Summary

Fitch’s corporate ratings make use of both qualitative and quantitative analyses to assess the business and financial risks of fixed-income issuers and of their individual debt issues.

An issuer default rating (IDR) is an assessment of the issuer’s ability to service debt in a timely manner and is intended to be comparable across industry groups and countries. Because short- and long-term ratings are based on an issuer’s fundamental credit characteristics, a correlation exists between them (see Fitch Rating Correlations chart, page 2). Fitch’s analysis typically covers at least five years of operating history and financial data, as well as forecasts of future performance. A fundamental part of Fitch’s approach is based on comparative analysis, through which we assess the strength of each issuer’s business and financial risk profile relative to that of others in its peer group. In addition, sensitivity analyses are performed through several “what if” scenarios to assess an issuer’s capacity to cope with changes in its operating environment. A key rating factor is financial flexibility, which depends, in large part, on the issuer’s ability to generate free cash flow from its operating activities.

Ratings of individual debt issues incorporate additional information on priority of payment and likely recovery in the event of default. The rating of an individual debt security can be above, below or equal to the IDR, depending on the security’s priority among claims, the amount of collateral and other aspects of the capital structure. Fitch’s criteria report, “Recovery Ratings: Exposing the Components of Credit Risk,” dated July 26, 2005, provides a full explanation of the methodology.

Qualitative Analysis

Industry Risk

Fitch determines an issuer’s rating within the context of each issuer’s industry fundamentals. Industries that are in decline, highly competitive, capital intensive, cyclical or volatile are inherently riskier than stable industries with few competitors, high barriers to entry, national rather than international competition and predictable demand levels. Major industry developments are considered in relation to their likely effect on future performance. The inherent riskiness and/or cyclicity of an industry may result in an absolute ceiling for ratings within that industry. Therefore, an issuer in such an industry is unlikely to receive the highest rating possible (‘AAA’) despite having a conservative financial profile, while not all issuers in low-risk industries can expect high ratings. Instead, many credit issues are weighed in conjunction with the risk characteristics of the industry to arrive at a balanced evaluation of credit quality.
Operating Environment
Fitch explores the possible risks and opportunities in an issuer’s operating environment resulting from social, demographic, regulatory and technological changes. Fitch considers the effects of geographical diversification and trends in industry expansion or consolidation required to maintain a competitive position. Industry overcapacity is a key issue, because it creates pricing pressure and, thus, can erode profitability. Also important are the stage of an industry’s life cycle and the growth or maturity of product segments, which determine the need for expansion and additional capital spending.

In rating cyclical companies, Fitch analyzes credit-protection measures and profitability through the cycle to identify an issuer’s equilibrium or midcycle rating. The primary challenge in rating a cyclical issuer is deciding when a fundamental shift in financial policy or a structural change in the operating environment has occurred that would necessitate a rating change.

Market Position
Several factors determine an issuer’s ability to withstand competitive pressures, including its position in key markets, its level of product dominance and its ability to influence price. Maintaining a high level of operating performance often depends on product diversity, geographic spread of sales, diversification of major customers and suppliers and comparative cost position. Size may be a factor if it confers major advantages in terms of operating efficiency, economies of scale, financial flexibility and competitive position. In commodity industries, size is not as important as cost position, since the ability of one participant to influence price in a global commodity is usually not significant.

Management
Fitch’s assessment of management quality focuses on corporate strategy, risk tolerance, funding policies and corporate governance. Corporate goals are evaluated to determine if management has an aggressive style dedicated to rapid growth that maximizes near-term earnings at the expense of future performance or a conservative style geared toward optimizing cash flow over the long term. A policy of growth through acquisition is not necessarily a negative credit factor, especially in a consolidating industry in which new projects would dampen prices for all participants. Key factors considered are the mix of debt and equity in funding growth, the issuer’s ability to support increased debt and the strategic fit of new assets. The historical mode of financing acquisitions and internal expansion provides insight into management’s risk tolerance. Although any assessment of the quality of management is subjective, financial performance over time provides a more objective measure. Fitch assesses management’s track record in terms of its ability to create a healthy business mix, maintain operating efficiency and strengthen market position.
Fitch also gives management significant credit for delivering on past projections or maintaining previously articulated strategies when evaluating future growth plans and related financial projections.

