EMERGING
Credit Rating Ltd
an independent house of risk assessment

CORPORATE BOND RATING

INTRODUCTION

For ratings of corporate bonds, the analytical framework consists of the following core areas:

- Business Risk Analysis
- Financial Risk Analysis
- Management and Other Qualitative Factors
- Issue Structure and Terms

Business Risk Analysis addresses industry characteristics, competitive position and operations analysis and Financial Risk Analysis are segmented into three sub-sectors – profitability, cash flow/debt service capacity, capitalization/financial policies and financial flexibility.

BUSINESS RISK ANALYSIS

The industry assessment aspect of ECRL's business risk analysis considers the operating environment of the bond issuing company, its industry structure, the relative market share of industry participants and trends in those shares, industry growth rates, the competitive environment as well as the regulatory environment.

Assessment of the current and long-term industry fundamentals of the industry or key industry sectors in which the ratee operates include consideration of pricing power, product or service substitution in addition to barriers to entry and exit. Industries also exhibit distinct attributes over their lifecycle .ECRL also considers the predictability of the regulatory environment and the extent to which regulation influences the competitive environment of the ratee

A ratee which belongs to an industry or industries with less favorable industry characteristics will require more conservative financial profiles/policies to achieve the same rating level as firms operating in industries with more favorable industry characteristics. An industry with declining growth rates creates uncertainty about the reliability of earnings and cashflow.

The competitive position aspect of ECRL's analysis covers the bond issuing company's business model, it looks at an organization's strengths and weaknesses relative to its peers. Size can be an advantage if it translates into economies of scale, purchasing power, or pricing advantages. Geographic diversity is usually viewed positively in that it may promote a balance between slower and higher growth markets

Net operating margin is the universal measure of performance on which firms in the same industry can be compared. It relates profits before interest expense and taxes to sales revenue.

1. Industry/Operating Environment of the Bond Issuing Firm

Key sub-factors

- Industry structure and its stability; number of players and relative size; barriers to entry and potential for new entrants
- Regulation (ownership restrictions, rate regulation, number portability and liberalization) to the extent it is supportive of return on investment

 Impact of newer technologies; prospects for substitutes
▪ Emerging new competition
▪ Market growth prospects for specific segments;

2. Competitive Position of Bond Issuing Firm

Key sub-factors
▪ Market share of /relative positioning within any given segment
▪ Revenue composition and dispersion
▪ Fixed line services (revenue trends, capex)
▪ Subscriber service penetration (basic and premium)
▪ Market share (size of customer base within any given segment), diversification between customer sets and growth trends for each
▪ Subscriber churn
▪ Any available measures of depth of a customer relationship (for e.g., number of different services used by a customer)
▪ Character of customer bases and target customers
▪ New product offerings (including ability to bundle multiple services)
▪ Brand equity (quality of service and network coverage) in relation to market position
▪ Distribution capabilities
▪ Rate structures/pricing vis-à-vis competitors
▪ Character of foreign investment
▪ Strategic alliances and appetite for mergers and acquisitions

Operations Analysis

This aspect of ECRL's analysis looks at the bond issuing company's operational efficiency. The rating factors that are covered here will differ according to the industry, but the objective of the analysis is to assess the ratee's operational efficiency and effectiveness, and corresponding implications for cost efficiency, profitability and relative competitive position.
Key sub-factors

▪ Customer service processes, customer focus and commitment to customer service
▪ Cost structure (composition, fixed cost trends, behavior of costs under flat revenue scenarios)
▪ Operating margins vis-à-vis competitors
▪ Capital expenditure spending (including strategic investments in emerging technologies)
▪ Productivity measures vis-à-vis competitors
▪ Execution and integration risks in relation to acquisitions and/or new service offerings

FINANCIAL RISK ANALYSIS
ECRL considers the ratee's operational profitability, typically over a five-year period to assess the volatility of the bond issuing company's operating margins and its record of earnings generation.

- Return measures which relate profits to assets, permanent capital or equity provide an indication of a ratee's ability to generate sufficient return to enable continuous access to equity and debt funding.

