prior year's statutory capital or the prior year's net operating income" will be at a disadvantage versus those companies located in a "greater of" state. Goodwill Goodwill is not recognized in Standard & Poor's view of consolidated statutory capitalization. However, many managed care organizations have GAAP goodwill at the holding company as a result of prior acquisitions. FAS 141 requires that this goodwill be booked as part of purchase accounting. Since Jan. 1, 2002, FAS 142 has required that the goodwill remain on the balance sheet unless or until it is impaired. Standard & Poor's analysis of goodwill continues to be a qualitative assessment. Standard & Poor's will continually review an organization's business-segment cash flows and the sustainability of cash flows used for its FAS 142 impairment testing. Furthermore, Standard & Poor's will aggressively discount or remove goodwill from the balance sheet and all holding company ratios when Standard & Poor's believes the goodwill could be impaired. It is for this reason that Standard & Poor's might also look at ratios such as debt to tangible capital and debt to EBITDA in addition to traditional leverage ratios. Adjusting For Unfunded Pension Obligations When the capital analysis is performed on a group consolidated GAAP basis, the unfunded defined benefit pension obligation will be deducted from total adjusted capital, if it is not already deducted. Although this is not standardized across all countries, accounting practice in Europe increasingly requires companies to eliminate unfunded liability from equity, and Standard & Poor's calculation of capital will reflect this practice. For U.S. companies reporting on a statutory basis, Standard & Poor's will incorporate the impact of unfunded defined benefit pension, post-retirement, and other compensatory plan obligations into analyses of financial leverage. These unfunded liabilities are viewed as debt-like in nature given that these are financial obligations that will ultimately be funded from future cash flows. In making these calculations, Standard & Poor's will use the fullest measure of the unfunded liability on an after-tax basis: the projected benefit obligation (PBO) minus net assets, which is the ultimate obligation for an ongoing enterprise. (By contrast, the accumulated benefit obligation does not allow for future salary increases.) We do not allow the use of a corridor to reduce the unfunded benefit obligations. Given that debt and financial leverage ratios will be affected by this change in criteria, the analyses will consider the impact with and without the inclusion of the amount of unfunded obligations. Where the amount of unfunded obligations causes adjusted leverage to increase by 10% or more, suggesting a lower rating

category, Standard & Poor's will be evaluating management's longer term capital strategy in making its assessment of the ratings impact of unfunded obligations. Credit will not be given for any surplus reported on the balance sheet. Financial Leverage Ratio Guidelines The ratios used to analyze the financial leverage risks are: Double leverage. Debt leverage. Debt plus preferred leverage. GAAP interest coverage. GAAP fixed-charge coverage. Statutory interest coverage. Statutory fixed-charge coverage. Funds available from operations/total debt. These ratios are meant to be used as guidelines only. For a given rating category, financial ratios can be expected to vary with the business or operating profile of a company. A company with a stronger competitive position, more favorable business prospects, and more predictable earnings can afford to undertake added financial risk while maintaining the same credit rating. Table 2 Hybrid Equity Tolerance for Operating Companies RATING HYBRID EQUITY TOLERANCE (%) AAA 15 AA 20 A 25 BBB and lower 30 Table 3 Debt Leverage RATING CATEGORY DEBT LEVERAGE AAA Less than 15% AA 15%-25% A 25%-35% BBB 35%-45% BB 45%-65% A great deal of discretion is required in applying these guidelines. Although they provide insight into ratings in general, it is a mistake to oversimplify the entire thought process behind a specific rating by relying solely on the numbers. Guidelines focus on only a few ratios. Many additional measures are used to round out the analysis or to focus on specific issues. Obviously, strengths reflected in one financial measure can offset or balance relative weakness in another. Ratings are an assessment of a company's ability to meet its obligations in the future, and ratio standards relate to a company's expected financial condition. Ratings are designed to reflect performance over the anticipated course of business cycles and not in what is viewed as a peak or trough period. Ratio standards do not always conform to an as-reported basis. Rather, a firm's financial figures may be adjusted to reflect ongoing performance. Analysis of more volatile speculative-grade credits does not revolve around traditional financial measures and defies the relatively patterned methodology associated with investment-grade credits. Numbers shown in the 'BB' column serve primarily to delineate the 'BBB' range. Operating Leverage Versus Financial Leverage As insurers participate in match-funded transactions that involve the raising of external funding, Standard & Poor's is often asked whether these companies' debt or debt-like obligations are viewed as financial leverage or operating leverage. Financial leverage is generally meant to measure the amount of debt or debt-like funding that is used by an insurer to meet its general capital needs. Alternatively, insurers might use debt or debt-like instruments to fund a discrete pool of financial assets—such as bonds or other high-quality, fixed-interest instruments. In these cases, Standard & Poor's may treat this debt as operational leverage when there is strong asset/liability matching or active risk management employed and when there is little to no risk that the assets will not be able to repay the funding. A distinct version of operational leverage, financial intermediation, is when the assets do not exist on the balance sheet when the transaction is initiated or when a third party's assets are match-funded. The purpose of this section is to codify and document Standard & Poor's treatment of operational leverage and financial intermediation activities in its analysis of insurance companies. The difference in the credit impact between funding viewed as financial leverage and funding viewed as operational leverage can be great. For example, debt raised to meet an insurer's general capital needs would be viewed as financial leverage, and typically, highly rated companies could have 10%-35% of their capital in these debt or debt-like instruments. Alternatively, insurers may issue funding agreements, GICs, or even debt backed by high-quality, fixed-interest assets with matching durations, tightly corresponding cash flows, and positive convexity. Standard & Poor's would view such an issuance as a financial-intermediation activity, these funds would be considered operational leverage as long as the residual risk is insignificant, and the sums would be excluded from financial-leverage ratios. By contrast to funding viewed as financial leverage, these lines of business can commonly have funding levels that are 10x-30x the amount of total equity for highly rated insurers. Standard & Poor's will continue to be conservative in its interpretation of the nature of the issuance of these funding instruments. Standard & Poor's will view both types as financial leverage in the absence of a thorough analysis of the assets and controls supporting these funding mechanisms, including segregation of pools of assets. Historically, Standard & Poor's has found that individual instances of financial intermediation and operational leverage in its analyses of insurance companies tended to fall into a handful of classes. One of the most common classes is the institutional spread-based business of some U.S. life insurance

