



CRA/03

RATING METHODOLOGY - SMEs

Practical guide to understanding concepts and evaluation techniques
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OVERVIEW

CRA rates Small and Medium sized Entities (SMEs) using its proprietary rating methodology. This methodology draws on frontier knowledge in corporate finance and management and is internationally benchmarked. A credit rating issued by CRA represents an independent opinion of the creditworthiness (also referred to as credit risk) of the entity. CRA measures creditworthiness in terms of the probability of default on a financial obligation. Accordingly, an SME rated AAA is considered to have a very low probability of defaulting on an obligation, while one rated C- has a high probability of default.

DEFINITION OF SMEs

A company is considered small if its annual turnover is less than five million kwacha. A company is considered medium sized if its annual turnover is between five to twenty million kwacha.

These parameters are in light of the Zambian economy and are reviewed from time to time.

RATINGS APPROACH TO SMEs

CRA's methodology for SMEs takes a panoramic view of default and conceptualises default probability as a function of two broad factors: (i) ability to pay, and (ii) willingness to pay. Under each broad factor are sub-factors that are regarded as the key attributes or determinants of default.

Ability to pay is assessed by giving due consideration to the business risk assessment and financial risk analysis. Business risk assessment scores the external environment and internal dynamics that can potentially affect viability of the business going forward. Models applied include:

- PESTLE Framework
- Porters Five Forces
- Mckinsey 7s Framework
- Mckinsey nine-box matrix
- BCG's growth share matrix
- SWOT analysis

The business risk analysis aims to evaluate as objectively as possible the sustainability of the SME in the particular industry and operating environment.

Financial risk analysis is undertaken by closely examining pertinent financial ratios on (i) profitability (ii)liquidity, and (iii) Indebtedness (including capital adequacy) ; and also their inter-relationships. Permutations of the three pillars ultimately determine the ability to service credit as it falls due. On one extreme is high profitability/high liquidity/low indebtedness, while on the other extreme is low profitability/low liquidity/high indebtedness.

It is recognised that while ability to pay is more prominent a factor in well-established corporates, willingness to pay can take greater prominence in less established entities or small and medium sized enterprises (SMEs). This could be due to poor cultural payment culture, poor corporate governance structures, excessive dividend policies or drawings, or management orientation which, all in all, favour owners and/or management more than creditors. Accordingly these factors as they impact willingness to settle credit are scored. CRA’s rating methodology on SMEs accordingly attaches greater weights to willingness to pay factors than is the case on methodologies for larger corporates.

CRA applies a scorecard on the aforesaid factors in assessing entities’ default probability. The scorecard uses backward-looking historical data. However, CRA does not conclude on the basis of historical data but takes a forward-looking approach and adjusts the factor scores accordingly based on its informed judgements of the future. The historical scorecard output is more likely to be relevant in periods of stable macroeconomic, market and regulatory environments. In periods of transition, the scorecard’s reliability is undermined. Additional considerations are required to reliably assess credit risk.

An illustrative summary of the Analysis types and key considerations in CRA’s ratings of SMEs is presented below:

<u>Analysis Type</u>	<u>Key considerations</u>	
	Ability to pay	Willingness to pay
Business Risk Assessment		
Environmental	Yes	
Intrinsic	Yes	Yes
Financial Analysis	Yes	

OVERVIEW OF RATINGS METHODOLOGY

This report explains the general methodology for SMEs in several steps:

1. Identification of Key Rating Factors

CRA has identified four key rating factors as critical to the credit analysis of corporates:

1. Business Profile
2. Corporate Governance and Management Integrity
3. Stability and Profitability
4. Financial Position

Apart from these factors, we also observe other factors such as- management effectiveness, shareholder structure etc. This methodology should enable users to understand how we arrive at a final rating.

2. Measurement of Key Rating Factors

CRA’s ratings are forward-looking, but the rating process extensively uses historical financial data in order to understand patterns and trends for a Company’s performance as well as for peer comparison. While the rating process includes both historical and anticipated results, this document makes use of historical data only and does so for illustrative purposes.

The main data source for the majority of the rating factors are the financial statements of the Company. Apart from the financial statements, we would prompt the company to provide a detailed statement of debt, showing their maturity and other terms and conditions, financial forecasts and strategic or business plans available. A detailed study would be conducted onsite to provide more insight into the management factors viz. management quality and strategy, organizational structures, corporate governance, risk management, operational practices and procedures and client services.

Corporates can display unique features relating to credit, leverage, funding and liquidity, and other risks, which need to be taken into account when assessing their credit worthiness and which have an impact on the rating process. Analyzing different risk categories and their management is a critical step in assessing the creditworthiness of the corporates.

