



## Rating Methodology - Industrial Corporates

Credit ratings inculcate transparency and invite investor confidence as they are a third party opinion on the credibility and financial strength of institutions signifying ability to service debt/Sukuk in a timely manner. Ratings facilitate borrower access to a large and diverse funding pool to provide greater leeway to match the nature of assets being financed. From the lenders point of view, borrower credit ratings can be an additional tool of risk management of their asset portfolios as well as serve as pricing benchmark.

Islamic International Rating Agency (IIRA) conducts both local and foreign currency credit ratings. In the former, sovereign risks are ignored and respective governments are usually considered risk free i.e. AAA rated. In order to serve the varying needs of the industrial sector, IIRA issues both entity and debt/Sukuk instrument ratings. Entity ratings reflect the capacity of the company to re-pay its senior unsecured creditors while debt/Sukuk instrument ratings also take into account the structure of that particular instrument and its priority in the capital structure which strengthens or weakens its recovery prospects in comparison with the unsecured creditors.

### **THE RATING SCALE & HORIZON**

Ratings are not a guarantee against loss, rather are opinions on the timely payment of obligations and the rating bands denote the relative risk associated with the ratings. Along the rating spectrum, all ratings of BBB- and above are investment grade. IIRA evaluates credit risk over the medium to long term horizon incorporating an assessment of future events to the extent they are known or can be anticipated, hence, the ratings are prospective in nature. The present and the projected financial health and market position of the institution are analyzed in view of the management's long-term vision and strategy, available resources and industry prospects. Moreover, IIRA also assigns short-term ratings with the time horizon of less than one year.

Ratings should be stable or at least predictable over the rating horizon unless the company demonstrates unexpected performance – either positive or negative. Temporary fluctuations in performance do not warrant a rating action if IIRA does not expect a change in long-term performance.

The lowest rating 'D' stands for default and is the only rating which is based on the historical event when an interest and /or principal payment is due and is not paid. The condition of default is removed on clearance of the dues by any means including rescheduling or write-off by the lenders.

Rating outlooks highlight the potential direction of ratings over the intermediate to long term. An outlook is not necessarily a precursor of a rating change. Rather, the rating outlooks "Stable," "Positive" and "Negative" are used to qualify the potential direction of the rating, given changes in economic and/or business conditions. Stable outlook indicates that the company is performing as expected for the given rating, and no events are currently foreseen that would precipitate a rating change. Positive outlook indicates that the company is performing above expectations set for the given rating while Negative outlook indicates the contrary view. Generally, we expect outlooks to resolve within a period of one year. It should also be noted that these indicators are concerned only with the perceived change

in credit risk involved, if any and should not be confused with expectations of the company's operational performance as a whole.

IIRA places entities and issues on 'Rating Watch' when it deems that there are conditions present that necessitate re-evaluation of the assigned rating(s). A 'Rating Watch' announcement means that the status of the assigned rating(s) is uncertain and an event or deviation from an expected trend has occurred or is expected and additional information is necessary to take any rating action. IIRA also designates direction 'Positive', 'Negative' or 'Developing', to ratings placed under 'Rating Watch'. This shows IIRA's opinion regarding the likely direction of a rating placed under the 'Rating Watch' status; this however does not bind IIRA in any way to make a similar change once ratings are taken out of the 'Rating Watch' status. Developments in factors other than those that necessitated the 'Rating Watch' may result in a rating change, while the rating(s) continues to be under 'Rating Watch'.

We expect the ratings to be more stable in the upper rating bands due to the stronger protection factors present. The performance criteria become stricter as we move up the rating spectrum and the risk profile has to be maintained at significantly lower levels to remain eligible for that rating band.

## **RATING METHODOLOGY**

A host of major factors and sub-factors are examined to reach the overall rating to incorporate all factors in accordance with their importance, weakness in one area may be offset by strengths in another area or vice versa may also hold true. IIRA analyzes both qualitative and quantitative factors to determine the credit risk of a company. Qualitative factors include the nature of the industry that the company is operating in, the entry and exit barriers, the competitive profile of the industry and the company's position in it, size, strength and adequacy of operational systems, quality of management and regulatory framework governing the industry.