companies. However, the number and variety of types of activities that are arguably instances of financial intermediation and potentially worthy of operational leverage treatment in Standard & Poor's analysis have multiplied in recent years. No longer are they always obviously identifiable as belonging to an existing class of operational-leverage transactions, nor do they lend themselves to the ready application of rules-based criteria. Rather than establish a formal rules-based approach, Standard & Poor's has elected to set clear definitions of terms, to enunciate the principles underlying its views on financial intermediation and operational leverage, and to establish a process that will insure a consistent application of these principles. When considering the appropriateness of operational leverage treatment in any application, whether traditional or new, Standard & Poor's will apply the following definitions and procedures. Definitions Financial intermediation is defined as any activity that a) raises cash by the issuance of debt or debt-like instruments that creates funding for b) a discrete asset or pool of assets and any related hedge instruments and capital, at least notionally segregated from the rest of the issuer's assets whose cash flows will be sufficient to pay all returns on and of the principal of that debt with c) insignificant risk of any of the issuer's other assets being called on to make such payments. Specific examples include GICs, funding agreements, medium-term notes, synthetic securitizations, securities lending, and retail-note programs. Operational leverage (operational debt) is debt incurred in the process of funding assets for financial-intermediation purposes. Measuring the relative magnitude of this business will be based on the calculation of three ratios: 1) the total amount of operational leverage divided by total equity, 2) the amount of earnings from financial-intermediation business divided by total earnings, and 3) the expected risk-based capital to total capital. Although Standard & Poor's acknowledges that it might eventually need to set limits or sub-limits on the maximum levels that any of these numbers could reach for particular rating levels, Standard & Poor's has not set any specific guidelines on the amount of operational leverage on an insurer's balance sheet. However, when the overall amount of operational leverage rises to the point of constraining an insurer's financial flexibility, this stress will be reflected in the ratings on that insurer. Principles The risks and associated measures that must be reduced to an insignificant level are provided below. (In this context, "insignificant" means that the cumulative modeled loss on the business from these risks is reduced to a 'AAA' or higher probability of default.) Liquidity risk: the probability of insufficient liquidity. Financial market risk: dollar exposure using a financial products company-type model (e.g., interest rate risk). Insurance risk: probability of a stressed-case event (e.g., mortality). Financial flexibility risk: measurement of the potential impact on access to capital markets, such as spread widening. Business risk: return on risk-adjusted capital relative to core businesses and continued profitability (reputational, market disruption, etc.). Diversification/concentration risk: including the proportion of capital or earnings committed to any one class of financial intermediation or volatility of payment. Credit risk: concentration limits by individual credit, industry, or sovereign, taken to underlying levels. Regulatory risk. Any other risk that might be identified in connection with a specific transaction. Structural considerations In addition, it is expected that certain structural elements of a business could mitigate or exacerbate the risks of any given transaction or class of transactions. These include: Whether the debt is full recourse, limited recourse, or non-recourse. Whether any embedded options exist for policyholders or whether options exist for the holders of the debt. Whether or not there are any cross-default provisions in the debt or other debt. The extent to which the assets are segregated (ring fenced) or used to collateralize other obligations. The tangible or intangible nature of the assets. The volatility of the asset valuations over time. The potential of proposed operational leverage to distort the overall risk profile of the insurer. Application The analytical application of operational leverage treatment will be made to individual entities within groups unless those entities are assigned ratings in consideration of implicit or explicit support from the group. In the event of such support, the applications will be made on a consolidated basis to the group. All debt judged to be operational leverage would receive the analytical treatment described as follows: The debt will be excluded from Standard & Poor's calculation of financial leverage. The interest will be excluded from the calculation of interest and fixed-charge coverage. The income from the associated assets will be excluded from the calculation of interest and fixed-charge coverage. Any capital (e.g., unrealized gains) in the structure will be excluded from the calculation of total adjusted capital. This will be true whether the obligation for funds raised is literally in the form of debt or debt-like instruments (such as GICs) that have many characteristics similar to debt. Any debt

not judged to benefit from operational leverage treatment would be treated as financial leverage. If the cumulative residual risks cease to be insignificant or assets are reused for unrelated purposed (e.g., repo's) during the term of the debt, Standard & Poor's may cease to award operational leverage treatment to that debt. There will be no intermediate levels of treatment. Off-Balance-Sheet Financing Off-balance-sheet items factored into the leverage analysis include the following: Operating leases. Debt of joint ventures and unconsolidated subsidiaries. Guarantees. Receivables that have been factored, transferred, or securitized. Contingent liability, such as potential legal judgments or lawsuit settlements. Various methodologies are used to determine the proper adjustment value for each off-balance-sheet item. In some cases, the adjustment is straightforward. For example, the amount of guaranteed debt can simply be added to the guarantor's liabilities. Other adjustments are more complex or less precise. Nonrecourse debt of a joint venture may be attributed to the parent companies, especially if they have a strategic tie to the operation. The analysis may burden one parent with a disproportionate amount of the debt if that parent has the greater strategic interest or operating control or if its ability to service the joint-venture debt is greater. Other considerations that affect a company's willingness to walk away from such debt—and other nonrecourse debt—include shared banking relationships and common country location. In some instances, the debt may be so large in relation to the owner's investment that the incentives to support the debt are minimized. In virtually all cases, though, the parent would likely invest additional amounts before deciding to abandon the venture. Accordingly, adjustments would be made to reflect the owner's current and projected investment, even if the venture's debt were not added to the parent's balance sheet. The debt-equivalent value of operating leases is determined by calculating the present value of minimum operating lease obligations as reported in the annual report's footnotes. The lease amount beyond five years is assumed to mature at a rate approximating the minimum payment due in five years. The variety of lease types could require the analyst to obtain additional information or use estimates to evaluate lease obligations. Equity Credit For Preferred Stock And Hybrid Equity Preferred stock and hybrid equity can qualify for treatment as equity for the purpose of calculating capital structure ratios. Some preferreds and hybrids are viewed as debt—or something between debt and equity—depending on their features and the circumstances. What is equity? What constitutes equity in the first place? Traditional common stock—the paradigm equity—sets the