- Return on assets is computed both before and after taxes and measures the productivity of all assets.
- Return on permanent capital is a slightly narrower measure which relates profits to the "permanent" funding providing by debt and equity capital, principally excluding trade financing and other current liabilities.
- Return on equity is the narrowest of the return computations and the outcome of the calculation is influenced by the capital structure of the ratee.
- The dividend payout ratio considers the portion of earnings paid out as dividends on common stock. A high dividend payout ratio usually translates into reduced ability to internally fund its working capital and capital investment requirements.
- The retained earnings ratio indicates the extent to which profits reinvested in the business (i.e. retained earnings) have contributed to the funding of the bond rating company's assets since inception.
- The interest coverage ratio measures the number of times operating profit before interest and taxes covers gross interest expense. By gross interest expense we are referring to interest before subtracting interest income and capitalized interest.

Key sub-factors

- Business line segment revenues and pre-tax profitability, correlation between segments
- Geographic contribution of revenue and pre-tax profitability
- Financial policies (leverage, target rate of return, dividends, and share buy backs)
- Free cash flow capability
- Liquidity
- Financial flexibility

ECRL's analysis of financial metrics considers both historical and projected financial ratios. Trends over a 3 to 5-year period are analyzed and compared to the industry medians.

The financial analysis provides insight into the bond issuing company's historical operating performance, identifies unusual trends or items, and provides a meaningful context to analyse its projections. Weaker companies are measured by its financial profile than any other single rating factor.

I. Profitability and Earnings Measures/Ratios

1) Earnings before interest, taxes, depreciation, and amortization (EBITDA) excludes items of a non recurring nature such as gains on asset sales, unusual losses, losses on asset sales, and charges due to asset write-downs, and restructuring (arising from M&A and divestitures) but includes interest income and equity earnings. EBITDA is also referred to as earnings from continuing operations before interest, taxes, depreciation and amortization.

2) EBIT equals EBITDA minus depreciation and amortization.

3) EBITA is EBITDA less depreciation.

4) Return on capital is EBIT/Average of beginning of year and end of year capital of the bond issuing company, including short-term debt, current maturities, long-term debt, and equity.

II Cash Flow and Coverage Ratios

- EBITDA/gross interest coverage (x) – measures an issuer's ability to meet its cash interest payments from core business operating cash flows.
- EBIT /gross interest coverage (x)
- Funds from operations (FFO) + Interest
- Expense/gross interest (x)
- FFO/total debt (%)
- Free cash flow/gross debt (%) – indicates ability to repay debt after all non-discretionary commitments, including capital expenditure
- Retained FFO/gross debt (%)

1. Gross interest is defined as interest charged to the profit and loss account plus capitalized interest.
2. FFO is defined as cash flow from operations before working capital changes. Total debt equals long-term borrowed funds plus current maturities, commercial paper, and other short-term borrowings.
3. Free cashflows from operations – capex – dividends (preferred + ordinary)
4. Gross debt is interest bearing debt whereas net debt is after gross debt minus cash and bank balances including fixed deposits held with financial institutions.
5) Retained funds from operations equal FFO minus dividends (preferred + ordinary). Analysis of the strength and predictability or stability of a company's cash flows is fundamental to ECRL's assessment of a bond issuer's ability to repay debt.
6)Retained FFO/gross debt captures the effect of changes in capital policy regarding the use of free cash flow or dividends.
7)The FFO interest coverage measures of the incumbent's position them favorably vis-à-vis highly rated companies in developed markets.

III Leverage Measures

- Total debt/equity (x)
- Net debt/equity (x)
- Total debt/EBITDA (x)
- Net debt/EBITDA (x)
- Total debt/total capital (%)
- Short term debt/total capital (%)
- Long term debt/total capital (%)

1. Equity refers to shareholders' equity (including referred stock) plus minority interest.
2. Total capital equals long-term debt plus current maturities, commercial paper, and other short term borrowings + shareholders' equity (including preferred stock) plus minority interest.
3. Short term debt refers to borrowed funds with remaining term to maturity of ≤ 1 year and includes borrowed funds with no fixed term of maturity classified as 'current liabilities'
4. Long term debt refers to borrowed funds (interest bearing or not) hat have a remaining term to maturity of > I year In addition to cash flow leverage measures, ECRL also looks at more traditional measures of leverage such as total debt to equity and total debt to total capita of the bond issuing company.

IV Short Term Debt Servicing Ability/Liquidity

- Cash flow from operations (CFO) to short term debt (x)
- CFO to current liabilities (x)
- Short term debt to total debt (%)
- Cash and marketable securities to current liabilities (%)

Note: CFO is funds from operations after incorporating the effects of working capital changes.

