

VIS

RATINGS

CORPORATE RATING METHODOLOGY

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SCOPE OF CRITERIA

The criteria 'Corporate Rating Methodology' applies to a wide range of non-financial corporate issuer / entity ratings conducted by VIS Credit Rating Company Limited (VIS). Entity ratings reflect the overall ability and willingness of a company to repay its senior unsecured creditors while debt 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 vis-à-vis the unsecured creditors.

It is important to recognize that rating is an opinion on the overall ability and willingness of a company to make timely payments and the rating bands denote the relative risk associated with the ratings. Rating is not a guarantee against loss. A rating does not constitute a recommendation to purchase, sell, or hold a particular security. In addition, a rating does not comment on the suitability of an investment for a particular investor.

SUMMARY OF CRITERIA CHANGES

The fundamental criteria as outlined in 'Rating Methodology - Industrial Corporates' dated April 2019 remains the same with no changes to the ratings framework itself. This document aims to lay out in more detail the key areas of assessment when reviewing corporate credit ratings and provides additional guidance on the relevant factors within the existing framework.

As the ratings universe within the VIS portfolio continues to expand, it also allows us to deepen our sector specific knowledge, outside of the listed companies' universe, for which VIS already maintains a robust database. Sectoral Research are regularly disseminated in the Sector Updates posted in the Knowledge Center on the VIS website.

AN OVERVIEW OF RATINGS FRAMEWORK

VIS ratings framework has two broad components: (A) Business Risk and (B) Financial Risk, with several sub-factors. Each area is assessed during the ratings process and the individual assessments are combined to arrive at the final rating. Weaknesses in one area may be offset by strengths in another or vice versa. While some factors such as financial ratios have clearly articulated benchmarks for each rating band, some areas require subjective assessment; this makes rating as much an art as a science.

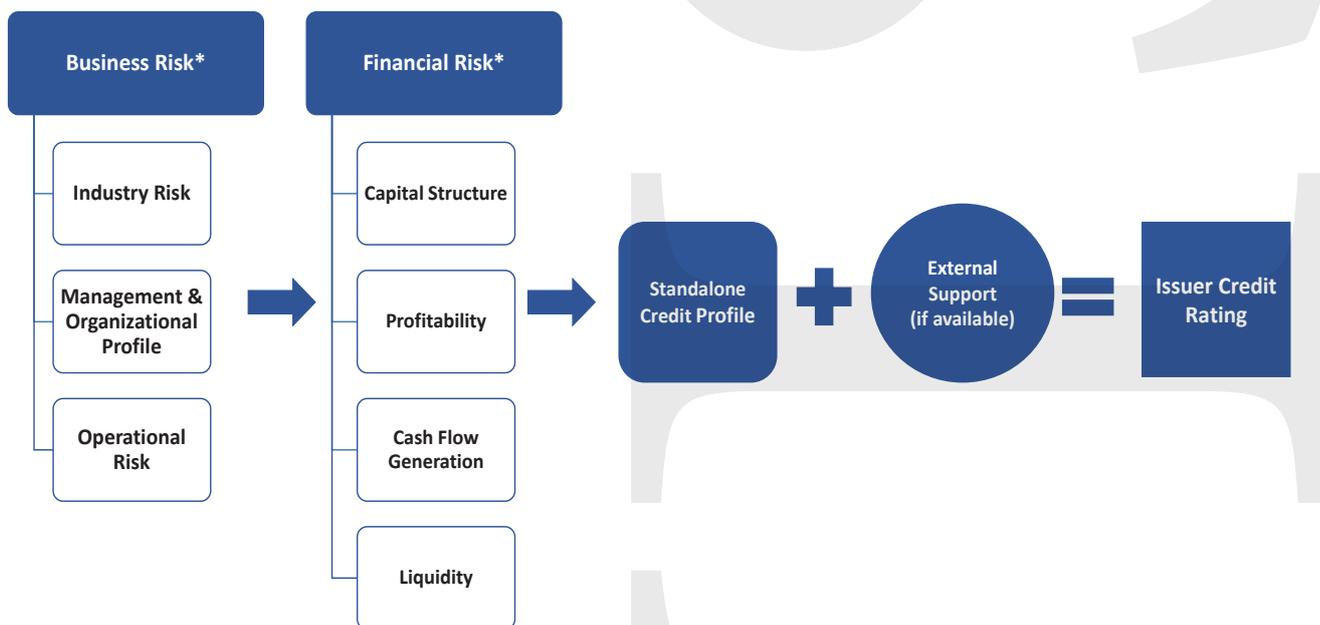
Through several years of experience, VIS has established weightages for the different rating factors. However, these weightages are subject to change over time and across industries. For entities operating for 5 years or more, it is recommended to allocate higher weight of up to 60% to financial risk, as matured operational dynamics and consistent financial results are expected from such companies. On the other hand, a higher weight for business risk is recommended for entities with shorter performance history.

