



Rating Methodology – Corporate/Manufacturing Corporate

MEANING OF CREDIT RATING

CRISL defines credit rating is a measure of assessing relative risk of default and the severity of default associated particular securities issue, issuer and/or other financial assets. It is a symbolic indication of current opinion of the relative capability of timely servicing of the debts and obligations as per the terms of contract. It is an independent, impartial best judged professional OPINION on the ABILITY and WILLINGNESS of a borrower to discharge its debt when due, in case of a debt instrument and assessment of net worth, external liability and earning prospects in case of a corporate Entity.

Rating agencies are perceived as impartial, professional and best judged opinion giving agencies in the investment process to safeguard the interest of the general investors. Rating reflects neutral and influence free professional opinion on the assessment of credit risk associated with an instrument or a corporate. The rating services provide a guideline to the investors as to the degree of certainty of payment of principal and interest in case of debt instrument and the degree of acceptability of the net worth and earning prospects of an entity seeking public finance.

SCOPE AND LIMITATIONS OF CRISL RATINGS

CRISL ratings are in local currency and therefore, it does not take into consideration the sovereign risks and foreign currency risk of Bangladesh. CRISL being a domestic rating agency of Bangladesh considers the government of Bangladesh as the highest pay master and all government guaranteed securities are considered as AAA.

CRISL issues to types of rating for the manufacturing corporate namely Entity Rating and debt instruments. Entity rating reflects ability and willingness of an entity to discharge its debt obligation when due. It also reflects earning prospects and increase in share holder's value in the long run. The debt instrument rating reflects the inherent features and structures and extent of credit enhancement compared to unsecured creditors. It also reflects all associated risks that may affect the instrument over a period of its life.

TIME HORIZON

CRISL ratings are forward looking and sustainable throughout normal business cycle. CRISL issues normally two types of ratings – short term and long term. Short term rating carries the validity of six months while the long term rating is valid for one year. The change in economic scenario, complexities and change in government policy may have an impact on the ratings assigned over a period of time. CRISL updates the rating periodically with the cooperation of the client. In case the client is not willing to cooperate, CRISL withdraws the rating after due notice to the client. Therefore, CRISL rating is to be read with the time.

RATING DEFINITION

CRISL follows standard definition of ratings in line with the global rating agencies. It follows a ten notch scale with AAA being the highest while lowest rating D reflects default in discharging its liabilities in time. With the addition of plus (+) and minus (-) signs before the scale the 10 notch scale reflects 26 positions. These plus and minus signs indicate the position of each rating in the scale. The rating scales along with the definition are enclosed at the end of this report.

DEFINITION OF DEFAULT

CRISL adopted the international definition of default as being adopted by global rating agencies. Under the above definition, Default is:

- A) A missed installment (Principal and or Interest) which has not been discharged / paid as per schedule or within the grace period allowed by the regulators/ creditors.
- B) Failure to honor the corporate guarantee obligations as per contract or within the allowed grace period;
- C) The legal insolvency or bankruptcy of the issuer/ entity
- D) A distress exchange in which the bondholders/ creditors are offered a substitute instrument with inferior terms and conditions
- E) Restructuring of a financial obligation substantially disadvantageous to the creditors;

RATING METHODOLOGY

In order to arrive at a meaningful rating CRISL considers a large number of qualitative and quantitative factors and applies the same in its analytical rigor. In order to avoid biasness in analysis, CRISL tries to convert the qualitative factors to quantitative which ultimately assist CRISL for back testing of its methodologies. Quantitative factors include appraisal of the historic and projected financials, level of profitability, capacity utilization, capital expenditure need, cash flow adequacy, debt servicing capacity, free cash flow, and time series analysis. In order to arrive at meaningful assessment the financial statements are recast in order to make the ratios and analytical factors meaningful in line with the time horizon. All the factors considered by CRISL in rating may be clustered in to four broad analytical risk blocks- Industry, Business Risk, Financial Risk and Quality of Corporate Governance.