Finally, Fitch analyzes the quality of corporate governance (e.g., percentage of independent directors) to evaluate the structural framework and context in which management operates. Fitch’s approach to evaluating corporate governance is described in the special report, “Evaluating Corporate Governance: The Bondholders’ Perspective,” dated April 12, 2004.

**Accounting**

While Fitch’s rating process does not include an audit of an issuer’s financial statements, it examines accounting policies and the extent to which they accurately reflect an issuer’s financial performance. Relevant areas include consolidation principles, valuation policies, inventory costing methods, depreciation methods, income recognition and reserving practices, pension provisions, treatment of goodwill and off-balance-sheet items. The overall aim is to judge the aggressiveness of the accounting practices and restate figures, where necessary, to make the issuer’s financials comparable with those of its peers. Fitch also analyzes the differences among national accounting standards and the effect these differences have on the financial results of issuers within the same industry but domiciled in different locations.

Because different accounting systems can affect an issuer’s assets, liabilities and reported income, Fitch makes adjustments to ensure comparability with other companies in the peer group. Such adjustments include those made for revenue recognition, asset values, leased property, contingency reserves, treatment of goodwill, provision for deferred taxes and off-balance-sheet liabilities. The general principal Fitch applies in its adjustments is to get back to cash. Fitch avoids using fair value numbers shown increasingly in financial statements unless these give an indication of what the real cash inflow or outflow will be.

### Quantitative Analysis

The quantitative aspect of Fitch’s corporate ratings focuses on the issuer’s policies in relation to operating strategies, acquisitions and divestitures, financial leverage targets, dividend policy and financial goals. Paramount to the analysis is the issuer’s ability to generate cash, which is reflected by the ratios that measure profitability and coverage on a cash flow basis. The sustainability of these credit-protection measures is evaluated over a period of time to determine the strength of an issuer’s operations, competitive position and funding ability.

**Cash Flow Focus**

In our financial analysis, Fitch emphasizes cash flow measures of earnings, coverage and leverage. Cash flow from operations provides an issuer with more secure credit protection than dependence on external sources of capital. In dealing with quantitative measures, Fitch regards the analysis of trends in a number of ratios as more relevant than any individual ratio, which represents only one performance measure at a single point in time. Fitch’s approach attributes more weight to cash flow measures than equity-based ratios. The latter rely on book valuations, which do not always reflect current market values or the ability of the asset base to generate cash flows. Measures such as debt-to-equity and debt-to-capital are less relevant to a credit analysis because they are based on formalized accounting standards, which are subject to interpretation. In addition, these measures do not reflect an issuer’s debt-servicing ability as transparently as those based on cash flow generation. Because the equity account is presented at book value, it does not provide the most accurate assessment of an issuer’s asset base to generate future cash flows. Thus, asset values may be over- or understated, while the issuer’s liabilities remain close to the cash obligation payable at maturity. However, use of equity-based ratios is prevalent in many parts of the world, and these ratios have relevance in helping investors in those markets understand an issuer’s financial profile.

**Earnings and Cash Flow**

Key elements in determining an issuer’s overall financial health are earnings and cash flow, which affect the maintenance of operating facilities, internal growth and expansion, access to capital and the ability to withstand downturns in the business environment. While earnings form the basis for cash flow, adjustments must be made for such items as noncash provisions and contingency reserves, asset writedowns with no effect on cash and one-time charges. Fitch’s analysis focuses on the stability of earnings and continuing cash flows from the issuer’s major business lines. Sustainable operating cash flow provides assurance of the issuer’s ability to service debt and finance its operations and capital expansion without the need to rely on external funding.
Capital Structure

Fitch analyzes capital structure to determine an issuer’s level of dependence on external financing. To assess the credit implications of an issuer’s financial leverage, several factors are considered, including the nature of its business environment and the principal funds flows from operations (see the Definitions of Cash Flow Measures table on page 5). Because industries differ significantly in their need for capital and their capacity to support high debt levels, the financial leverage in an issuer’s capital structure is assessed in the context of industry norms.

As part of this process, an issuer’s debt level is adjusted from fair value to cash where applicable and for a range of off-balance-sheet liabilities by adding these to the total on-balance-sheet debt level. Such items include the following:

- Borrowings of partly owned companies or unconsolidated subsidiaries that may involve claims on the parent issuer.
- Debt associated with receivables securitizations, if there is recourse to the issuer.
- In the event of debt that is nonrecourse to the rated entity, Fitch reviews each situation to ascertain the relevance of including the debt as part of the total debt calculation.
- Operating lease obligations.
- Pension, health care and other post-retirement obligations.