Quantitative factors include an appraisal of the historic and projected financials, risk entailed by the capital structure, level of profitability, capacity utilization levels, capital expenditure requirements, adequacy of cashflows to meet operational requirements and debt servicing obligations etc. Financial statements may also be re-casted to assess the company's performance over a timeline. The projected financials are studied for their reflection of the current and expected economic realities and are also sensitized on different risk scenarios to judge the company's ability to bear operational and financial risk. While review of history is important to judge the company's track record of performance, it is the potential for future performance which primarily drives the ratings.

## **Industry Risk Assessment**

Rating analysis begins with an assessment of the environment in which the company operates. IIRA analyzes the dynamics of the business to determine the degree of operating risk. The analysis focuses on the strength of industry prospects, as well as competitive factors affecting that industry. The many factors assessed include industry prospects for growth, stability and the pattern of business cycles. It is critical to determine vulnerability to technological change, stability of labor and/or regulatory interference. Industries that have long lead times or that require operating fixed asset of a specialized

technology attract relatively higher risk. Competitive forces are critically analyzed. Knowledge of investment plans, in terms of capital expenditure, of the major players in any industry is important to assess competitive prospects. While any particular aspect can be the overriding rating factor, the industry risk assessment sets the platform for assigning the rating of a particular entity. The industry risk assessment also sets the stage for analyzing more specific company risk factors and establishing the priority of these factors in the overall evaluation. For example, if an industry is determined to be highly competitive, careful assessment of its market position is stressed. If the industry has large capital requirements, sponsors' financial strength along with adequacy of financial package for the project and inspection of projected operational cash flow adequacy assumes high importance.

The regulatory framework governing the industry may place the company at a significant advantage or disadvantage vis-à-vis its competition through tax incidence, price regulations, industry protection, environmental regulations etc. The degree of regulatory support the industry receives is also a function of its contribution to economic growth which will determine its importance to the economy and to policy makers. For instance, oil and gas industry is generally supported by the local governments worldwide due to its strategic nature. Similarly energy and infrastructure development projects are generally of high economic importance. The performance of different industries is affected by trend of various economic variables including GDP, interest and exchange rates and the nature of the industry (cyclical, commodity, value-added), and must be given due consideration

The other industry factors which are considered include level and patterns of demand growth and elasticity of demand, level of profitability and ability to maintain margins, capital intensive nature and flexibility in the timing of capital outlay and degree of cyclicity. Vulnerability to technological change may also be a hazard in certain industries such as information technology, telecom or consumer durables. For industries / companies dependent upon foreign markets for input supply or for sales, the timely access and fluctuations in exchange rate pose major risks. The competitive nature of industry is also critical including nature and size of competition versus the size of the market and the entry and exit barriers to competition.

### **Business Risk Assessment**

Assessing the industry risk is fundamental to evaluating a company's business risk. The industry risk rating broadly determines the median rating for companies in that industry. Industry risk along with operational risk of a specific company determines business risk of an entity. Business risk is often categorized into systematic risk and unsystematic risk. Systematic risk refers to the general level of risk associated with any business enterprise, the basic risk resulting from fluctuating economic, political and market conditions. Systematic risk is an inherent business risk that companies usually have little control over, other than their ability to anticipate and react to changing conditions.

Unsystematic risk, however, refers to the risks related to the specific business in which a company is engaged. A company can reduce its level of unsystematic risk through good management decisions regarding input and operational costs, product range and sales, investments and marketing.

The business risk of a company to a large extent dictates the extent of financial risk it can afford by affecting the level and predictability of cash flows that the companies operating in that industry are likely to generate. Higher and predictable cash flow streams will lower the business risk.