INDUSTRIAL RISK

1. Regulatory framework

Regulatory framework has direct impact on the industry and to the firms operating under the industry. The regulatory framework of the industry in most cases are dictated by the government industrial policy, annual budgetary frame work and measures including tax holidays, cash incentives, labour laws, environmental compliance issues and even by the import policy of the government. In countries like Bangladesh, these policies are very unstable. There are instances that many good industrial units fell sick due to change of government policy allowing the import of the products at a cheaper price without due protection to the industries. The regulatory environment of the country sometimes also been influenced by external factors such as buyers requirements from abroad, WTO Commitment of the government etc.

2. Industrial Risks

Risk is inherent in all industrial firms. Risk assessment in manufacturing units begins with an understanding of their operating environment. The operating environment dictates the factors to be taken into account while evaluating its long term performance and its possible impact on the cash flow, profitability and ultimately repayment capacity. For example, while evaluating a gas based industrial unit, availability of gas as raw material in the long run and its pricing plays an impotent role in the process of evaluation. As a general rule, the industrial profile, growth prospects dictates the

limitations and constrains of operating activities. For example, a firm in an industry can hardly achieve any effective growth if the industry as a whole has been suffering from recession.

The operating performance of industrial units is affected by trend of various economic variables including GDP, interest and exchange rates and nature of the industry. In addition, pattern of demand growth, elasticity of demand, plays an important rule in evaluation. The above unstable framework is again fuelled by inherent risk in manufacturing, unstable power supply, small and unstable market, entry of advance technologies in the economy. In view of above, with few exceptions, there is hardly any top category ratings in the manufacturing sector.

Technological advancement and invention of new technology in place of old technology sometimes poses a great threat to the industry. There are instances where the machinery was required to depreciate 100% over a period of only one year in view of the installation on new technology based equipment by the competitors. These are most important in case of software. Telecommunication, airlines etc.

3. Growth potentials

Growth potential of a firm vis a vis its industrial growth plays an important role in CRISL analytical rating framework. The industry life cycle such as introductory stage, growth stage, maturity stage and sunset stage, all deserves a weightage in analysis. However, the above potential is always reviewed in the context of future risks potentials. Again the matured industries are not over risk weighted in view of maturity rather the factors such as business stability gets due priority vis a vis its other peripheral factors.

4. Vulnerability

The vulnerability of the industry through controllable and uncontrollable factors are considered in the analytical framework of CRISL the degree of sensitivity of demand to economic cycle, change in government policies such as import policy, industrial policy, tariff policy etc are the key elements to be considered in rating an industrial unit. The volatility of prices of raw material may also create a vulnerable situation for the industries. The political influence on the trade unions effecting labour intensive industries such as garments, are susceptible to vulnerability.

5. Industrial Cyclicity

Cyclical companies are those manufacturing units such as sugar, cotton spinning, automobiles paper and pulp etc whose sales in volume moves with the

macro economic fundamentals and the operation of which needs different volume of resources as it moves with cycle. CRISL analytical framework considers the high and low picks of the cycle and gives due weights to the factors at each stage of cycle and tries rates through the cycle. Under the above circumstances CRISL ratings are forward looking. Normally the companies in cyclical industries accumulates cash and creates buffer during the boom period in order to keeping the company in smooth operation during the down turn

6. Entry Barrier

Strong restriction on the new entrant in the industry protects the interest of the existing companies and viewed as plus point while keeping the industry open for any body may at any point of time take away the share of the existing companies and ultimately poses a threat for survival or profitable operation. However, CRISL considers that the strong prohibition factors such as huge capital outlay, creation of franchise value and brand image of the products needing time, Government restriction, distribution net work etc.