standard. But equity is not a monolithic concept; rather, it has several dimensions. Standard & Poor's looks for the following positive characteristics in equity: It requires no ongoing payments that could lead to default. It has no maturity or repayment requirement. It provides a cushion for creditors in the case of a bankruptcy. It is expected to remain as a permanent feature of the enterprise's capital structure. If equity has these distinct defining attributes, it should be apparent that a specific security can have a mixed impact. For example, hybrid securities, by their very nature, will be equity-like in some respects and debt-like in others. Standard & Poor's analyzes the specific features of any financing to determine the extent of financial risks and benefits that apply to an issuer. In any event, the security's perceived economic impact is relevant; its nomenclature is not. A transaction that is labeled debt for accounting, tax, or regulatory purposes could still be viewed as equity for rating purposes, and vice versa. For Standard & Poor's to view any capital issuance as more equity-like in nature, it must have a maturity that is consistent with the advantages offered by long-term capital. Standard & Poor's has adopted a single maturity standard that will apply to all investment-grade financial institutions, insurance companies, and corporates, in all regions. Under this standard, a hybrid capital issue (2007 and subsequent) should have a remaining term of at least 20 years to receive our equity classification. We continue to view undated (i.e., perpetual) and very long-dated (i.e., more than 20 years) securities as superior instruments from the perspective of equity content. But, as a practical matter, we believe a remaining life of 20 years is long enough to view the issue as being sufficiently permanent to warrant our "intermediate" equity credit classification when other issue features are consistent with this designation. Issues with initial maturities of greater than 20 years that subsequently fall to less than 20 years of remaining maturity will be viewed as no longer providing equity credit and as such will no longer receive any formal equity treatment in our calculation of financial ratios. Nevertheless, as a qualitative matter, we will still be sensitive to the benefits afforded by such issues—for example, the deferability of ongoing payments—even where the "intermediate" equity credit determination is not warranted because the condition of a long remaining term is no longer

met. We also treat all so-called scheduled maturities (where the issuer is required to undertake efforts to refinance the issue) as effective maturities, even where accompanied by legally binding replacement provisions. The latter indeed do not mitigate scheduled maturities, which still expose the issuer to a sharp increase in financing costs if its credit spreads have widened. For speculative-grade issuers, where debt maturities are typically far shorter than with investment-grade credits—and where, more broadly, the scope of our analysis necessarily extends a lesser number of years—we will not apply the same standard. That is, in this area, hybrid capital issues with maturities shorter that 20 years can still achieve the equity credit, assuming other features make this appropriate. In addition to these maturity considerations, to be considered equity-like, these instruments must be subordinated in the payment of interest and principal to debt and policy obligations. Finally, the insurer should not be forced into bankruptcy or receivership if interest, dividends, or principal repayment on the obligation is not paid. The rationale for determining whether a particular instrument is more debt-like or equity-like is as follows: Equity requires no ongoing payments that could lead to default Equity pays dividends but has no fixed requirements that could lead to default and bankruptcy if these dividends are not paid. Moreover, there are no fixed charges that might, over time, drain the company of funds that might be needed to bolster operations. A company is under pressure to pay both preferred and common dividends but ultimately retains the discretion to eliminate or defer payment when it faces a shortage of funds. Of course, a firm's reluctance to pass on a preferred dividend is not identical to its reticence to altering its common payout. Accordingly, there is a difference in equity credit afforded to common equity relative to preferred equity. The longer a company can defer dividends, the better. An open-ended ability to defer dividends until financial health is restored is best. As a practical matter, the ability to defer dividend payments for five or six years is most critical in helping prevent default. If the company cannot restore financial health in five years, it probably never will. The ability to defer payments for shorter periods is also valuable, but equity content diminishes as constraints on the company's discretion increase. Equity provides a cushion for creditors in the event of default What happens in bankruptcy also pertains to the risk of default, albeit indirectly. Companies can continue to raise debt capital only as long as the providers feel secure about the ultimate recovery of their loans in the event of a default. Debtholders' claims have priority in bankruptcy, while equity holders are relegated to a residual claim on the assets. The protective cushion created by such equity subordination allows the company access to capital, enabling it to stave off a default in the first place. Equity is expected to remain a very long-term feature of the enterprise's capital structure At any time, a company can choose to repurchase equity or issue additional shares. However, some securities are more prone to being temporary than others. Standard & Poor's analysis tries to be pragmatic, looking for insights as to what might ultimately occur. Preferred stock, in particular, is likely to have provisions for redemption or exchange, if not an outright stated maturity. A preferred stock that the analyst believes will be refinanced eventually with debt is viewed as a debt-equivalent, not equity all along. Auction preferreds, for example, are perpetual on the surface. However, they are often merely a temporary debt alternative for companies that are not current taxpayers until they once again can benefit from the tax deductibility of interest expense. Moreover, the holders of these preferreds would pressure for a redemption in the event of a failed auction or even a rating downgrade. Standard & Poor's discussions with management regarding the firm's financial policies provide insights into the company's plans for the securities: whether a company will call or repurchase an issue and what is likely to replace it. The ability to call always gives reason for pause. Nonetheless, where an issue contains a call provision, the issuer has the option to redeem the issue but no obligation to do so. As long as we believe the issuer intends either to keep the issue outstanding or refinance it with the proceeds of another issue warranting comparable equity credit, we do not view the call date as an effective maturity. Still, we would question the rationale for a call date less than five years after issuance. Given the quality-of-capital considerations, at some point, the issuance of additional preferred stock or hybrid equity puts sufficient pressure on a company that Standard & Poor's will view the incremental capital as more debt-like than equity-like. Currently, Standard & Poor's views insurance holding companies with total preferred stock and hybrid equity in excess of 15% of total capital as having sufficient quality-of-capital concerns that the increment of preferreds and hybrids above 15% of capital is viewed as more debt-like than equity-like. If a company has issued hybrid instruments above