3. Mapping Rating Factors to Rating Categories

After identifying the measurement for each factor, the potential outcomes for each of the 16 sub-factors are mapped to a CRA rating category (i.e. AAA, AA, BBB, BB, B and CCC).

4. Determining the Final Rating

To determine the overall rating, the rating ranges for each factor are converted into numeric values based on the following scale.

AAA	AA	A	BBB	BB	B	CCC
1	3	6	9	12	15	18

Each metric’s value is multiplied by the respective assigned sub-factor weighting. For example, the value for “Scale” (e.g. for AA=3) is multiplied by 5% to arrive at a factor value of 0. 15

Table 1: Overall Grid Map

Rating Factors	Factor Weighting	Relevant Sub-Factor	Sub-Factor Weighting
Business Profile	25%	Scale	5%
		Market share	5%
		Business Longevity	10%
		Product Diversity	5%

Corporate Governance and Management Integrity	35%	Transparency	10%
		Dividend or Drawing Policy	10%
		Structural Complexity	5%
		Management Public Reputation	10%
Stability & Profitability	15%	Operating Margin	5%
		ROAA	5%
		Stability of EBITDA	5%
Financial Position	25%	EBITDA/ Interest	6%
		Leverage (Debt/ Equity)	5%
		Liquidity	5%
		FCF/Total Debt	6%
		(RCF-capex)/Total Debt	3%

The factor values for each key rating factor are then added together to arrive at the final rating score, which is mapped back to an indicative rating outcome. For example, an aggregate factor score of 9 would map to an indicative rating outcome of BBB.

Indicated Rating	Aggregated Factor Score
AAA	$X \leq 1.50$
AA+	$1.50 < X \leq 2.5$
AA	$2.50 < X \leq 3.5$
AA-	$3.50 < X \leq 4.5$
A+	$4.50 < X \leq 5.5$
A	$5.50 < X \leq 6.5$
A-	$6.50 < X \leq 7.5$
BBB+	$7.50 < X \leq 8.5$
BBB	$8.50 < X \leq 9.5$
BBB-	$9.50 < X \leq 10.5$
BB+	$10.50 < X \leq 11.5$
BB	$11.50 < X \leq 12.5$
BB-	$12.50 < X \leq 13.5$
B+	$13.50 < X \leq 14.5$
B	$14.50 < X \leq 15.5$
B-	$15.50 < X \leq 16.5$
CCC+	$16.50 < X \leq 17.5$
CCC	$17.50 < X \leq 18.5$

In the event of deterioration that potentially leads to a ratings downgrade – e.g. a major change in liquidity due to an economic market crisis – CRA would focus on the specific circumstances of the Company and the factors impacting the key credit metrics to assess whether this situation is properly reflected in the rating matrix. Together with other qualitative factors, the indicative rating based on the grid outcome might be adjusted accordingly to better reflect the credit risk of the company under certain extreme market conditions. For standard economic conditions, the factor grid is expected to result in appropriate approximations for the credit risk of the corporate.

5. Applying the Rating Criteria

The rating score for a sub-factor may deviate from the overall indicative rating outcome for the company (i.e. it is an 'exception'). In those cases where the outcome of a sub-factor is more than two rating categories away from the indicative overall rating outcome, the specific corporate's rating report will provide a descriptive explanation as to the underlying factors which result in the exception.

SME INDUSTRY CHARACTERISTICS

Before evaluating an SMEs business factors, the industry specific factors the SME operates in are taken into considerations. Industry trends have an impact on the operating environment and the company's overall performance. The following characteristics, while not intended to be an exhaustive list, indicate the key areas considered in evaluating an SME.

Vulnerability to economic cycles: Supply and demand for both the industry's major products and its production inputs are critical, as are other cyclical pressures that may affect prices. Trends in world energy prices, for example, have an obvious impact on oil producers, as well as a secondary impact on basic industry companies that require energy for production. A prolonged depression in mineral commodity prices, as another example, has resulted in weak mine company profitability despite mine closures and deferred capital expenditures and exploration costs.

Cyclical in nature: SMEs are susceptible to the general economic cycles and industry cycles. To understand the degree of cyclicity, factors such as industry maturity and strength of the economy are considered. It is also important to examine a company's strategies, correlation of its product portfolio and performance in the long term and understand them in the cyclical highs and lows.

Heavy Industrial SMEs and construction companies are more exposed to cyclical pressures as compared to the producers of electrical equipments. Also, cyclical exposure is mitigated for companies with a geographically diversified portfolio and product lines.