7. Size of the industry

Size of the industry on the economy and the size of the companies operating under the industry plays an important role in analyzing long term and long term viability. Large companies have greater tenacity and staying power due to their extensive resource base and stronger shields. Those companies also enjoys broader market access, larger market share, strong marketing network, franchise value which ultimately assist the company's long term viability.

8. Threats of product substitution

Availability of substitute at cheaper price or availability of substitute products at the door step may intensify the competition. CRISL analysis inter alia considers existing and potential substitutes that may stand as threat to the existing products of the company. In addition alternative use of the products are also explored to have an understanding under distress situation.

BUSINESS RISK ANALYSIS

Under the business risk analysis CRISL evaluates the issuers business model, business strategies and competitive strength in the industry. There is large number of sub sectors in the manufacturing sector. Each need to be looked differently after due care to the business, manufacturing and competitive edges and advantages. However the broad spectrum of the analysis centers around the following broad guidelines.

MARKET RISK

1. Competition

The nature of competition varies from industry to industry. However the product lines and its market share determines the nature of competition an organization may face. In order to survive in the competition, the cost efficiency in production and quality of product at competitive price is essential. Presently competitive advantages are being created through strong infrastructure build up and supply chain which are given due weight in the analytical process.

2. Market position, size and Age of the Business

Market share, size and age of the organization plays an important role in deciding on the competitiveness of a company. Size of an organization assist in achieving economy of scale, determining economic order size, cost efficiency and thereby lowering the unit cost of production. The size of an organization also justifies the research expenditure and capital intensive equipment, effective distribution channel and branch network. However, size of an organization does not always speak for the advantages mentioned above. In a highly fragmented industry, price leadership goes with the quality of product and not by the size of the organization. Again the age of the business is also an important factor to have an understanding the foundation of the entity. Generally CRISL gives higher weightage to an entity having long business operation compared to a new entrant.

3. Product demand

Product demand in the market is a very important factor in the process of ascertaining the market stability and future growth. In this connection CRISL reviews the plant capacity utilization and quantity of production compared to the market demand, seasonality of the product demand etc are critically reviewed.

4. Product and Service diversity

In a highly competitive environment more particularly in the industries having frequent change in technology, product diversity and scope of switchover to other alternative products with small or no cost is considered to be a favorable point in the overall rating process. In the rating process, the diversity is considered to be mitigating factor against concentration risk. Companies having more product lines are always preferred to the companies dependent on single product or product line.

5. Customer Analysis

The number of customers occupying large portion of receivables, customer concentration, company reliability on few customers, capacity of the company

to absorb the shock of switching over to new customer, impact of customer shifting to other competitors are reviewed by CRISL in its analytical exercise. Dependence on the customers in various market segments such as Domestic vs export market, whole sale vs. retail market, distribution channels, long term sales contract, impact on market due to change in price all are given due weightage while carrying out customer analysis.

6. Customer satisfaction

CRISL reviews customer satisfaction of an organization in order to ascertain the market continuation and market growth. Customer satisfaction can be reviewed by average continuation of a customer with the company, repeat orders, product rejection rate etc.

OPERATIONAL RISK

1. Plant location and production facilities

Plant facilities, technology and plant location counts significantly in reviewing a manufacturing company. Location of an export oriented company in the export processing zone or near to that or access to easy communication is considered to be advantageous while the location of a company requiring heavy raw material or selling heavy products in the port side or river side involving cost effective transportation is considered to be a positive factor. Excess to low cost utilities facilities such as gas and water and electricity is given due weightage.