The **Business Risk** assessment itself is performed at two levels; first at the industry level and then at the company specific level. The industry risk assessment focuses on the degree of cyclicity and the strength of competitive forces along with the extent of capital intensity, vulnerability to technological change and level of regulatory interference in the industry.

At the company specific level, business risk analysis includes management quality assessment, organizational structure, and operational risk factors. The objective of this analysis is to ascertain the strength of a corporate entity's business model, franchise value, diversity, competitive advantage and adequacy of operational systems, together with a review of quality of management and organizational structure.

Financial Risk analysis includes an appraisal of the historic and projected financials, risk entailed by the capital structure, level of profitability and, adequacy of cash flows to meet operational requirements and debt servicing obligations. Financial statements may be re-casted to assess the company’s performance over a timeline. The projected financials are studied for management’s expectations regarding future economic environment and are also sensitized for different scenarios to determine 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.

Finally, ratings take into account the external support available to the entity and may be enhanced on the basis of the nature of support from sponsors / shareholders, associated companies etc. and the relative credit standing of the supporting entity.



**Weightages assigned according to stage of industry/entity life cycle*

RATING METHODOLOGY- STANDALONE RATINGS

Our assessment model is based on some key factors, qualitative and quantitative, which may further be broken down into sub-factors to comprehensively capture the rating drivers.

A. BUSINESS RISK ASSESSMENT

Industry risk along with operational risk and management & organizational profile of a specific company determines mainly the business risk of an entity. 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.

BUSINESS RISK SUB-FACTORS
Industry Risk
Management & Organization Profile
Operational Risk

i. Industry Risk

As mentioned earlier, rating analysis begins with an assessment of the environment in which the company operates. The industry risk assessment provides guideline for rating ceiling of individual entities within a given industry. For example, given the stage of the industry life cycle of the jute sector, ratings in the sector may not breach “A” band, regardless of how conservative the financial risk profile at a point of time may be. On the other hand, certain industries may feature strong growth prospects, robust margins and flexibility in timing and amount of capital outlays – such as the pharmaceutical sector. While all companies in sectors with such traits may not have high ratings, but the strong industry fundamentals provide cushion against financial risks.

INDUSTRY RISK SUB-FACTORS

Cyclicality

Competition

Capital Intensity

Technology Risk

Regulatory Framework

Energy Sensitivity

VIS analyzes the dynamics of the business to determine the degree of **cyclicality** in a given business. Corporate entities are said to be highly cyclical when financial performance fluctuates significantly because of changes in the economic environment. VIS categorizes all industries for cyclicality and other sub-factors on a spectrum of High to Low risk. In an economic boom when consumer confidence and incomes are high, highly cyclical industries such as automobiles will experience increased sales, while sales usually suffer during economic downturns as people try to save money on large expenses. Similarly, steel manufacturers do well when the economy is doing well. Vibrant economy triggers more construction thereby resulting in more demand for steel. When the economy is in depression, there is austerity all around resulting in fewer construction activities and hence subdued performance of steel companies.

Commodity based industries are also prone to swings. For example, companies in the oil sector remain vulnerable to changes in international oil prices. Even the strongest players in the industry are exposed to fluctuations in margins and profitability due to changes in commodity prices. Conversely, some industries are more stable. They demonstrate steady demand growth and are resilient to economic expansion as they are to economic recession. Consumer goods sectors such as soaps, detergents, food items and pharmaceutical industry all exhibit low cyclicality.

VIS evaluates industries through their cycle. While rating through the cycle, it is possible that during economic upturns, certain ratings may appear depressed and vice versa; however, it is the ability of a company to weather potential downturns that will determine its long-term rating. As long as reversal in performance can reasonably be expected following a downturn, there may be no need to lower the ratings during the downturn.

Financial flexibility and liquidity are important considerations as cash can accumulate and be consumed very rapidly in cyclical industries. Generally, companies in cyclical industries accumulate cash during the boom cycle to provide a buffer during the downturn. The strength of the cash flows 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 breakeven level to maintain or increase market share which may result in unsustainable losses for the higher cost producers.