Barriers to entry: High barriers to entry are common for various industrial product markets. This is due to high costs associated with production or distribution facilities, limited sources of supply, strong market acceptance of the products or services of existing competitors and long gestation periods. High barriers hinder the entry of new competition into the market. This can substantially enhance the competitive position of an SME company.

Building material companies have high entry barriers given the limited availability of raw materials, such as pits and quarries and high initial costs of entering a market. Whereas the entry barrier for some capital goods companies can be raised reflecting established leadership positions and high market shares, brand names, proprietary technologies and custom engineered products.

Capital Intensive: Industrial SMEs companies generally attract a high degree of fixed costs. This is primarily due to the high level of capital expenditures incurred on production and distribution network costs. A company's capital expenditure history, corporate history of strategic alliances to achieve economies of scale, upgrade and rationalizing operations to improve quality and lower operating unit costs are factored in while evaluating a company. These can provide an indication of the company's current and future productivity and efficiency.

Commodity Pricing: Generally, production of industrial products is highly energy and raw material intensive and producers are often exposed to volatile commodity costs. Raw material prices make up a significant share of an industrial SME company's cost mix.

We evaluate the company's ability to access low cost raw materials, hedging strategies and input-efficient production process. This can have a significant impact on the earnings of a company.

Vulnerability to technological changes: The duration of development and introduction cycles for major technologies in the industry are also assessed for their likely impact on product competitiveness. An evaluation of the importance of research and development can indicate how susceptible the industry is to rapid increases in capital spending to meet competitive challenges. The degree to which patents offer competitive protection and the timing of their expiration may also be important

Domestic and global competition: The role of the emerging markets can be significant as well. In the metals and mining industry, for example, low cost ore bodies, which previously were not exploited due to historically higher sovereign risk and associated lack of investment capital, have lately come on line. This new supply can significantly alter global cost curves and create more difficult competitive environments for long-standing industry players. On the positive side, growth of population and spending power in overseas markets may offer new market opportunities.

Other important considerations: In addition to the above mentioned characteristics, each sub sector within the SME sector has certain unique features that cannot be broadly applied across all corporates. There are factors like national regulations, monetary policy and currency exchange rates, government guarantees and support, home-country business practices, event risk etc which are specific to each region or country that characterize the sector.

Main Activities of Entity

For the purpose of this methodology, the SME Sector includes companies which generate a majority of their total revenues and operating cash flows from the following business activities:

- Trading activities, whether wholesale or retails
- Agency businesses
- Services businesses other than in banking or financial services

- Production of basic materials such as concrete, aggregates, gypsum, bricks and roof tiles
- Production of basic chemicals and allied products
- Construction of buildings for commercial, residential or industrial purposes .

METHODOLOGICAL APPROACH

We will be using the following factors in our methodology. It is to be noted that our rating method is not limited to these factors. We use qualitative and quantitative analysis to identify these factors :

1. Business Profile
2. Corporate Governance
3. Stability & Profitability
4. Financial Position

These four factors constitute sub-factors are based on CRA analysis. The sub-factors are parts of the factors, which are mentioned below.

Factor 1: Market Position

Importance- This factor is most closely aligned with the company's identity and evaluates the fundamentals. An SME company's profile is measured along four dimensions – scale, breadth of the product line, geographic reach and the market share of the company. The four sub-factors for the business profile are indicators of the company's market share, leadership, purchasing power, position and logistic approach, flexibility in operations and reduction of costs, enhanced ability to absorb smaller financial and process disruptions.

- **Sub-factor 1 – Scale**

This corresponds to the total annual revenues of the company. This sub-factor acts as a good measure to check the productivity and size of the entity.

- **Sub-factor 2 – Product Diversity**

This sub-factor measures the product diversity of the company's portfolio. An SME company can have many product lines from one sector. For eg :for paper companies, the company has lines like paper manufacturing, paper packaging, communication paper, tissue paper, market pulp and wood based building products. There are some companies who have diversified their core business segment into areas such as real estate development and consumer manufacturing. However, here we consider the company's product lines which contribute more than 10% of the revenue or EBIT.

- **Sub-factor 3 – Geographic Diversity**

This evaluates the geographic reach of the company in terms of regions which contribute to more than 10% of the revenue or EBIT. For eg- We consider Kuwait , Bahrain and UAE as a part of GCC but as three separate regions and if their contributions are more than 10% of EBIT or revenue, we measure this sub-factor as three.