Cash Flow Generating Ability/Debt Servicing Capacity

- Cash flow from operations (CFO) is typically defined as pretax profit adjusted for items not involving movement of funds, principally depreciation, amortization and other non-cash items, excluding interest and after movements in working capital.
- Non-operating cash flows are normally derived from sales of long term assets, which may include property or equipment, parts of or entire business units, or investments in affiliates.
- Annual cash inflows (sources) from operating and non-operating activities are compared with annual cash outflows (uses), both on historic and projected bases. This is called the Cash Flow Match
- Cash outflows considered include capital expenditures, long-term investments, dividends on common and preferred stocks, interest expense, and working capital changes.
- The CFO Interest Coverage ratio is a variation on the Operating Profit Interest Coverage ratio considered under Profitability. For CFO coverage, we are essentially assuming that amounts attributable to depreciation and amortization are available to service interest payments. In principal, it is typically available for this purpose, but at least with respect to depreciation we normally assume that amounts at least equal to depreciation will have to be reinvested in property, plant, and equipment to enable the firm to remain competitive.
- The CFO Debt Coverage ratio compares funds from operation to the overall level of debt outstanding. In theory, the ratio indicates how long it would take for one year's CFO (either that of the past year, the most recent 12 months, or projected years) to repay all short and long term debts. As with CFO, the debt level chosen for use can be either the most recent balance sheet date, pro forma for a new issue, or projected.
- Capex/Depreciation is a way to quickly judge whether a firm is replacing its aging property, plant and equipment, with new facilities. A ratio of less than 100% would certainly be a red flag, but it is best to compare this ratio against an industry peer group to develop a proper idea about required spending levels.
- Ratios well in excess of a peer group also need to be investigated, as one explanation could be that the firm is using longer depreciation lives than its peers. Such a practice would produce artificially inflated profits and might necessitate an asset write down at some point.

Capital Structure/Financial Flexibility

A firm's Capitalization and Financial Policies are often indicative of its risk orientation. The extent to which a bond issuing firm decides to finance its operations with debt rather than equity will influence the analyst's rating recommendation. Thus, analysts should seek to understand the basis of a firm's financial policies and its capital structure before drawing conclusions in this section of the credit analysis.

- standard leverage measure is Total Debt/Equity, which considers all on balance sheet debt obligations, including such short-term liabilities as bank overdrafts, relative to equity. Equity comprises shareholders' funds and minority interest.
- The Total Debt/Equity calculation can be segmented into Long-Term Debt/Equity and Short-Term Debt/Equity components. While short term debt does expose a company to refinancing risk, its use within reasonable limits is justified by cost and asset-matching considerations.
- Total Liabilities/Total Capital, which is wider than Total Debt/Equity in that it considers trade credit and other liabilities, in addition to debt, as funding sources. Equity values reported on corporate balance sheet are not always comparable.
- Asset revaluations relating to acquisitions or other transactions can increase a firm's capital to nearly true market values, while another firm's reported capital can reflect much lower asset valuations.
- goodwill can sometimes represent a sizable portion of equity. While it is worthwhile making such an observation, the acid test of whether goodwill has value is the bond issuing firm's ability to earn a return on that investment.
- ECRL considers a firm's debt maturity profiles in its analysis of the ratee's liquidity position. Bullet maturities indicate that the debt may have to be refinanced at maturity, with new debt or other forms of external capital.
- Financial Flexibility principally incorporates the available liquidity in the form of unrestricted cash reserves and liquid investments as well as access to alternate financial sources. Potential constraints on financial flexibility, such as legal claims or potential environmental liabilities, would also be considered in this section.
- Cash Ratio (cash and equivalents/current liabilities)
- the Quick Assets Ratio (cash and equivalents plus trade receivables/current liabilities)
- the Current Ratio (current assets/current liabilities).
- On the other hand, large amounts of cash and other liquid securities do not usually make economic sense for a firm to permanently carry, since returns on them are low. Seasonal flows may temporarily boost cash balances, but analysts should not be misled and assume that they are a permanent fixture.
- Working Capital/Total Assets is a potentially useful indicator if comparisons can be drawn against a sufficient number of peer companies. Also, if the company being rated has shown a declining trend over a period of time, then a red flag should be raised.
- Working capital cycle.
- The availability for potential sale of discrete assets whose marketability and value can be reasonably established may be considered as additional liquidity support.

Trade financing lines do not really provide liquidity against contingencies because their use requires presentation of documents related to a specific transaction.

Potential legal liabilities or environmental claims can cause a cloud of uncertainty to form over a bond-issuing company, raising its cost of capital or even precluding its ability to raise capital at economic rates. On legal matters of potential significance, it is appropriate to have ECRL's external legal counsel provide their views on likely outcomes of litigation.