The company's product lines and its market share for each determine its ability to govern the market supply and, hence, output prices and may render it an advantage over other market players. Serving niche markets may also be an advantage or disadvantage depending upon the elasticity of demand for the limited target market. Generally, there are better margins and greater stability and control over output prices and hence, cashflows for companies positioned higher up on the value-chain. Vertical integrations also provide greater control of costs and prices.

The quality and concentration of trade debtors and the credit terms extended to them are also analyzed for the past track record of payment, diversification to mitigate exposure risk and the impact on the length of cash cycle of the company, a positive cash cycle indicates the market strength of the company and is accordingly recognized. Similarly, the supply and price risk of raw materials is assessed including the availability and nature of market of raw materials including foreign markets, supplier relationships and available substitutes.

The location and number of independent plant facilities reduces the vulnerability of the company to geographical risks which may pertain to demand, or availability of raw materials or labor problems. For instance, geographical dispersion is necessary for any hotel chain to mitigate regional downturns and provide certain stability to cashflows through economic and real estate cycles. Similarly, for the sugar industry factors such as easy availability of sugarcane and recovery rates are important considerations for location.

Product/service diversification in most contexts is looked at favorably as it mitigates business risk to the company. Diversification within the industry including variety in product lines and target markets is encouraged as it provides cushion to the revenue base in case demand declines for a particular product or a segment.

Larger well diversified companies generally have greater resilience due to their extensive resource base and stronger shields in terms of economies of scale, reserves, broader market access or customer base, large number of products, franchise value which may enable them to better withstand economic downturns. They generally have a greater number of peripheral assets as well to sell off or place as collateral to raise funds. It is seen that since lending institutions have larger exposure to these companies, they are more willing to extend support in difficult times and to reschedule and restructure their borrowings or even extend additional funds. Smaller companies in the growth stage generally lack the above strengths, a weak financial structure would add to their vulnerability in times of economic or business downturn.

## **Management & Organization**

The credibility of the management is judged by the convergence of the management strategy and established business goals and its performance against objectives. Management is assessed for its operational effectiveness and for its risk tolerance. The stability of the management team and the relevance of their credentials to their tasks are also important considerations. Organizational structure depicts the overall management philosophy and determines operational efficiency and success. Over-dependence on just a few individuals, absence of successor planning, heavy orientation towards family versus professional management, indistinct management structure, too much interference by the board in the day-to-day operations, absence of delegation etc. become rating constraints. The formulation of a vision by the top management and its communication to all levels is also a pre-requisite for organization building. Employee awareness of the overall goals and objectives of the company and the short-term and long-term strategy towards achievement of those goals is important for business growth.

## **FINANCIAL RISK ASSESSMENT**

### **Capital Structure & Access to Funds**

The financial policy of the management is assessed to determine the degree of flexibility in the capital structure of the company as compared to its business risk. Common shares provide the greatest cushion to creditors, as they do not entail any fixed obligations. Preference shares, depending upon their features, also have greater flexibility in payments than pure debt/Sukuk instruments as the dividend payments are made out of available profits, although they pose a greater strain on cashflows as compared to common equity.

While the definitions of equity and debt remain standardized, certain adjustments are at times necessary to evaluate the capital structure of the company on the basis of the structure and priority of the instrument. Preference shares may bear greater characteristics of debt if they are cumulative and carry a redeemable option which has high probability of being exercised. Debt/Sukuk instruments may also carry options for conversion into equity.

Any un-provided losses or provisions are also netted off including dead investments or lending with little likelihood of repayment. On the other hand, a company is given the benefit of hidden reserves, if any, in the form of high value assets not reflected on the books. Revaluation surpluses on fixed assets are generally treated as illiquid unless they are occurring from easily marketable assets.

Leverage translates into higher returns enhancing shareholders' value, however, at the same time, increases the risk level as fixed obligations increase. An analysis of the source of funding, tenor and the associated costs with respect to the assets being financed is conducted to assess the re-financing risk of the balance sheet. The level of unencumbered assets to total assets is also considered to determine room for additional leverage. A higher leverage would generally be considered risky and viewed with caution in rating analysis.