• **Sub-factor 4 – Market Position**

This sub-factor has a qualitative approach in assessing the business profile of the SME. This is an important indicator of credit quality for the highly cyclical and competitive industries. A company’s market share and barriers to entry are expected to impact the cash flows and margins of the company. This assesses the sustainability and defensibility of the company’s business model. A strong market position and barriers to entry in a regional market or segment implies more robust pricing and purchasing power against its peers.

Barriers to entry can be provided by the following characteristics:

- **Economies of scale** is more beneficial for bigger companies than smaller companies and new start ups
- **Regulatory qualifications** and **legislative requirements** by local authorities
- **High start up costs** prevent new competitors from easily entering an industry or area of business
- **Technological patents** or patents on business processes,
- **Highly cash intensive companies**
- **Strong customer loyalty** or **high customer switching costs.**
- **Globalization** makes entry of local players into the market more difficult than for global companies

We evaluate this sub-factor by analyzing the relative market share in key markets and segments as well as assessment of barriers of entry. The three characteristics used to measure barrier to entry are:

- Market position, since market is more stable for bigger players than smaller players
- Good track record for on-time and on-budget project management
- Reputation for managing longer term projects with a high degree of complexity and technological competence

Measurement Grid

This factor has four sub-factors to be taken into consideration for arriving at the final rating. Each sub-factor has a corresponding rating as mentioned below.

Score	AAA	AA	A	BBB	BB	B	CCC
Scale (revenues in KWD bn)	>10	10 to 6	5.9 to 4	3.9 to 2	1.9 to 0.9	0.9 to 0.1	< 0.1
Product diversity	>= 6	5	4	3	2	1	
Geographic diversity	>=6	5	4	3	2	1	
Market Position	#1 & #2 in majority of the segments in	#1 & #2 in majority of the segments in key	Among top 3 in core market segments.	#3-5 in fragmented market/segments. Revenue	#3-5 in fragmented market/segments. Revenue	Niche player. Revenue protected by 1 level of	Niche player. NO barriers to entry.

key market. Majority of revenues protected by 3 levels of barrier to entry	market. Majority of revenues protected by 2 levels of barrier to entry	Majority of revenue protected by at least 2 levels of barriers to entry	protected by at least 2 levels of barriers to entry	protected at least one levels of barriers to entry	barrier to entry
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Factor 2: Corporate Governance

Corporate Governance focus on the firm’s overall shareholder versus creditor orientation, which manifests itself through four sub-factors:

- Dividend Policy
- Transparency
- Shareholder Protection
- Structural Complexity

For these factors, CRA has attached weight to objective measurability as well as to more subjective and less transparent sub-components such as quality of ownership or management experience.

The measurement for each of the four sub-factors is generally based on information available in a company’s public financial statements and through due diligence meetings with the firm’s management.

- **Sub-factor 1 :Dividend Policy** – Average payout over the past three years and prospective two years
- **Sub-factor 2: Shareholder Protection** – Public information and qualitative assessment of shareholder rights in the Rating Co. areas of voting and minority rights, board of directors election, composition and oversight, and management quality.
- **Sub-factor 3 :Transparency** – Existence of a publicly communicated target for market-based leverage tolerance and a commitment to adhere to target via sale of assets, reduction of leverage
- **Sub-factor 4: Structural Complexity** – Indicators:
 - Share cross-holdings among participations
 - Intercompany transactions among participations and/or holding and participations
 - Related-party transactions of shareholders of the Houses
 - Multiple debt-funding entities, i.e. participations within the holding’s portfolio provide funding among themselves
 - Only local GAAP audited financial statements of the consolidated and individual accounts

A factor score is derived depending on the number of indicators that are significant. ‘Significant’ means that the indicator is either present or not (such as local GAAP financial statements) or is expected to have a material impact on the credit risk of the company (such as a certain amount of intercompany transactions). We presume that the more complex the group is, the less clear-cut the separation of the firm from the rest of the group or its shareholders becomes and the more likely it is that the credit risk of the holding company will be potentially affected by other factors that have a negative impact on the overall credit quality. (At the extreme, this might actually prompt CSR to consider the Investment House as a conglomerate and hence modify our analytical approach as the risk of credit contagion between the holding company and its individual investments becomes significant.)