this tolerance, the excess amount is treated as pure debt for the leverage calculations. For the purposes of leverage calculations, the distinction between hybrid treated as equity or debt is only relevant for the numerator. The denominator is total consolidated capital, which includes stockholders' equity, all debt, and all hybrid securities. Certain preferred and hybrid securities that are mandatorily convertible to common stock would be considered outside this limited equity basket of securities. Total adjusted capital includes eligible hybrid up to a maximum of 25% of the total. Within total adjusted capital exists a sub-limit of 15% for the following forms of hybrid capital: preference shares and dated and undated subordinated hybrid capital issues with capacity to defer interest. The additional 10% that brings the limit for eligible hybrid equity in total adjusted capital to 25% can only be composed of eligible mandatorily convertible securities. To date, the only forms of hybrid equity included in total adjusted capital above the 15% sub-limit are shorter-dated (three years or less) mandatory convertible securities. Standard & Poor's generally classifies mandatory convertible securities into two groups: shorter-dated issues that convert within three years and longer-dated issues that convert over a longer time frame. Many shorter-dated mandatory convertible securities have strong equity-like characteristics. Standard & Poor's typically includes them up to its highest tolerance limits for hybrid equity instruments if the following guidelines are met: Within three years of issue, the securities convert on a mandatory basis into new common equity of the issuer. There must be no option for the securities to be retired with cash at any time or under any circumstances during the life of the securities, unless that cash is itself the direct product of a new equity issue by the issuer. The issuer is highly rated (in general, at least an 'A-' counterparty credit rating) or the securities must have an acceptable, credit-related trigger that accelerates conversion before the mandatory conversion date. Note that the existence of a mechanism that triggers deferral of coupon under stress or a nominal coupon renders a mandatory convertible security even more equity-like. The securities have a robust mechanism that ensures the conversion will not excessively dilute the issuer's share price. This mechanism should reduce to a minimum the potential buy-back of newly issued shares resulting from conversion. Mandatorily convertible securities (MCS) with a longer period to conversion—more than three years—often have many equity-like characteristics. Standard & Poor's will include them within the total adjusted capital sub-limit of 15% along with noncumulative perpetual preferred shares and other hybrids, if they meet the following guidelines: At maturity, the securities convert on a mandatory basis into new common equity of the issuer. There must be no option for the securities to be retired with cash at any time or under any circumstances during the life of the securities, unless that cash is itself the direct product of the new equity issue by the issuer. The securities have an acceptable, credit-related trigger that accelerates conversion before the mandatory conversion date, or the securities contain a clause that enables the issuer to defer cash interest payments to absorb losses on an ongoing basis. The securities are subordinated to all other debt of the issuer. The securities have a robust mechanism that ensures that conversion will not excessively dilute the issuer's share price. This mechanism should reduce to a minimum the potential buy-back of the newly issued shares resulting from conversion. The closer an MCS is to mandatory conversion, the more equity-like it becomes. During the last three years before mandatory conversion, Standard & Poor's considers an eligible MCS as shorter-dated and includes it up to the highest tolerance limits for hybrid equity instruments. Some hybrid capital instruments with step-up clauses or the potential to dilute excessively existing common shareholders—a characteristic of some MCS—create incentives for management to retire the instrument or repurchase the common shares after conversion. These characteristics cast doubt on the permanency of the capital raised. This, in turn, leads Standard & Poor's to establish reasonable limits in analytical ratios or, in some cases, exclude altogether an instrument from analytical measures. Furthermore, hybrid securities with a step-up clause of more than 100 basis points, which are issued in conjunction with a call option, will be viewed as having an effective maturity coinciding with the call date. Even when the elimination or deferral of a coupon payment does not constitute a default under the terms of the issue, Standard & Poor's considers theses events a failure to pay and would revise a specific issue rating to 'D' in such cases. The potential for a payment failure (including allowed eliminations or deferrals) is reflected in the rating on the instrument. Note that the payment of the coupon in kind (such as a stock settlement) is not a payment failure provided that this option is clearly defined in the original prospectus of the security. The rating on a hybrid capital instrument also reflects

subordination of the instrument in liquidation. Certain shorter-dated MCS that have features that render them virtually indistinguishable from common equity—notably, accelerated conversion under stress and a coupon that participates in the financial performance of the issuer—could enter Standard & Poor's more narrowly defined measures of common equity, within appropriately prudent limits. To qualify for inclusion in Standard & Poor's tangible common equity measures, these instruments must be seen as equivalent to common equity in the eyes of investors, regulators, accountants, and the issuers themselves. Redeemable preferred stock issues may also be refinanced with debt once an issuer becomes a taxpayer. Preferreds that can be exchanged for debt at the company's option also may be viewed as debt in anticipation of the exchange. However, the analysis would also take into account any offsetting positive factors associated with the change in tax status. In cases where the investor is given a put option to force redemption (which can be exercised within 20 years of remaining life on the issue), Standard & Poor's will generally view such securities as debt-like. Often, the trigger prompting an exchange or redemption would be improved profitability. Then, the added debt in the capital structure would not necessarily imply lower credit quality. The implications are different for many issuers that do not pay taxes for various other reasons, including availability of tax-loss carryforwards or foreign tax credits. For them, a change in taxpaying status is not associated with better profitability, though the incentive to turn the preferred into debt is identical. In the same vein, sinking fund preferreds are less equity-like. The sinking-fund requirements themselves are of a fixed, debt-like issuance, which results in the sinking fund preferred being just the precursor of debt. It would be misleading to view sinking fund preferreds, particularly that portion coming due in the near to intermediate term, as equity, only to have each payment convert to debt on the sinking fund payment date. Accordingly, Standard & Poor's views at least the portion of the issuer's sinking fund preferreds due within the next five years as debt. Standard & Poor's continues to review a variety of pre-funded contingent capital arrangements and, assuming acceptable security features, has accepted these as eligible hybrid equity up to 5% of the capital structure for investment-grade issuers. This 5% is a subset of the traditional hybrid 15% capital bucket. For example, perpetual or long-dated pass-through securities are issued by a trust, with the proceeds ultimately used to purchase eligible assets that reside in a Regulation 114 Trust. For these securities, the insurer has a put option giving it the right to put to a special-purpose entity, the insurer's preference shares having a liquidation value equivalent to the assets owned by the trust. Standard & Poor's would expect a trigger to be included in the securities, requiring mandatory exercise of the put if the