In situations where specific liabilities are excluded from the debt calculation, the analyst will also exclude any related cash flow, income or assets from the equation. The issuer’s history in supporting off-balance-sheet investments with additional funds will also be a factor in determining the appropriateness of including or excluding these amounts from total debt in the absence of a formal guarantee or commitment.

Preferred stock issues with fixed dividend payments or redemption dates may be considered as quasidividend instruments. These securities offer issuers low-cost, tax-deductible funds while providing equity that is available if needed. Structural features that Fitch deems as essential characteristics for partial consideration as equity include subordination to all other debt of the issuer, maturities of at least 30 years, a payment deferral option for multiple five-year periods, limited acceleration rights and weak creditor rights in bankruptcy. Shortfalls of interest and principal payments may be rolled over to succeeding periods but must not constitute nonpayment or insufficient payment, which would increase the risk of insolvency.

Hybrid securities, which are financial instruments that combine attributes of debt and equity, may also be considered as quasidividend depending on their terms. For details and statistical support for the current policy, see the criteria report, “Hybrid Securities: Evaluating the Credit Impact—Revisited,” dated April 20, 2005. Given the recent developments in this market, the criteria for hybrids are subject to revision.

Financial Flexibility

Having financial flexibility provides an issuer with the ability to meet its debt-service obligations and manage periods of volatility without eroding credit quality. The more conservatively capitalized an issuer is, the greater its financial flexibility. In addition, a commitment to maintaining debt within a certain range allows an issuer to cope with the effect of unexpected events on the balance sheet. Other factors that contribute to financial flexibility are the ability to redeploy assets and revise plans for capital spending, strong banking relationships and access to debt and equity markets. Committed, multiyear bank lines provide additional strength. Factors that diminish financial flexibility include a large proportion of short-term debt in the capital structure, significant unfunded pension obligations, contingent obligations and unfunded other post employment benefits (OPEB) other than pensions. Each of these can cause substantial drains on cash flow, which can severely reduce or even eliminate financial flexibility (e.g., the numerous asbestos bankruptcies).

Appendix: Guide to Credit Metrics

Fitch uses a variety of quantitative measures of cash flow, earnings, leverage and coverage to assess credit risk. The following sections summarize the key credit metrics used by Fitch to analyze credit default risk and compare them to measures based on operating earnings before interest, taxes, depreciation and amortization (EBITDA). EBITDA is still an important measure of unlevered earnings capacity and the most commonly used measure for going-concern valuations. As such, EBITDA plays a key role in Fitch’s recovery analysis for defaulted securities (see the criteria report, “Recovery Ratings: Exposing the Components of Credit Risk,” dated July 26, 2005). However, given the limitations of EBITDA as a pure measure of cash flow, Fitch utilizes a number of other measures for the purpose of assessing debt-servicing ability. These include funds flow from operations (FFO), cash flow...
from operations (CFO) and free cash flow (FCF),
together with leverage and coverage ratios based on
those measures, which are more relevant to debt-
servicing ability and, therefore, to default risk than
EBITDA-based ratios.

The following definitions are only an introduction to the
cash flow measures and credit metrics used by Fitch in
our analysis. Detailed definitions and sample
calculations are provided in the criteria report, “Cash
Flow Measures in Corporate Analysis,” dated Oct. 12,
2005. Specific industries, such as media and
telecommunications, may have industry-accepted
definitions and practices that differ from the terms
described below.

■ Cash Flow Measures

Funds Flow from Operations

Post-Interest and Tax, Pre-Working Capital
FFO is the fundamental measure of the firm’s cash
flow after meeting operating expenses, including
taxes and interest. FFO is measured after cash
payments for taxes, interest and preferred dividends
but before inflows or outflows related to working
capital. Fitch’s computation also subtracts or adds
back an amount to exclude noncore or nonoperational
cash in- or outflow. FFO offers one measure of an
issuer’s operational cash-generating ability before
reinvestment and before the volatility of working
capital. When used in interest coverage ratios,
interest paid is added back to the numerator.