2. Availability of Raw material

Availability of raw material either from local market or export market plays an important role in the rating process. In case of local supply, the supply chain, sufficiency in terms of quality, no of suppliers, seasonality, price fluctuation, lead time and ease of import, additional factors such as import policy, the government duty structure, import restrictions, cash incentive considerations all plays important role in the CRISL analytical process

3. Technology vs Asset efficiency

Modern technology provides competitive edge over old technology. Asset composition, balanced equipment for maximum production efficiency all plays positive role while old and outdated technology reduces competitiveness having a negative impact on rating

4. Cost Structure

Cost structure plays an important role in the industrial production. CRISL classifies the cost into direct material, direct labour and overhead. Again

cost accumulation and its allocation to various products through job order costing system, or process cost system is reviewed in order to arrive at a meaningful cost efficiency analysis. Product wise contribution margin cost inefficiency arising out of unplanned expenditure, peer comparison cost, labour availability, labour sensitivity, cost components, direct cost as percentage of overall cost, all are reviewed in the rating process

5. Credit Controls

Credit control policies and its effectiveness play an important role in the liquidity management of the manufacturing companies. It is more particularly important when a company has been manufacturing for the local market. In order to maintain cash operating cycle to order for raw materials, payment of labour and factory operation, the companies require cash constantly from the business cycle. In case of export oriented manufacturing companies, the Status of payment terms of the export LC vis avis back to back LCs needs review to assess the funding mismatch.

6. Inventory management

Inventory management plays a vital role in the working capital management of manufacturing companies. Excess inventory increases the holding cost and thus increase the working capital need while inadequate inventory leads to production stop or excess production cost. CRISL reviews inventory planning, supply chain management, lead time, economic order quantity etc in addition to the risk of getting the finished products out of fashion , risk of expiry date etc.

FINANCIAL RISK

Every business decision ultimately leads to a financial decision. While the financial risks are the outcome of the business risk and activities, CRISL reviews the same from the perspective of short-term and long term financial planning and projections vis a vis financial flexibility to meet emergency financial need. CRISL generally reviews the audit reports in order to ascertain as to its reliability from various perspectives. However, in many cases CRISL reviews the financial statements from the view point of cash flow trend, management reports, peer analysis based on quantitative production/activity reports. Accounting systems/ practices, measurement system, inventory valuation, depreciation methods, quality of audit and auditors comfort level, audit qualification, management report of the auditors, application of international accounting standards in accounting plays an important role in CRISL financial analysis.

1. Profitability and coverage

Although the absolute profitability figures such as Earning (profit) before Tax and interest,(EBIT), Return on equity, return in investment etc, CRISL puts due weight to profitability indicators, profitability trend vis a vis industry norms, position of a particular company in the peer.

2. Funding structure

Funding structure of an organization may have an impact on its cash flow and mismatch is cash generation. CRISL places due importance to the financing pattern of long term and short term assets vis a vis the short term and long term debts. For example, if the long term investment in machinery is financed by working capital loan or short term finance it may seriously affect the cash flow of the company. The companies having excessive short term debts may face cash shortage in meeting its obligations in the volatile economy. In addition, dependence of the company on financial intermediaries such as leasing companies for short term fund may also face liquidity problem in the economic volatile situation. CRISL also ties up the asset life with its financing pattern. Any machinery purchased through lease must not have any repayments after the machinery life is exhausted.

3. Capital Structure / leverage

Capital structure of an organization varies from industry to industry. Capital intensive industries require high leverage while the labour intensive industries work at low leverage. CRISL identifies industrial norms in respect of debt equity ratio, coverage ratios, overall gearing ratio, interest coverage ratio, debt servicing coverage ratio in order to measure the degree of leverage. CRISL also reviews the off balance sheet assets and liability items such as guarantees, LCS together with BB LCS in order to ascertain its leverage.

4. Cash flow stability and adequacy

Cash flow of a company plays a very important part in CRISL assessment procedure. CRISL in many cases reads the Financial Statements with due emphasis to cash flow. To CRISL Cash flow balance sheets rather provides more reliability of financial statements than normal statements. Stable cash flow provides comfort of judging the capability of the company to discharge its liabilities while free cash flow predicts company's ability to go for expansion or loan repayment capacity or business growth.