insurer's credit strength falls below investment grade in order for these securities to be viewed as current equity. Standard & Poor's would accept the instrument, when drawn, as equity just as any other acceptable hybrid security, up to 15% of capital. As with other hybrid instruments viewed as equity, they must have an appropriate long-term maturity, cannot be funded with an auction preferred mechanism, and cannot have any feature that would cause management intend to make them a short-term security. Hybrid Equity Tolerance In Operating Insurers' Capital Structures From the policyholders' perspective, common equity and surplus remain the preferred forms of capital, but for mutuals that cannot issue stock, selling hybrid equity is the only way to raise additional capital externally and improve financial strength. As previously noted, when looking at insurance holding companies, the overall tolerance for hybrid equity within an insurer's capital structure is 15% (with an additional 10% allowed for eligible mandatory convertible securities) across all rating categories, whereas debt levels vary, higher levels of leverage being permissible as one moves down the ratings spectrum. In contrast with past practice, which applied the same tolerance to operating companies, hybrid equity tolerance for operating companies by rating category varies according to the counterparty credit rating on the operating company (see Table 4). Table 4 GAAP Interest Coverage Ratio RATING CATEGORY GAAP INTEREST COVERAGE LOW INTEREST RATE ENVIRONMENT HIGH INTEREST RATE ENVIRONMENT AAA 10x or more 8x or more AA 8x-10x 6x-8x A 5x-8x 4x-6x BBB 3x-5x 3x-4x BB 2x-3x 2x-3x Hybrid equity exposure at an operating company is calculated as follows (on a statutory accounting basis): The result ties in with what Standard & Poor's understands to be regulators' maximum tolerance for these types of instruments. However, to the extent that a regulator disallowed a hybrid equity issuance within a particular insurer's capital structure, that issuance would be treated as debt for risk-based capitalization model and hybrid equity tolerance purposes. All issuances of hybrid equity by operating companies that are part of stockholding companies are viewed as debt in

evaluating consolidated stock holding-company debt leverage. Standard & Poor's believes holders of these operating-company instruments have an equal, if not senior, call on operating-company resources versus holding-company debtholders. These standards allow insurers to manage capital structures more optimally according to their own needs. The combination of operating company hybrid equity tolerance with double leverage analysis for insurance holding companies also helps level the playing field between stock companies and mutuals because tolerances then combine both debt and hybrid equity exposure. In the end, however, these standards are just that, and as such, they are only one part of Standard & Poor's analysis of an insurer's financial strength. In and of themselves, they will not be the sole determinants of a rating on a company or group. Preferred Stock Rating Criteria Preferred stock ratings address the issuer's capacity and willingness to pay dividends—and principal, in the case of limited life preferreds—on a timely basis. They address the likelihood of timely payment of dividends, notwithstanding the legal ability to pass on or defer a dividend payment. Preferred stock is rated 'D' upon a bankruptcy filing by the issuer. Preferred stock ratings are also lowered to 'D' when an issuer omits a dividend payment. As with the 'D' rating in the case of debt issues, the omission must actually have occurred. The omission is deemed to have occurred when, at the time the issuer's board would normally declare the dividend, no such action is taken. The 'C' rating is used for cumulative preferred stock when an issuer has resumed paying dividends but an arrearage still exists. 'C' is also the normal rating on preferred stock of issuers with ICRs of 'CCC', 'CCC-', or 'CC' when dividend payments are still being made. In addition, 'C' is the rating assigned to any preferred stock when a deferral of the dividend is viewed as imminent, whatever the ICR of the issuer. Standard & Poor's rates the credit risk of preferred stock and similar instruments along a single continuum that includes all other fixed-income obligations issued by the company. Broadly, the criteria are to rate preferred stock two notches below the counterparty credit rating on an investment-grade issuer and three notches below that on a speculative-grade issuer. The ability to defer payment and deep subordination will constitute the decisive analytical factors and could broaden the notching. Mandatory deferred features will broaden the notching if Standard & Poor's believes these features could significantly increase the likelihood of nonpayment on these instruments. The same basic methodology and ratio norms are used to rate both debt and preferred stock. The financial analysis performed in conjunction with preferred stock ratings is virtually the same as that used to rate debt. Fixed-charge coverage and capitalization ratios are calculated treating preferred stock obligations as though they were debt. Although issuers have the right to defer payments on their preferred stock without triggering default, a large amount of preferred stock outstanding will drag down a credit rating as well. Even though a company under duress can stop paying the preferred dividends to avoid default, the burden increases the risk that the company will face such a financial crisis. The company will pay dividends as long as possible; this can sap its financial strength or siphon off funds that otherwise could be used to protect the firm's competitive position. Preferred stock ratings also consider the dividend's vulnerability to the firm's discretionary passing on a payment. It is, therefore, appropriate to rate preferred stock lower than indicated by pure financial analysis—and well below the debt rating—in the case of speculative-grade credits. Such issuers may be expected to eliminate preferred dividends to help avoid financial constraints. Covenants in debt instruments can endanger payment of preferred dividends, even if financial measures indicate a capacity to pay. State charters also restrict payments when there is a deficit in the equity account. This can occur following a write-off, even while the firm is healthy and possesses ample cash to continue paying. Trust Preferred Stock When using a trust preferred, a company establishes a trust that is the legal issuing entity of the preferred stock. The sale proceeds of the preferred are loaned to the parent company, and the payments on this intercompany loan are the source for servicing the preferred obligation. In some cases, this financing structure can provide favorable equity treatment for the company, even while the payments are tax deductible. Standard & Poor's rating of trust preferreds is based on the parent company's creditworthiness and the terms of the intercompany loan. Any equity credit that might be associated with these issues also is a function of the terms of the intercompany loan, especially with respect to payment flexibility. This variety of preferred was introduced in 1995 as TOPrS (Trust Originated Preferred Securities). TOPrS were a structural alternative for deferrable-payment hybrids that had been sold since late 1993 under the appellation MIPS (Monthly Income Preferred Securities). Canadian companies have issued a security called