IIRA also examines the company's access to funds under stress. A company's experience with different financial instruments and debt and capital markets gives it several options in case funds from a particular source dry up for any reason.

Often access to borrowings at favorable terms for weak companies is also achieved through obtaining guarantees from the stronger group companies. On the opposite note, it is entirely possible that the other group companies are weaker and require support from the company being rated. The prospective burden is assessed in light of past instances and future potential including currently outstanding guarantees or commitments on behalf of weaker associated concerns and is accordingly reflected in the ratings.

### **Profitability & Cash flow Generation**

Strong profitability over time, coupled with judicious retention, is able to attract external capital as well as withstand weak business cycles. Historical trends and the current and expected market situations are examined to project future profitability to form a broad idea of stable, improved or deteriorating profitability position in the intermediate to the long-term.

Sales stabilize and gross margins improve generally as a company moves towards value-addition, develop a differentiated product or a market niche, operate at higher capacity utilization and develop economies of scale. For commodities, there is risk of both price and off take as may be observed in the sugar and cotton spinning sectors. Global supply and demand risk is also evaluated for companies with significant exports or imports.

The capital structure of the company will also affect the profitability through the burden of debt servicing costs. As the risk associated with the capital structure increases, lenders demand greater compensation for their exposure. A rough measure to evaluate the degree of benefit awarded by the level of leverage maintained by the company is ROAE / unleveraged ROAA (adjusted for financial expenses). If the ratio is above 1.0x, then the company is benefiting from leverage while the trend indicates improving or declining level of benefit.

The projected profitability levels are subject to various stress tests including reduced volumes, unfavourable change in input and output prices, unfavourable change in exchange rates if there is currency risk involved and increased burden of financial costs.

While profitability levels are considered, the quantum of free cashflows available for debt servicing is pivotal for meeting timely debt/Sukuk obligations, hence an important rating determinant. The current and projected level of debt and debt servicing requirements with respect to the cashflows generated annually are examined to determine the projected risk profile of the company.

The Funds flow From Operations (FFO) level reflects the capacity of the cash generated from operations to meet working capital, capital expenditure and debt servicing requirements. The sensitivity of revenues from core operations to business cycles is evaluated to determine the precision of the cash flow forecasts.

Cashflow From Operations (CFFO) incorporates the impact of stress created by working capital changes. Industries which have historically utilized funds for working capital, are better analyzed for debt coverage from CFFO, rather than FFO. IIRA utilizes the conservative tactic of utilizing changeable benchmarks from industry to industry depending on which cash flow indicators are best suited for each different type of business. In the same vein, business that require heavy capital expenditure on a routine basis, are better analyzed using Free Cash Flow (FCF) indicators, which reflects the company's capability to service both regular and strategic expenditures. Since the assumption is that of a going concern, IIRA evaluates the company's ability to internally generate funds to modernize / maintain its assets as well as to obtain external funds for expansions. A useful measure to determine adequate level of capital expenditure for modernization is the capital expenditure to depreciation ratio. The dividend paying capacity is evaluated at the level of Discretionary Cash Flow (DCF).

The crux of the cash flow analysis is to determine the ability of the company to produce sufficient funds from operations to meet debt servicing requirements and incur capital expenditure. For higher-grade companies where long-term viability is more assured, there is greater emphasis on the level of cashflows from operations and its relation to the outstanding debt level which will determine the time period required to pay-off the entire debt. Focusing on debt servicing coverage from cash flow becomes more important as we go down the rating spectrum.

High cash flow coverage ratios may not necessarily constitute strength if they are arising from low level of capital expenditure or decline in debt levels which can indicate complacency on the part of the management and shall affect future growth.