5. Financial flexibility and liquidity

Liquidity is the key to judge the short term financial flexibility of a company. In addition the franchise value of the company to borrow quick fund from the

market, relationship with the financial institutions, level of financial limits allowed by the banks and its utilization level, perception of the financial institutions for funding projects under the company, cash operating cycle etc provides wider coverage to the CRISL analysis. CRISL also reviews the company's failure in updating CIB report of the central Bank in case of any default. In case of Group companies, CRISL analysis goes beyond the individual company, rather Group cash flow, support of Group companies in case of funding need, extent of inter- company cash movement gets highest weightage in judging the liquidity position of a company.

6. Financial Management

CRISL rating analysis places due weight to the quality of financial management. Managing Finance through budgetary control system, working capital management through budgetary control system, management of cost efficiency through installation of appropriate cost accounting system, product costing, use of accounting information by the management, IT base financial management system, quality of the manpower and their qualification etc all are taken into consideration while ascertaining the extent of financial management.

GOVERNANCE RISK

1. Corporate goals and strategy

Although the Memorandum of Association of the company contains a large number of objectives, the company normally pursues one or two main objectives on the basis of which the MISSION and VISION Statements are prepared in order to determine the corporate goals. Companies operating on the basis of certain corporate goals as reflected in operating activities

2. Corporate Governance

Corporate governance is a blend of law, regulations, enforcement and appropriate voluntary practice by the organizations that permit a corporate to attract capital, perform efficiently and generate long term economic value for its shareholders while respecting the interest of its stakeholders and society as a whole. The specific areas covered are composition of Board, formation of Committees, transparency in disclosure of relevant, reliable financial and operational information, information on ownership and control and information on internal processing of management. CRISL places due importance to the governance factors in the rating process of an organization

3. Succession planning/ Family owned outfit

The succession plan is the key indicator of corporate philosophy that an organization is a going concern and it has unlimited life and its viability will not be affected on the departure of any individual professional. In order to reduce the dependency on single / few individuals a succession plan in a corporate reflects the management idea of business management continuity and its succession. CRISL while reviewing the management philosophy takes into consideration of the above factor. In addition, through the succession plan, the visibility of family management vs professional management becomes more prominent.

4. Credibility and Banking Relationship

Credibility, to a great extent, may be reflected in its franchise value and public perception in the market. However, in order to identify the willingness of the company to discharge a liability in time, CRISL philosophy is to see the corporate environment prevailing in the organization vis a vis the strategy being followed to achieve the corporate goals through managing its diversified business. In addition, corporate policy to management of conflict of interest, handling inter company transfer pricing and inter company transactions also reflects the credibility of the organization and its system. In addition to the above, banking relationship plays important role to judge the credibility of an entity. CRISL carefully looks into all the exposures of the entity enjoyed from the bank/FIs along with length

of relationship. CRISL also reviews the utilization limit of credit facility. Besides, the personal deposit of the key sponsors, if there is any, are also taken into consideration. While reviewing the credit facilities, CRISL also look into the present status of the same along with past performance.

5. IT Infrastructure

The extent of Information technology and communication infrastructure installation and the extent of its use in the production and product management, cost management, inventory management play an important role in managing an organization. CRISL review process places due importance to the above factors in order to ascertain the competitiveness in both local and international market.

ENVIRONMENTAL AND LEGAL ISSUES

Compliance of environmental regulations as imposed by the local regulators and the compliance requirement of the international buyers has been playing a very important role in determining competitiveness of a manufacturing organization. CRISL reviews the extent of compliance to the local environmental rules, regulators clearance, updated tax and other clearance, compliance with the labour related rules such as minimum wage payments, Excess hour rules, compliance of the buyer's requirements etc. CRISL also carefully look into the legal issues including the pending legal cases along with latest status to get idea about the company's standing.