Measurement Grid

	Parameters	Low Category Component Points: 1	Medium Category Component Points: 3.5	High Category Component Points: 6
Dividend Policy	Past 3 yrs, prospective 2 yrs	Less conservative: (>50% of distributable income)	Moderate: (>20% - >50% of distributable income)	Conservative: (<20% of distributable income)
Shareholder Protection	Indicators: a) Voting rights b) Cumulative voting c) Independence of BoD d) Executive chairman e) Risk management	Significance of 0-1 indicators	Significance of 2-3 indicators	Significance of 4-5 Indicators
Transparency	Financial Policy	No public transparency in financial policy (no public target of market based leverage tolerance / no public commitment to adhere to target via sale of assets, reducing of leverage, etc.)	Moderate public transparency in financial policy (public target of market based leverage tolerance / no public commitment to adhere to target via sale of assets, reducing of leverage, etc.)	No public transparency in financial policy (public target of market based leverage tolerance / public commitment to adhere to target via sale of assets, reducing of leverage, etc.)
Structural Complexity	indicators: a) Share cross holdings b) Intercompany transactions c) Related party transactions d) Multiple debt funding entities e) Only local GAAP audited financial statements	Significance of 4-5 indicators	Significance of 2-3 indicators	Significance of 0-1 Indicators

CRA uses three different rating component points (1, 3.5, 6) for each sub-factor to arrive at a total factor score. The total factor score is then mapped to rating categories as mentioned below

Mapping of Rating Factor Points to Rating Scale

AAA	AA	A	BBB	BB	B	CCC
24	<24-22	<22-18	<18-12	<12-6	<6-3	<3

Factor 3: Stability and Profitability

Importance- This factor measures the efficiency, consistency and the return earned for the company. This is a function of the companies size, efficiency, management effectiveness, cost of raw materials, capital invested, production cost etc. Further, with low leverage and the finance costs reducing, the entity is in a better credit quality position. The company’s cash position, business cycle are all valuable information. This factor helps in evaluating the performance and efficiency of the company in spite of irregular market trends.

We use three sub-factor to measure the cost position of the company

- Operating Margin
- Return on Average Assets
- Stability of EBITDA Margin

The description of the sub-factors is as mentioned below.

- **Sub-Factor 1: Operating Margin**

This measures the company’s pricing strategy and management efficiency. Operating margin is a measurement of what proportion of a company’s revenue is left over after paying for variable costs of production such as wages, raw materials, etc. A healthy operating margin is required for a company to be able to pay for its fixed costs, such as interest on debt. This is an important measure for all SME as this is a measurement of the funds a company generated from its operations.

We take a three year average of the average of the operating income and divide the revenue , scale to the corresponding rating table. To maintain stability in ratings in different economic environments, we take a three year average

- **Sub-factor 2 : Return on Average Assets**

This sub-factor takes into account the capital intensive nature of the company and helps in measuring the company’s ability to generate meaningful return from its assets. This is a critical measurement for analyzing the underlying operational profitability of the company. ROAA therefore gives us valuable insight into management’s execution ability, by measuring their capacity to continue investing in the right assets to derive value from the business.

We measure this by dividing the EBIT over the average assets for the last three years and this is scaled to the corresponding rating grid. The use the average assets for three years to maintain stability in rating in different environments

- **Sub-Factor 3 : Stability of EBITDA**

The stability of the profit margin is an integral component of a comprehensive risk assessment in this industry given that financial results for SMEs can be very volatile, and volatility indicates risk. Since some SMEs are consumers of input materials like crude oil, steel, wood, metals chemicals, electricity, water etc and as input prices are likely to be affected by the same macroeconomic conditions that influence output prices. The fluctuation in fixed costs can impact the EBITDA of the company. The more stable the EBITDA of the company, the higher the credit quality.

We use the three year percentage variability of EBITDA/Sales. We use historical figures , measuring change in EBITDA margin from one year to the next over a period of three years. In cases where the value is negative, the value is doubled and the absolute value of the resulting figure is used to calculate the average of observation over a period of three years.

Measurement Grid

The three factors are scaled to the rating grid as below

	AAA	AA	A	BBB	BB	B	CCC
Operating Margin	>40%	30%-40%	20%-30%	10%-20%	5%-10%	0%-5%	<0%
ROAA	>20%	15%-20%	10-14.9%	7%-9.9%	4%-6.9%	3.9%-0.5%	<0.5%
EBITDA Stability	<0.5%	0.51% - 1.00%	1.1% to 3.4%	3.5%-5.8%	5.9%-8.2%	8.3%-10.9%	>11

Factor 4: Financial Strength

Importance

The financial strength checks the ability of the company to withstand any financial crunch in the future and speaks about the current ability to repay its creditors. The SMEs need to generate sufficient earnings and cash flow to cover their capital expenditure, in addition to dividends, interest expense and debt amortization. We consider five ratios which are based on earnings, cash flow, debt availed and the financial policy of the company

- **Sub-factor 1 : Interest Coverage**

This ratio is a measure of the number of times a company could make the interest payments on its debt. The higher the company's debt burden, the greater the possibility of bankruptcy or default and lower would be the interest coverage ratio. While this ratio is a good measure for companies in speculative grade, this also holds good for companies where the interest rate keeps changing in the economy.