COPrS. This preferred stock is similar in terms of economic substance but is issued directly, without the trust structure. Canadian tax and accounting treatment facilitates tax deductibility for this type of equity instrument without the complexity of indirect issuance. The use of a trust neither enhances nor detracts from the structure compared with the alternative issuing entities. The legal form of the issuing entity can be a business trust, limited partnership, offshore subsidiary in a tax haven, or onshore limited liability corporation. These structures have in common an intercompany loan with deferral features, no cross-default provision, a long maturity, and deep subordination. The preferred dividend is similarly deferrable as long as common dividends are not being paid. After the deferral period, the trust preferred holders have legally enforceable creditors' rights—in contrast to conventional preferreds, which provide only very limited rights. The extent of any equity credit for the parent company depends on the specific features of the intercompany loan. It can be equal to that of conventional perpetual preferred stock. Surplus Notes In Insurers' Capital Structures Surplus notes provide long-term funding at a low cost of carry because the interest paid on the notes is only slightly higher than the insurer's investment rate of return. If structured properly, the notes are treated as surplus by insurance regulators. Depending on the structure and maturity of these instruments, Standard & Poor's also views surplus notes as equity-like in nature, with positive implications for the ratings on an insurer's policy obligation. Surplus notes are capital instruments that regulators generally treat as part of the capital and surplus of an operating insurance company. The notes, which usually pay interest semiannually or annually, have a stated maturity, though the issuer has the option to call some notes. Surplus notes have restrictive repayment features that give regulators the ability to prevent principal and interest payments if an insurer's financial condition deteriorates. The notes also contain equity features, i.e., they are subordinated in the payment of interest and principal to debt and policy obligations. Yet the insurer is not forced into bankruptcy or receivership if interest or principal is not paid. Analyzing Surplus Notes In Standard & Poor's view, the structure and maturity of an insurer's surplus notes dictate how much support the notes provide for policyholder obligations as well as what rating should be assigned to the notes relative to the financial strength rating on the company. To receive equity-type treatment by Standard & Poor's, the notes must be subordinate in the payment of interest and principal to all other types of obligations, such as debt and policy obligations. In the event of nonpayment of interest or principal, the noteholders must not be able to force the issuer into bankruptcy, receivership, liquidation, or any other form of regulatory supervision. To date, regulators agree that notes requiring the commissioner's approval for each payment of interest and principal should be treated as surplus. At longer maturities, Standard & Poor's also views these notes as equity-like and treats them as equity capital in support of a financial strength rating. For Standard & Poor's to view surplus notes as equity-like in nature, they must have a maturity that is consistent with the advantages offered by long-term capital. As previously noted for hybrid instruments and preferred stock, surplus notes should have a remaining term of at least 20 years to receive credit as equity. Standard & Poor's will tier the rating on a surplus note off the financial strength rating on the company. To date, the ratings on surplus notes have been two notches below the financial strength rating as long as the financial strength rating is secure ('BBB-' or higher). To give a perspective of how Standard & Poor's rates surplus notes versus debt, the senior debt and financial strength ratings on an operating insurance company are generally the same, and the subordinated debt rating will typically be one notch lower as long as the senior debt and financial strength ratings are in the secure range. The subordinated debt will be rated two notches below the financial strength rating if the financial strength rating is not secure ('BB+' or lower). The gap between the financial strength rating and the rating on the surplus note widens as an insurer's financial condition deteriorates. Although the above criteria apply to insurers with secure ratings, the ratings gap will increase significantly if the insurer is rated vulnerable. Standard & Poor's believes the likelihood of regulatory intervention on the payment of a surplus note's interest or principal is high for insurers rated 'BB+' or lower. Consequently, at that rating level, the gap between the financial strength rating and a surplus note rating will be two rating categories. Lastly, Standard & Poor's believes surplus notes should be a prudent amount of an insurer's total capitalization to comply with the above gap criteria. If surplus notes purchased by unaffiliated third parties constitute more than 15% of total capital, the ratings gap is likely to be wider, and Standard & Poor's gives less equity credit for the note. If surplus notes are issued to unaffiliated third parties by an operating company that is ultimately owned by a

holding company, any amount exceeding 15% of capital will be treated as debt. If the surplus notes are issued to an affiliated group member, Standard & Poor's will consider incremental amounts of surplus notes exceeding the 15% threshold as equity capital. Often these notes are issued to the parent as a tax-efficiency strategy. In situations where the parent and subsidiary do not file a consolidated tax return, the tax deduction that the parent receives for debt servicing cannot offset the subsidiary's earnings. By issuing a surplus note at the subsidiary level, the debt-servicing expense can offset the subsidiary's earnings. The parent commits that the note is a permanent part of the subsidiary's capital base and commits to restructure the note to avoid a default. In certain situations, Standard & Poor's will accept up to 30% of a subsidiary's capital in the form of parent-held surplus notes if the subsidiary is viewed as strategically important or core to the parent and the parent has committed that the surplus notes will be a permanent part of the capital structure. Commercial Paper And Confidence-Sensitive Debt Commercial paper consists of unsecured promissory notes issued to raise short-term funds. Typically, only companies of strong credit standing can sell their paper in the money market, though there was some issuance of lesser-quality, unrated paper prior to the junk bond market collapse late in 1989. The commercial paper and confidence-sensitive debt markets' acute sensitivity to credit quality and the speed with which confidence can be lost are of great concern to Standard & Poor's. When a crisis of confidence strikes, issuers that do not have alternative sources of liquidity could default on their commercial paper or any other obligations coming due. All prudent issuers of confidence-sensitive debt should have alternative sources of liquidity. The purpose of backup liquidity is to protect the issuer in the event that investors are reluctant to roll over short-term debt because of developments—e.g., bad business conditions, a lawsuit, management changes, a rating change—affecting a single issuer or group of issuers, even though Standard & Poor's believes the issuer remains creditworthy. In addition to examining liquidity backup for rated commercial paper programs, Standard & Poor's reviews liquidity backup for all confidence-sensitive, short-term debt for all rated insurers. Confidence-sensitive, short-term debt is defined as rated or unrated commercial paper issued in all markets (based on authorized amount unless Standard & Poor's is told in writing that the company will maintain a lower amount outstanding); borrowings under money market lines; short-term borrowings from mutual funds and other organizations that are not banks; master notes; loans due on demand; and current maturities of publicly held long-term debt, including medium-term notes. Borrowings not considered confidence-sensitive would be traditional bank loans and debt owed to an affiliate. Evaluation of an issuer's commercial paper and other short-term debt issues reflects Standard & Poor's opinion of the issuer's fundamental credit quality. The analytical approach is virtually identical to the one followed in assigning a long-term rating, and a strong link exists