A company with stable and predictable cashflows can undertake a comparatively aggressive capital structure without largely compromising creditworthiness. For example, cashflows of the oil and gas exploration industry are dependent upon the quantum of present proven reserves which will go into production; therefore, it continually invests significant capital in exploration activities to build up reserves. However, since a successful hit is not assured, cashflows tend to be volatile and indebtedness related benchmarks for any given rating band are more stringent than for other industries, which can more reliably and steadily service debt. Illustratively, the pharmaceutical industry exhibits comparatively stable demand patterns, and hence, stable cashflows, and can afford comparatively higher debt leverage for the same rating band.

For industries dependent upon seasonal agricultural crops for production, like the sugar and cotton spinning industry, debt leverage peaks during the production season with seasonal borrowing to finance inventories and then declines. For such industries, the average liquidity position is assessed through the cycle as well as the maximum stress on the financials during the peak production time. The marketable nature of the inventories is taken into consideration in rating assessments.

### **Rating Cyclical Industries**

A cyclical company is defined as one whose sales in volume and / or price, move closely with major macroeconomic indicators and / or aggregate business activity. Generally, these companies sell non-differentiated products, are price takers in a volatile market, and are capital intensive with high capital



spending cycles. Examples of cyclical companies in the manufacturing sector are sugar; cotton spinning, automobiles, paper and machinery while non-manufacturing include lodging / hospitality, recreation and airlines.

IIRA rates such industries through the cycle. The maximum downturn potential in the industry has to be analyzed after stressing forecasts and the company's ability to weather any downturn. Given that ratings are assigned through the cycle, these may appear depressed when the industry is going through a boom period, and optimistic in a trough. This philosophy essentially marks the trade – off between stability in long-term ratings vs. point in time accuracy.

Financial flexibility and liquidity are important considerations as cash can accumulate and be consumed very rapidly in cyclical industries. Generally, the companies in cyclical industries accumulate cash during the boom cycle to provide a buffer during the downturn. The strength of the cashflows from year to year is hard to determine due to volatility, especially if it is in both input and output prices and volumes, and large capital expenditures spread variably across the cycle. Relative cost position then becomes a competitive strength in the industry as in a downturn the lowest cost producer has the room to cut prices up to his breakeven level to maintain or increase market share which may result in unsustainable losses for the higher cost producers. For instance, for spinning companies the prices of yarn move in line with the international prices while the prices of raw cotton depend upon domestic production factors. Since increase in raw material prices cannot be passed on to the customer entirely this affects gross margins in which case only the low cost producers with high volumes can perform.

It is also important to understand the management discretion in incurring capital expenditure and the timing and level of such capital expenditure. Generally, increase in capacity comes near the peak of the cycle on an industry-wide basis. Also, the capacity increase tends to be large to generate economies of scale. Since it takes time for the new capacity to come online and generate full efficiency, it is hard to predict supply conditions which can result in price swings. Often the capacity increase may hit the trough of the cycle which can further exacerbate supply conditions. Such is also the case with lodging / hospitality industry since construction takes time; any additions in capacity including setting up of a new facility entails increased risk as economic conditions may not be so robust by the time it comes online.

Benchmarks for any given rating band are stressed for cyclical industries which carry high business risks. Hence, a conservative debt profile is viewed favourably, as cashflows become significantly stressed in times of low economic activity.

## **NOTCHING CRITERIA**

Entity ratings are notched up from the standalone ratings in case of significant explicit external support available to the entity. Notching relationships for debt/Sukuk instruments combine considerations of asset protection and ranking i.e. material advantage or disadvantage of a given instrument which may arise due to its positioning in the capital structure of the company, presence of security etc. Notching also takes into account the level and mechanism for cashflow entrapment for debt servicing, if any. This leads to differentiation in ratings of specific issues from entity ratings.

While timeliness is the primary issue for investment grade ratings, the potential for ultimate recovery also becomes important for lower grade ratings which have higher probability of default. Therefore, based on similar security ensuring ultimate recovery, the degree of advantage or disadvantage given to a below investment grade rating may be greater as compared to an investment grade rating.