This is calculated by dividing the EBIT over the interest costs. We get a better judgment of companies if the financial ratios are taken for more than three years as this gives us a holistic view of the company.

- **Sub-factor 2 : Liquidity**

This is a measure to check the financial flexibility and the cushion that a company has to quickly meet known and unknown demands on cash. This also speaks about the management's strategy of managing, reserving and controlling funds for sudden repayment or more investments. The management's decision to keep cash and other reliable sources of liquidity, such as committed credit lines, may be an indication of liquidity planning and providing for unexpected liquidity. This will support the credit quality of the company.

This is calculated by dividing the current assets by the current liabilities

- **Sub-factor 3: Leverage**

Some SMEs are characterized as highly capital intensive and being highly leveraged. A measure of a company's financial leverage is calculated by dividing its total liabilities by stockholders' equity. It indicates what proportion of equity and debt the company is using to finance its assets. A high debt/equity ratio generally means that a company has been aggressive in financing its growth with debt. This can result in volatile earnings as a result of the additional interest expense. This is an important indicator to check the credit quality of a company. This is evaluated by dividing its total liabilities by stockholders' equity

- **Sub-factor 4 : Free cash flow to total debt**

This ratio is important as it measures the financial strength of the company keeping in mind the potential cash flow volatility for the company. For SMEs, strong and stable sources of funding are the best cash flow indicators, thereby upgrading their credit profile. This helps to measure that the company's operations are generating enough cash flow to cover its current liabilities.

This is calculated by three-year average of free cash flow (Cash flow from operations after payment of dividends and capital expenditure) to gross debt.

- **Sub-Factor 5: (RCF-capex)/ total debt**

Some SMEs are highly capital intensive and have huge assets of plant and machinery. The company uses many funds to acquire physical assets such as property, industrial buildings or equipment for their operation purposes which leads to increase in their capital expenditure. This ratio is significant for the company because of the high value of funds spend towards capital expenditure. It measures the cash flow left after the company has accounted for the capital expenditure and other variable costs.

We calculated this by deducting the capital expenditure for the year from the retained cash flow, the total debt is divided from the value.

Measurement Grid

The sub-factors are rated according to the rating grid mentioned below

	AAA	AA	A	BBB	BB	B	CCC
Interest Coverage	>20x	15x-20x	10x-14.9x	5x-9.9x	2x-4.9x	1x-1.9x	<1x
Liquidity	>6x	5x-6x	4x-5x	3x-4x	2x-3x	1x-2x	<1x
Leverage	<10%	10%-20%	20%-30%	30%-40%	40%-50%	50%-60%	>60%
Free cash flow/total debt	>40%	39%-30%	29%—20%	19%-10%	10%-2.5%	2.5%-0.5%	<0.5%
RCF-capex/total debt	>30%	29%-20%	19%-10%	9%-5%	4%-2%	1%-0.5%	<0.5%

DETERMINING THE FINAL RATING

To arrive at our ratings, CRA uses historical data to arrive at the key factors and sub-factors that characterize the industry and their respective weights. Once we determine the Entity’s rating on a sub-factor, we look to the sub-factor’s weighting on the sub-factor mapping grid and assign its weight accordingly. The logic behind this is that sub-factors with lower scores will affect the Company more so than a sub-factor with a higher score and therefore should weigh more in the overall credit rating. The mapped score of each sub-factor will then be multiplied by its respective sub-factor weight age in the rating methodology grid. After this is completed for each sub-factor, we calculate the sum of weighted average and map that to the overall rating grid and arrive at a final rating for the SME.