Cash Flow from Operations

Post-Interest, Tax and Working Capital
CFO represents the cash flow available from core
operations after all payments identified by the issuer
for ongoing operational requirements, interest,
preference dividends and tax. CFO is also measured
before reinvestment in the business through capital
expenditure, before receipts from asset disposals,
before any acquisitions or business divestment and
before the servicing of equity with dividends or the
buyback or issuance of equity.

Free Cash Flow

Post-Interest, Tax, Working Capital, Capital
Expenditures and Dividends
FCF is the third and final key cash flow measure in
the chain. It measures an issuer’s cash from
operations, after capital expenditure, nonrecurring or
nonoperational expenditure and dividends. It also
measures the cash flow generated before account is
taken of business acquisitions, business divestments
and any decision to issue or buy back equity, or make
a special dividend, by the issuer.

Operating EBITDA and EBITDAR
Operating EBITDA is a widely used measure of an
issuer’s unleveraged, untaxed cash-generating
capacity from operating activities. Fitch excludes
extraordinary items, such as asset writedowns and
restructurings, in calculating operating EBITDA
unless an issuer has recurring one-time charges,
which indicate the items are not unusual in nature.
Fitch also excludes stock-option expensing from
operating EBITDA calculations.

The use of operating EBITDA plus gross rental
expense (EBITDAR, including operating lease
payments) improves comparability across industries
e.g., retail and manufacturing) that exhibit different
average levels of lease financing and within
industries (e.g., airlines) where some companies use
lease financing more than others.

<table>
<thead>
<tr>
<th>Definitions of Cash Flow Measures</th>
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<tbody>
<tr>
<td>Revenues</td>
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<tr>
<td>— Operating Expenditure</td>
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<tr>
<td>+ Depreciation and Amortization</td>
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<tr>
<td>+ Long-Term Rentals</td>
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<tr>
<td>= Operating EBITDA</td>
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<tr>
<td>— Cash Interest Paid, Net of Interest Received</td>
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<tr>
<td>— Cash Tax Paid</td>
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<tr>
<td>+ Associate Dividends</td>
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<tr>
<td>— Long-Term Rentals</td>
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<tr>
<td>+/- Other Changes Before FFO</td>
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<tr>
<td>= Funds Flow from Operations (FFO)</td>
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<tr>
<td>+/- Working Capital</td>
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<tr>
<td>= Cash Flow from Operations (CFO)</td>
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<tr>
<td>+/- Nonoperational Cash Flow</td>
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<tr>
<td>— Capital Expenditure</td>
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<tr>
<td>— Dividends Paid</td>
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<tr>
<td>= Free Cash Flow (FCF)</td>
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<tr>
<td>+ Receipts from Asset Disposals</td>
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<tr>
<td>— Business Acquisitions</td>
</tr>
<tr>
<td>+ Business Divestments</td>
</tr>
<tr>
<td>+/- Exceptional and Other Cash Flow Items</td>
</tr>
<tr>
<td>= Net Cash In/Outflow</td>
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<tr>
<td>+/- Equity Issuance/(Buyback)</td>
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<tr>
<td>+/- Foreign Exchange Movement</td>
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<tr>
<td>+/- Other Items Affecting Cash Flow</td>
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<tr>
<td>= Change in Net Debt</td>
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<tr>
<td>Opening Net Debt</td>
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<tr>
<td>+/- Change in Net Debt</td>
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<tr>
<td>Closing Net Debt</td>
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</table>
**Coverage Ratios**

**Debt and Net Debt**

Debt represents total debt or gross debt, while net debt is total debt minus cash and equivalents on the balance sheet. Recognizing the cultural differences in the approach of analysts and investors worldwide, Fitch evaluates all debt measures on both a gross and net debt basis. As previously discussed, distinctions are also made between total interest and net interest expense. The following definitions include only gross interest and gross debt to illustrate the concepts. For a detailed explanation of net debt and net interest calculations, see the criteria report, “Cash Flow Measures in Corporate Analysis,” dated Oct. 12, 2005.

**FFO Interest Coverage**

FFO plus Gross Interest Paid plus Preferred Dividends divided by Gross Interest Paid plus Preferred Dividends

This is a central measure of the financial flexibility of an entity. This measure compares the operational cash-generating ability of an issuer (after tax) to its financing costs. Many factors influence coverage, including the relative levels of interest rates in different jurisdictions, the mix of fixed-rate versus floating-rate funding, the use of zero-coupon or payment-in-kind (PIK) debt and so on. For this reason, the coverage ratios should be considered alongside the appropriate leverage ratios.