between the short-term and long-term rating systems. In effect, the minimum credit quality associated with the 'A-1+' commercial paper rating is the equivalent of an 'A+' long-term rating. Similarly, for commercial paper to be rated 'A-1', the long-term rating would need to be at least 'A-'. (In fact, the 'A-/A-1' combination is rare. Typically, 'A-1' commercial paper ratings are associated with 'A+' and 'A' long-term ratings.) Conversely, the long-term rating will not fully determine a commercial paper rating because of the overlap in rating categories. However, the range of possibilities is always narrow. To the extent that one of two commercial paper ratings might be assigned at a given level of long-term credit quality, criteria to make that determination are as follows: Overall strength of the credit within the rating category is the first consideration. For example, a marginal 'A' credit would likely have its commercial paper rated 'A-2'; a solid 'A' would almost automatically be rated 'A-1'. In addition, the commercial paper rating perspective sometimes focuses more intensely on the near term. The time horizon for a commercial paper rating extends well beyond the typical 30-day life of a commercial paper note, the 270-day maximum maturity for the most common type of commercial paper, or even the one-year tenor used to distinguish between short-term and long-term ratings in most markets. Thus, commercial paper ratings are likely to endure, rather than change frequently. Nonetheless, the near-term outlook is occasionally distinct from long-term prospects. An example is companies with substantial liquidity, which provides protection in the near or intermediate term, but that also have less-than-stellar profitability, a long-term factor. Similarly, companies with relatively large cash holdings that might be used to fund acquisitions fit in this category. Liquidity Backup Policies Having a substantial level of liquidity—in the form of bank facilities or readily available liquid resources—is prudent for virtually all issuers and will continue to be necessary to

support an investment-grade rating on both commercial paper and long-term debt. From time to time, developments affecting a single company or group of companies could make commercial paper investors nervous and unwilling to roll over the issuer's paper, even though the issuer remains creditworthy. Prearranged bank facilities are often essential in protecting against the risk of default under these circumstances. Another purpose of having a backup bank line is to ensure that an issuer can meet its obligations in the event of a disruption to the financial markets that might inhibit the normal rollover of commercial paper, even while the issuer's own financial condition remained strong. However, given the growth of the commercial paper market, the protection afforded by back-up facilities could not be relied on with a high degree of confidence in the event of widespread disruption of the commercial paper markets. A general disruption would be a highly volatile scenario under which most bank lines would represent unreliable claims on whatever cash would be made available through the banking system to support the market. Standard & Poor's neither anticipates that such a scenario is likely to develop nor assumes it never will. Lower-rated issuers typically provide 100% backup—excess liquid assets or bank facilities—for commercial paper outstanding. However, companies with the highest credit quality can provide a lower percentage of coverage. Issuers rated 'A-1+' need not prearrange 100% coverage because they should be able to raise funds quickly even if adversities develop. The exact amount is determined by the issuer's overall credit strength and its access to capital markets. Traditionally, implementation of backup policies has revolved around determining how much committed bank credit line backup is necessary in relation to the size of the rated program. Standard & Poor's expects appropriate backup decisions to combine not just commercial paper but all confidence-sensitive debt in determining the issuer's overall liquidity position and policies. The institution's on-balance-sheet liquidity in relation to overall confidence-sensitive liabilities would then be the primary area of analysis. Backup liquidity must be sufficient to provide the appropriate level of coverage for all maturing short-term debt, not just commercial paper. Backup for 100% of rated commercial paper is meaningless if other debt maturities—for which there is no backup—coincide with those of commercial paper. Thus, the scope of backup liquidity must extend to unrated commercial paper, master notes, syndicated bank notes, and other similar confidence-sensitive obligations. The issuer is expected to meet the following guidelines at all times. If liquidity needs fluctuate during the year, liquidity backup must be maintained to cover the seasonal peak. At the very least, Standard & Poor's expects all back-up lines to be in place and confirmed in writing; preapproved lines or verbally committed lines are insufficient. Standard & Poor's is also particularly skeptical about reliance on money-market lines or similar arrangements that are little more than an invitation to do business at some future date. Payment for the lines—whether by fee or balances—generally creates some degree of moral commitment on the part of the bank. Whether a facility is specifically designated for commercial paper backup is of little significance. Table 5 Minimum Liquidity Backup Coverages CASH AND LIQUID ASSETS* + COMMITTED BANK LINES¶ = A-1+ 50% of confidence-sensitive short-term debt (CS STD) A-1 75% of CS STD A-2 and lower 100% of CS STD *Cash and liquid assets. The best source of liquidity is cash and immediately marketable securities. Marketability is the key analytical focus here, and only assets that can be easily sold in a short period should be considered “liquid.” The best securities are government obligations, bank instruments, and corporate instruments that are readily disposable, particularly high-grade, public, short-term obligations such as high-grade commercial paper. Investment equity holdings, loan sales, and other nonmarketable assets would be looked at only as a last resort. ¶Committed bank lines. Banks offer various types of credit facilities that differ widely regarding the degree of the bank’s commitment to advance cash under all circumstances. Ever-weaker forms of commitment, which are less costly to issuers, have become common in recent years, providing banks with great flexibility to redirect credit at their own discretion. No distinction is made between a 364-day and a 365-day facility. However, it is obviously critical that the facility at all times extends beyond the longest maturity of the paper it is backing. A prudent company will arrange for the continuation of its banking facilities well in advance of their lapsing. The weaker the credit, the greater the need for more reliable forms of liquidity. Issuers rated 'A-1+' have superior access to capital because of their strong credit profiles; one assumes that banks would not hesitate in honoring lines of credit to such borrowers. By contrast, Standard & Poor's considers it prudent for 'A-1', 'A-2', and certainly 'A-3' rated commercial paper issuers to have a substantial portion of their banking facilities