Rating Methodology

Table 2: Rating Grid

Sub-Factor	Weight	AAA	AA	A	BBB	BB	B	CCC
Market Position (20%)								
Scale (KWD bn)	5%	>10	10 to 6	5.9 to 4	3.9 to 2	1.9 to 0.9	0.9 to 0.1	< 0.1
Product diversity	5%	>= 6	5	4	3	2	1	1
Geographic diversification	5%	>=6	5	4	3	2	1	1
Vertical Integration	5%	#1 & #2 in majority of the segments in key market. Majority of revenues protected by 3 levels of barrier to entry	#1 & #2 in majority of the segments in key market. Majority of revenues protected by 2 levels of barrier to entry	Among top 3 in core market segments. Majority of revenue protected by at least 2 levels of barriers to entry	#3-5 in fragmented market/segments. Revenue protected by at least 2 levels of barriers to entry	#3-5 in fragmented market/segments. Revenue protected at least one levels of barriers to entry	Niche player. Revenue protected by 1 level of barrier to entry	Niche player. NO barriers to entry.
Corporate Governance (20%)								
Quality of Management	20%	High		Medium			Low	
Stability & Profitability (30%)								
Operating Margin	10%	>40%	30%-40%	20%-30%	10%-20%	5%-10%	0%-5%	<0%
ROAA	10%	>20%	15%-20%	10-14.9%	7%-9.9%	4%-6.9%	3.9%-0.5%	<0.5%
EBITDA Stability	10%	<0.5%	0.51% - 1.00%	1.1% to 3.4%	3.5%-5.8%	5.9%-8.2%	8.3%-10.9%	>11
Financial Strength (30%)								
Interest Coverage	6%	>20x	15x-20x	10x-14.9x	5x-9.9x	2x-4.9x	1x-1.9x	<1x
Current Liquidity(CA/CL)	6%	>6x	5x-6x	4x-5x	3x-4x	2x-3x	1x-2x	<1x
Leverage(Debt/Equity)	6%	<10%	10%-20%	20%-30%	30%-40%	40%-50%	50%-60%	>60%
FCF/total debt	6%	>40%	39%-30%	29—20%	19%-10%	10%-2.5%	2.5%-0.5%	<0.5%
(RCF-Capex) / total debt	6%	>30%	29%-20%	19-10%	9%-5%	4%-2%	1%-0.5%	<0.5%

Other Rating Considerations

Although Capital Standard's considers other factors in addition to those discussed above, in most cases the metrics presented herein will enable a good approximation of our view on the credit quality of companies in this sector. The other rating factors which including the future operating & financial performance that may vary from the historical performance, financial and accounting policies, acquisition strategies, event risk and seasonality. Risk management is also a key factor for SME. The analysis of these factors remains an integral part of our rating process and can have a significant impact on the rating outcome.

To sum up for the final rating, the methodology and other rating factors are taken into consideration. The metrics gives us a good approximation of the company's financial strength and credit quality

APPENDIX B: Rating Scale

Long-Term Credit Ratings

<i>Investment Grade</i>	
AAA	An issuer/issue with an 'AAA' credit rating is classified as the highest rating by CRA when compared to its peers. The issuer/issue is highly unlikely to be affected by adverse changes in the environment and economic conditions*.
AA	An issuer/issue with an 'AA' credit rating is classified as a very strong rating by CRA when compared to its peers. The issuer/issue is slightly susceptible to the changes in the environment and economic conditions.
A	An issuer/issue with an 'A' credit rating is classified as a strong rating by CRA when compared to its peers. The issuer/issue is susceptible to adverse changes in the environment and economic conditions. These changes can affect the debt servicing capabilities to an extent that is rendered weaker than those rated 'AA' and 'AAA'.
BBB	An issuer/issue with a 'BBB' credit rating is classified as adequate rating by CRA when compared to its peers. The issuer/issue is influenced by changes in the environment and economic conditions. These changes can affect the debt servicing capabilities to an extent that is rendered weaker than those rated 'A', 'AA' and 'AAA'.
<i>Speculative Grade</i>	
BB	An issuer/issue with a 'BB' credit rating is classified as a less than adequate rating by CRA when compared to its peers. The issuer/issue is strongly influenced by changes in the environment and economic conditions. This could lead to deterioration in an issuer/issue's capacity to meet its financial obligation to an extent that is rendered relatively weaker than the ones rated under the Investment Grade.
B	An issuer/issue with a 'B' credit rating is classified as a weak rating by CRA when compared to its peers. The issuer/issue could suffer impairment in its debt service capacity due to changes in the environment and economic conditions. Their willingness to service debt obligations could also get subdued.
CCC	An issuer/issue with a 'CCC' credit rating is classified as a very weak rating by CRA when compared to its peers. The issuer/issue generally has lower tolerance towards unexpected swings in the environment and economic conditions. As a result, their debt servicing capacity is dependent upon favorable environment and economic conditions.
CC	An issuer/issue with a 'CC' credit rating is classified by CRA as a rating with a very high default probability when compared to its peers. The issuer/issue generally has fragile and uncertain cash flows, as well as other factors, making them very vulnerable to nonpayment.
C	An issuer/issue with a 'C' credit rating is classified as on the verge of default by CRA when compared to its peers. The issuer/issue is extremely susceptible to breaching its debt covenants and the likelihood of them filing for bankruptcy is very high. Hence, they become highly qualified for nonpayment.
R	An issuer is under regulatory supervision due to its financial situation. During the regulatory supervision, the regulators can favor some obligations over others or issue the payment of some obligations and not others. (Rating applicable to issuers only)
SD	An issuer has selectively defaulted due to failure in payment within the due date. (Rating applicable to issuers only)
D	An issuer/issue with a 'D' credit rating has defaulted . The issuer/issue failed to pay its obligation within the due date even if the applicable grace period has not expired. However, this does not apply if there is evidence that such payments will be made during the grace period. The 'D' rating would also be assigned to an issuer filing for bankruptcy or taking similar actions.
NR	An issuer/issue is not rated because either a rating wasn't requested, lack of sufficient information, or CRA does not rate the issuer/issue as a matter of policy.