CORPORATE VS. BANK LOAN RATING

Annexure-1

CRISL RATING SCALES AND DEFINITIONS

LONG TERM RATING SCALE - CORPORATE

RATING	DEFINITION
AAA Triple A (Highest Safety)	Investment Grade Entities rated in this category are adjudged to be of best quality, offer highest safety and have highest credit quality. Risk factors are negligible and risk free, nearest to risk free Government bonds and securities. Changing economic circumstances are unlikely to have any serious impact on this category of companies.
AA+, AA, AA- (Double A) (High Safety)	Entities rated in this category are adjudged to be of high quality, offer higher safety and have high credit quality. This level of rating indicates a corporate entity with a sound credit profile and without significant problems. Risks are modest and may vary slightly from time to time because of economic conditions.
A+, A, A- Single A (Adequate Safety)	Entities rated in this category are adjudged to offer adequate safety for timely repayment of financial obligations. This level of rating indicates a corporate entity with an adequate credit profile. Risk factors are more variable and greater in periods of economic stress than those rated in the higher categories.
BBB+, BBB, BBB- Triple B (Moderate Safety)	Entities rated in this category are adjudged to offer moderate degree of safety for timely repayment of financial obligations. This level of rating indicates that a company is under-performing in some areas. Risk factors are more variable in periods of economic stress than those rated in the higher categories. These entities are however considered to have the capability to overcome the above-mentioned limitations.
BB+, BB, BB- Double B (Inadequate Safety)	Speculative Grade Entities rated in this category are adjudged to lack key protection factors, which results in an inadequate safety. This level of rating indicates a company as below investment grade but deemed likely to meet obligations when due. Overall quality may move up or down frequently within this category.
B+, B, B- Single B (Risky)	Entities rated in this category are adjudged to be with high risk. Timely repayment of financial obligations is impaired by serious problems which the entity is faced with. Whilst an entity rated in this category might be currently meeting obligations in time through creating external liabilities.
CCC+, CCC, CCC- Triple C (Vulnerable)	Entities rated in this category are adjudged to be vulnerable and might fail to meet its repayments frequently or it may currently meeting obligations in time through creating external liabilities. Continuance of this would depend upon favorable economic conditions or on some degree of external support.
CC+, CC, CC- Double C (High Vulnerable)	Entities rated in this category are adjudged to be very highly vulnerable. Entities might not have required financial flexibility to continue meeting obligations; however, continuance of timely repayment is subject to external support.
C+, C, C- (Extremely Speculative)	Entities rated in this category are adjudged to be with extremely speculative in timely repayment of financial obligations. This level of rating indicates entities with very serious problems and unless external support is provided, they would be unable to meet financial obligations.
D (Default)	Default Grade Entities rated in this category are adjudged to be either already in default or expected to be in default.

Note: For long-term ratings, CRISL assigns + (Positive) sign to indicate that the issue is ranked at the upper-end of its generic rating category and - (Minus) sign to indicate that the issue is ranked at the bottom end of its generic rating category. Long-term ratings without any sign denote mid-levels of each group.

SHORT-TERM RATING SCALE- CORPORATE

ST-1	Highest Grade Highest certainty of timely payment. Short-term liquidity including internal fund generation is very strong and access to alternative sources of funds is outstanding. Safety is almost like risk free Government short-term obligations.
ST-2	High Grade High certainty of timely payment. Liquidity factors are strong and supported by good fundamental protection factors. Risk factors are very small.
ST-3	Good Grade Good certainty of timely payment. Liquidity factors and company fundamentals are sound. Although ongoing funding needs may enlarge total financing requirements, access to capital markets is good. Risk factors are small.
ST-4	Moderate Grade Moderate liquidity and other protection factors qualify an entity to be in investment grade. Risk factors are larger and subject to more variation.
ST-5	Speculative Grade Speculative investment characteristics. Liquidity is not sufficient to ensure discharging debt obligations. Operating factors and market access may be subject to a high degree of variation.

ST-6

Default

Entity is in default or is likely to default in discharging its short-term obligations. Market access for liquidity and external support is uncertain.

CRISIS