contractually committed in the form of a revolving credit. These revolvers should provide same-day availability of funds. As a general guideline, an 'A-1' issuer should have sufficient revolving credit capacity to provide for the next 10 days' maturities of outstanding paper. In the case of 'A-2' and 'A-3' issuers, revolvers should cover at least 15 days of maturing paper. Usually, for 'A-2' and 'A-3' issuers, this means backup of 50% of total outstandings with revolving credits. The rest of the backup should be with other committed facilities, such as compensated lines. Stronger backup may be required in some cases to provide additional protection against potential roll-over problems caused by declining market confidence in the issuer. Standard & Poor's recognizes that even revolving credit agreements, which are usually the strongest commitment a bank can make, often include material-adverse-change clauses that allow the bank to withdraw under certain circumstances. Although inclusion of an escape clause weakens the commitment, Standard & Poor's does not consider it critical—or realistic—for most borrowers to negotiate removal of material-adverse-change clauses. It is important to note that even the strongest form of backup—a revolver with no material-adverse-change clause—does not enhance the underlying credit and does not lead to a higher rating than indicated by the company's own creditworthiness. Credit enhancement can be accomplished only through letters of credit or another instrument that unconditionally transfers the debt obligation to a higher-rated entity. Banks providing issuers with facilities for backup liquidity should be sound institutions with the capacity to lend funds as committed. The credit rating on the bank can serve as a guide to its soundness: an investment-grade rating should indicate sufficient financial strength for providing a commercial paper issuer with a reliable source of funding. Standard & Poor's does not require that the bank credit rating equal the issuer rating. Nor does Standard & Poor's require that the bank credit rating be 'AA', 'A', 'A-1', or even 'A-2' to be included in the lineup of banks supporting an issuer's liquidity. There is no reason to presume that any potential difficulties for the bank would coincide with the period during which the issuer would look to it for support. Moreover, higher credit quality of the bank does not lead to an inclination to add assets at a given time or to lend to a given borrower. Nonetheless, Standard & Poor's looks askance at situations where most of a company's banks are only marginally investment-grade. That indicates an imprudent reliance on banks that might deteriorate to weaker, noninvestment-grade status. Dependence on just one or very few banks is also viewed as an unwarranted risk. Apart from the potential that the bank will not have adequate capacity to lend, there is the chance that it will not be willing to lend to this issuer. Having several banking relationships diversifies the risk that any bank will lose confidence in this borrower and hesitate to provide funds. Concentration of banking facilities also tends to increase the dollar amount of an individual bank's participation. As the dollar amount of the exposure becomes larger, the bank could be more reluctant to honor its commitment. In addition, the potential requirement of higher-level authorizations at the bank could create logistical problems with respect to expeditious access to funds for the issuer. Diversification is desirable up to a point. A company must not spread its banking business so thin that it lacks a substantial relationship with any of its banks. In the end, a solid business relationship with a bank is the key to whether the bank will stand by its client. Standardized criteria cannot capture or assess the strength of such relationships. Standard & Poor's is interested, though, in any evidence—subjective as it might be—that could demonstrate the strength of an issuer's banking relationships. For example, the nature of credit and noncredit services provided by the bank and the length of the business relationship can often provide some insight. Extendible commercial notes provide built-in backup by allowing the issuer to extend for several months if there is difficulty in rolling over the notes. Accordingly, there is no need to provide backup for them. However, there is no way to prevent the issuer from tapping backup facilities intended for other debt and use the funds to repay maturing extendible commercial notes instead of extending. This risk is known as leakage. Accordingly, for issuers that provide 100% backup, unbacked extendible commercial notes must not exceed 20% of extant backup for outstanding conventional commercial paper. Companies providing backup based on upcoming maturity levels could not issue extendible commercial notes without backup because that would degrade their coverage below what is deemed a minimum level. Guaranteed Commercial Paper And Other Parent And Subsidiary Arrangements When a corporate commercial paper program is guaranteed, the guarantor's liquidity is the subject for analysis. Bank lines and liquid assets should be in the guarantor's name, not the issuer's. If the issuer becomes insolvent or bankrupt, it will lose access to its bank lines and will not be able to pay off commercial paper with its liquid assets

in a timely fashion. Thus, backup lines and liquid assets should be in the hands of the guarantor. If a subsidiary issues commercial paper without a guarantee, the commercial paper backup should be based on the subsidiary's liquid assets and bank lines, not the parent's, unless the rating on the subsidiary is based on substantial and timely support from a stronger parent. If a maintenance-of-net-worth agreement or other document allocates a specified amount of the parent's liquidity to the subsidiary, this might be counted as part of the subsidiary's backup. The subsidiary's commercial paper should then be included in the parent's confidence-sensitive debt when backup for the parent's commercial paper is calculated and, more broadly, when the parent's liquidity is evaluated. Frequently Asked Questions Over what time frame does Standard & Poor's calculate ratios? Standard & Poor's may calculate many variations of the ratios to identify the key drivers of performance. Typically, Standard & Poor's looks for trends in ratios based on five-year historical data and projections up to three years. Why does Standard & Poor's sometimes make adjustments when calculating ratios? It is appropriate to measure underlying performance, so one-off profits or losses can be excluded, and profits and losses from acquisitions and disposals can be annualized. However, materiality should always be considered. How important are financial ratios in determining the final rating? Standard & Poor's analysis is not confined to models, numbers, and ratios. Subjective analytical judgment often outweighs the hard numbers. Financial ratios are used to help form opinions on a company's performance in the analytical areas of Standard & Poor's rating process. How are ratios interpreted by Standard & Poor's? Guideline benchmarks are given for debt leverage, the interest-coverage ratio, and the capital adequacy ratio. Holding-company double leverage indicates how holding-company debt can be treated in Standard & Poor's risk-based capital models, and the hybrid equity ratio indicates how hybrid instruments can be treated in Standard & Poor's capital models and the leverage calculation. Other ratios are used to help measure operating performance, investment quality, and liquidity. How should ratio benchmarks be used? Benchmarks must be used with caution. A great deal of discretion is required in applying these guidelines. Although they provide insight into ratings in general, it is a mistake to oversimplify the entire thought process behind a specific rating by relying solely on the numbers. Guidelines focus on only a few ratios. Many additional measures are used to round out the analysis or to focus on specific issues. Obviously, strengths reflected in one financial measure can offset, or balance, a relative weakness in another. Are the guideline benchmarks applicable to statutory or GAAP reported financials? The guideline benchmarks should be applied to ratios that show earnings and net worth in a realistic economic light. GAAP presents a more economic view of financial performance than statutory data. In Europe, analysts use the best available financial information when calculating ratios to reflect economic worth and earnings, some of which might be confidential. In reality, the availability of public financial information can change from year to year. However, Standard & Poor's underlying analysis looks through the changes in accounting treatment and availability of financial information to assign a consistent final rating.