* Environment and economic conditions, such as political, business, financial, commercial and demographic factors.

Short-Term Credit Ratings

<i>Investment Grade</i>	
S-A1	An issuer/issue's capacity to meet its financial commitment is at its highest .
S-A2	An issuer/issue's capacity to meet its financial commitment is strong . It is, however, susceptible to adverse economic conditions.
S-A3	An issuer/issue's capacity to meet its financial commitment is satisfactory due to adverse economic conditions.
<i>Speculative Grade</i>	
S-B	An issuer/issue's capacity to meet its financial commitment is weak . It faces major ongoing uncertainties that could impact its financial commitment.
S-C	An issuer/issue's capacity to meet its financial commitment is very vulnerable to non-payment . It is dependent upon favorable business, financial and economic conditions to meet its financial commitments.
S-D	An issuer/issue is in payment default . Issue is not made on due date and grade period may not have expired. The rating is also used upon the filing of a bankruptcy petition.

Additional Indicators to Credit Ratings

- + or -** The plus (+) and the minus (-) signs show relative positioning of an issuer/issue within the major rating categories. (Used in Long-Term Ratings only)

- CW** The **Credit Watch** placement indicates that CRA is *currently* considering changing the rating due to an event or deviation occurring that might affect the credit worthiness. Such events could be mergers, acquisitions, regulatory actions, etc. However, it is to be noted, that a placement on credit watch does not mean that a change in the rating is imperative. A watch could be positive, negative or affirmed.**

- CO** A **Credit Outlook** indicates the direction a rating is likely to move *over a one or two-year period*. An outlook reflects financial or other deviations that have not yet reached the level that would trigger a rating action, but which may do so if the trend continues. An outlook may be either stable, positive, negative, or evolving.**

- WR** A **Withdrawn Rating** signifies the removal of a rating on either the issuer or the issue being rated. A withdrawal could be due to inadequate information, bankruptcy, reorganization, liquidation, certain business reasons, or an issue or obligation reaching its maturity.***

- SR** A **Suspended Rating** signifies the rating being placed on hold at an intermediate stage before the occurrence of a withdrawal. A suspension could be due to the issuer failing to provide information required for the rating process or revision.

- (pi)** This modifier is appended to a rating solely based on **public information**.

** Credit Watches and Outlooks:

Credit Watch

- Positive** indicates a potential upgrade in the rating.
- Negative** indicates a potential downgrade in the rating.
- Evolving** indicates rating may be raised, lowered, or affirmed.

Credit Outlook

- Stable** indicates a rating is not liable to change over a one or two-year period.

Positive indicates a possibility of an upgrade in the rating over a one or two-year period.

Negative indicates a possibility of a downgrade in the rating over a one or two-year period.

Evolving indicates a possibility of the trend having conflicting elements, both positive and negative.

It is to be noted that ratings that are not on Credit Watch or Outlook can be upgraded or downgraded if circumstances warrant such an action.

*****Reasons for assigning Withdrawn Rating (WR):**

- *Inadequate Information:* A rating can be withdrawn due to lack of insufficient information to assess the creditworthiness of an issuer/issue effectively. This would typically hold in situations where the issuer declines to provide information requested by CRA and CRA cannot otherwise obtain the necessary information through other public means.
- *Bankruptcy/Reorganization/Liquidation:* If an issuer/issue defaults, goes bankrupt, goes into reorganization or is liquidated, CRA would no longer have a reason to maintain the issuer/issue's rating.
- *Business Reasons:* CRA can withdraw a rating for reasons other than bankruptcy or inadequate information. In this situation, CRA will weigh the market needs against the cost of maintaining and monitoring the rating.
- *Maturity of Obligation:* A rating is withdrawn when the rated obligation has matured.

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