### **External Support to Entity**

Entity ratings may be enhanced on the basis of the extent of support from sponsors / shareholders, associated companies, etc. IIRA takes into account how important the company is to the group, the relative financial health of the group and any explicit or implicit support to the company being rated. IIRA seeks to analyze the particular instances in which assistance was required by the company being rated and the degree of support provided by the sponsors. Evaluation of the financial strength of the group then becomes important to give any benefit in credit ratings including its franchise value, access to funds and diversification element.

Any institution holding an external guarantee will be rated equivalent to the guarantor if the guarantee is explicit and provides full coverage to obligations. However, in other cases where the guarantee is present but timeliness is not ensured, notching down from the guarantor is usually the practice. The ultimate sponsor / guarantor will be the government which is rated risk free or AAA where LCY rating is concerned. In the event that a company / obligation is supported by two entities carrying independent credit risks, then the support provided is generally superior as compared to the situation in which only the stronger entity was supporting the company being rated. This concept arises from the viewpoint that the probability of both the supporting entities defaulting at the same time is lower than the probability of either one defaulting. Limited benefit of joint support is given to associated / group companies or companies in the same sector to ensure independent risk drivers.

### **Notching Relationships of Debt/Sukuk Instruments**

Debt/Sukuk instruments may be notched up or down based on their recovery prospects particularly important here would be the existence or otherwise of a cashflow entrapment mechanism for debt servicing, vis-à-vis the unsecured creditors. Notching relationships on the basis of security alone, however, may not hold for AA band rated companies with high probability of timely payment, unless secured by some very strong collateral or dedicated future cash flows. Subordinated unsecured debt/Sukuk can be notched below the entity rating and the number of notches depends upon the degree of subordination. Notching up is done on the basis of security determined by the quality of security and degree of coverage provided to principal. Further notching up is also possible through establishing a strong structure which gives significant additional enhancement to the debt/Sukuk recovery prospects. This could be achieved through credit enhancement features such as creation of a reserve or sinking fund, dedicated liquidity support or strong external higher rated guarantors, in the last case, the debt/Sukuk issue rating will be rated equivalent to the guarantors rating if the guarantee is explicit and provides 100% coverage to the obligations.

### **Cash Flow Ratios**

- Funds Flow from Operations (FFO): profit before financial expenses and taxes + adjustment for impact of non-cash items – payment for financial expenses and taxes
- Cash Flow from Operations (CFFO): FFO +/- changes in working capital requirements
- Free Cash Flow (FCF): CFFO – impact of capital expenditure undertaken and disposal of fixed assets
- Discretionary Cash Flow (DCF): FCF – dividends paid during the period

### **Debt Coverage Ratios**

- FFO / Total Debt
- FFO / Long-term Debt
- Debt Servicing Coverage Ratio: (FFO + financial charges paid) / (Periodic principal repayment + financial charges paid)

### **Liquidity Ratios**

- Current Ratio: Current Assets / Current Liabilities
- Net Working Capital: Current Assets – Current Liabilities
- Days to Sell Inventory: Days of Raw Material Inventory Turnover + Days of WIP Inventory Turnover + Days of Finished Goods Inventory Turnover
- Collection Period: (Average Trade Debtors / Net Sales)\*365
- Payable Cycle: [Average Creditors / (Cost of Goods Manufactured – Depreciation & Amortization)]\*365
- Net Cash Cycle: Days to Sell Inventory + Collection Period - Payable Cycle

### **Profitability Ratios**

- Gross Margin: Gross Profit / Net Sales - Cash Margin: Gross Profit + Depreciation & Amortization / Net Sales
- Operating Profit Margin: Operating Profit / Net Sales
- Net Margin: Net Profit / Net Sales
- ROAA: Net Profit / Average Total Assets
- ROAE: Net Profit / Average Net Worth
- Effective Interest Rate: Financial Charges / Average Total Debt
- Effective Tax Rate: Taxation / Profit before Tax

### **Capitalization**

- Gearing: Borrowings / Net Worth
- Debt Leverage: Total Liabilities / Net Worth