**FFO Fixed-Charge Coverage**

FFO plus Gross Interest plus Preferred Dividends plus Rental Expenditure divided by Gross Interest plus Preferred Dividends plus Rental Expenditure

The above measure of financial flexibility is of particular relevance for entities that have material levels of lease financing. It is important to note that this ratio inherently produces a more conservative result than an interest cover calculation (i.e., coverage ratios on debt-funded and lease-funded capital structure are not directly comparable), as the entirety of the rental expenditure (i.e., the equivalent of interest and principal amortization) is included in both the numerator and denominator.

**FCF Debt-Service Coverage**

FCF plus Gross Interest plus Preferred Dividends divided by Gross Interest plus Preferred Dividends plus Prior-Year’s Debt Maturities due in one year or less

This is a measure of the ability of an issuer to meet debt service obligations, both interest and principal, from organic cash generation, after capital expenditure and assuming the servicing of equity capital. This indicates the entity’s reliance upon either refinancing in the debt or equity markets or upon conservation of cash achieved through reducing common dividends or capital expenditure or by other means.

**Leverage Measures**

**FFO Adjusted Leverage**

Gross Debt plus Lease Adjustment minus Equity Credit for Hybrid Instruments plus Preferred Stock divided by FFO plus Gross Interest Paid plus Preferred Dividends plus Rental Expense

This ratio is a measure of the debt burden of an entity relative to its cash-generating ability. This measure uses a lease-adjusted debt equivalent and takes account of equity credit deducted from hybrid debt securities that may display equitylike features. Fitch capitalizes operating leases as the net present value of future obligations where appropriate and when sufficient information is available. Otherwise, leases are capitalized as a multiple of rents, with the multiple depending on the industry.

**Total Adjusted Debt/Operating EBITDAR**

Total Balance Sheet Debt Adjusted for Equity Credit and Off-Balance-Sheet Debt divided by Operating EBITDAR

**Total Debt with Equity Credit/Operating EBITDA**

Total Balance Sheet Debt with Equity Credit for Hybrid Securities divided by Operating EBITDA

These leverage measures help gauge financial flexibility and solvency. They are conceptually...
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similar to the commonly used debt/EBITDA measures with adjustments for equity credit and lease financing.

**Pension-Adjusted Leverage**

Fitch believes the general increase in unfunded pension liabilities should be addressed in financial analysis. In European ratings, this is done by adding pension fund deficits to financial indebtedness as a supplementary tool in our quantitative financial analysis. The criteria reports, “European Pensions—Implications for Contingent Funding of Pension Schemes on Corporate Credit Ratings,” dated Feb. 22, 2006, and “The European Pensions Debate,” dated March 26, 2003, discuss the topic in depth. In the United States, the shortcomings of current accounting treatment for pension obligations and the fact that pension accounting will be revised in the near term make an adjusted-debt figure less useful. As a result, Fitch focuses on cash claims in the near term, represented by required contributions, and assesses these obligations in the context of the issuer’s operating cash flow. Fitch also recognizes the long-term, and volatile, nature of the obligations represented by an underfunded position. The ability of the issuer to meet these obligations is analyzed, but the reported GAAP deficit is not included in the U.S. ratio analysis since it is an inadequate measure of the potential cash funding need.

**Total Debt/Total Capitalization**

As with gearing, this commonly used measure shows the portion of debt and equity in the issuer’s funding. The inherent limitation of this ratio is that book equity does not give a true picture of the cash flow generating ability of the asset base. However, many companies, especially those with fluctuating cash flows, use this ratio to communicate the composition of their capital structure to third parties.

**Profitability Ratios**

**Operating Income/Revenues**

**Operating EBITDA/Revenues**

Operating or profitability margins provide a useful measure of an issuer’s profitability from one period to the next, stripping away gains due entirely to revenue growth. These ratios are also quite helpful in assessing relative profitability of companies within the same industry facing similar competitive pressures. However, a comparison of operating margins across industries as a measure of relative creditworthiness is not relevant due to inherent differences in cost structure and risk premiums.