MANAGEMENT AND OTHER QUALITATIVE FACTORS

ECRL's assessment of management quality encompasses the track record of management, in particular its performance through different phases of the economic cycle and relative to industry peers as well as execution of its long-term and short-term strategic plans. Also considered are management's growth ambitions, its appetite for risk

The ratee's financial strategy and policies as they provide a guide as its prospective financial risk profile. Key issues addressed are leverage, management's willingness to support the company's share price through share repurchases and its commitment to maintaining a sound credit profile.

Key sub-factors

- Complexity of the corporate structure
- Organization structure, management breadth and experience
- Management flexibility in responding to competition, track record of management
- Management continuity
- Strategy and execution (including success in growing business beyond traditional voice services and plans to address threats from alternate technology and new operators)
- Financial risk tolerance/policies
- Corporate governance
- Ownership (degree of support to be expected and resources available to provide such support)

Corporate governance represents an important analytic element of management quality.

The management evaluation also needs to be conducted with due consideration given to the actual and potential influence of significant shareholders.

BOND ISSUE STRUCTURE AND TERMS

- ECRL undertakes an evaluation of issue's principal terms and conditions. Analysis in this area will largely focus on the proposed utilization of the proceeds from debt to be issued and implications of the proposed issue on the bond issuing company's debt maturity profile, debt servicing burden and covenant headroom.
- Short-term liquidity and rollover risk are important considerations for commercial paper ratings, particularly if there is heavy reliance on short-term debt to fund longer term assets.
- The structure of the issue and the affirmative and negative covenants of the indenture under which the rated instrument is issued may influence the ratee's probability of default, and post-default recovery.
- Structure includes such characteristics as priority for repayment in a liquidation, security, sinking funds, call features, refunding provisions, reserve funds, payment terms and maturity.
- Security can be in the form of specific collateral or a lien on all assets. To determine whether the senior secured debt rating should be higher than that of the bond issuing agency's unsecured debt rating, ECRL examines the adequacy of the collateral securing the debt, liquidity of the collateral and the likely time frame for the disposal of the collateral and debt recovery.

- When rating hybrid securities which possess both characteristic of equity and debt, ECRL will typically notch down from the ratee's issuer rating with regard to the priority of hybrid security holders' claims relative to senior obligations, the likelihood of deferral of interest or dividend payments and the extent to which the issuer possesses discretion to suspend dividend or interest payments.
- ECRL is also sensitive to the structural subordination of parent company debt to debt at its operating companies and the presence of mitigating features intended to limit the impact of structural subordination such as subsidiary debt limitation and upstream guarantees.
- ECRL also recognizes that tax authorities and possibly other government bodies may rank higher in the ratee's hierarchy of the creditors.
- Reserve Funds or Special Accounts for Assignments of Revenue may in certain instances add confidence that cash will be available for debt service on a timely basis.

The covenants the rating analyst would prefer to see (even if the issue being rated is expected to be bank guaranteed) are the following:

Limits on additional debt – The covenant can be phrased in a couple of different ways, either as an absolute amount of debt than can be issued, usually with some caveats, or as an interest coverage test. Such a test might say, for example, that no additional debt may be issued unless earnings before interest and taxes for the past 12 months are at least two times pro forma interest expense.

Limits on distributions – Such a covenant places some controls on dividends, advances or loans upstream or downstream and sales or dispositions of subsidiaries and uses of proceeds thereon. Proceeds from "significant" asset sales are usually required to be used to repay debt or reinvested in similar assets within a reasonably short time frame.

Negative pledge – If a holding company is the issuer of the debt, but the earning power and cash flow generation capability is at the subsidiary level, a guarantee of the debt by the subsidiary would make the holding company debt equal in terms of priority to the subsidiary's unsecured debt. Holding companies guaranteeing subsidiary debts can also make sense under certain conditions.

Events of default – This section spells out the conditions under which a debt holder has the right to accelerate repayment. The most critical item is the cross default provision, which would state that a default on any obligation represents a default on all obligations. This stops a borrower from deciding it will pay some debts and not others. The inclusion of covenants, even in bank guaranteed issues, is a statement by management that it is willing to operate within certain boundaries, and as such should be viewed positively.

Of course, a firm's agreement to abide by indenture covenants does not necessarily mean that it will be able to do so. Covenants which are so tight that only a small variation from plan would cause an event of default are viewed with concern.