It is also important to understand the timing and level of capital expenditures in cyclical industries. Generally, capacity increases come near the peak of the cycle on an industry-wide basis. Whether demand will remain as robust till the time the new capacities come online becomes critical and may be difficult to predict. For instance, the Pakistan cement industry had tripled its capacity from 15 million tons in 2001 to 45 million tons in 2009. Unfortunately for the industry, that

expanded capacity and the associated debt payments came online right after the economic crash of 2008, which resulted in a painful few years for the industry that saw depressed profits and companies struggled to repay their debts.

Analysis of the **competitive factors** affecting an industry is also a key consideration in assessing industry risk. Competitive risk may be analyzed through the effectiveness of **barriers to entry, risk of substitution and prospects for growth**. Low entry barriers, competition from other industries or from alternative technologies within the industry and prospect of declining revenues or rapid growth in an early industry age can be major elements of risk. In the domestic context, fertilizer industry is categorized as low risk with high barriers to entry, low risk of substitution and moderate growth prospects.

Capital intensity in terms of initial capital outlay as well as maintenance or expansionary capex, can increase industry risk especially for those with a long-term return horizon. Financial strength and access to funds becomes an important determinant for supporting long-term growth in such industries. For example, automobile manufacturing is considered a capital intensive industry with heavy capital expenditure required for facilities, infrastructure, and manufacturing equipment. Power sector also requires large outlays and therefore capital intensity is rated as a high risk factor for players in this sector.

Changing technology and consumer preferences makes some industries obsolete more rapidly than others, requiring constant capital investment. This vulnerability to **technological change** is more evident in certain industries such as information technology, telecommunication and consumer durables. The technology inherent in an industry, including the industry's rate of innovation or the rate of a product's obsolescence, creates an expectation from customers concerning the development of new products. This requires skilled employees and an effective innovation process which may also act as a significant hurdle for many companies.

Regulatory framework in terms of licensing, approvals, tariffs, taxation, environmental regulations and price controls, is analyzed since it affects business strategy and future performance. If the regulatory environment is overly restrictive, it may hamper industry growth potential. On the other hand, balanced regulations establish a safety net for operators in the industry enhancing their financial performance. Margins in the pharmaceutical industry remain constrained due to price regulations by the government. In view of this, the regulatory framework is rated as a high risk factor for the pharmaceutical industry. 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.

Another factor affecting rating is the sensitivity of the industry to **energy requirements**. To determine future profitability of industries such as cement and steel that have high energy requirements constituting a sizeable portion of their input cost, an analysis of uninterrupted supply of energy becomes critical.

The industry risk assessment 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, market share of the entity and its sustainability over the long-term needs to be assessed. Similarly, if the industry has huge capital requirements, sponsors' financial strength and company's ability to access capital assumes greater importance.

When a company has units operating in multiple sectors, each business unit is separately analyzed. An overall industry risk assessment is arrived at by weighting each business unit as per its importance to the overall organization. The potential benefits of diversification, which may not be apparent from the additive approach, are then considered. In such a business setup, the management's ability to run diverse business operations is one of the most critical factor in addition to the industry specific challenges posed by each sector in which the company participates.

INDUSTRY RISK	AUTOMOBILE	CEMENT	FERTILIZER	OIL & GAS-REFINERIES	PHARMA	POWER-GENERATION	SUGAR	TELECOMMUNICATIONS
CYCLICALITY	High	High	Low	High	Low	Low	High	Low
COMPETITION	Low	Medium to Low	Medium to Low	Medium to Low	Low	Low	Medium to Low	Medium to Low
CAPITAL INTENSITY	High	High	High	High	Medium to Low	High	Medium	High
TECHNOLOGY RISK	Medium	Low	Low	Medium	Low	Medium	Medium	High
REGULATORY FRAMEWORK	Medium	Medium to Low	High to Medium	High	High	High	High	High
ENERGY SENSITIVITY	Medium	High	Medium	High	Low	Medium to Low	Low	High
OVERALL INDUSTRY RISK	Medium	Medium	Medium to Low	High to Medium	Medium to Low	Medium to Low	Medium	Medium

ii. Management & Organizational Profile

The credibility of the management is evaluated by the convergence of the management strategy and established business goals and its performance against those objectives. Business performance that is consistent with plans and objectives reflects positively on the management. VIS also analyzes the extent to which good performance is a result of good management, or achieved despite muted management! This becomes more apparent with results across business cycles.

MANAGEMENT RISK SUB-FACTORS

- Organizational Structure
- Management Information Systems
- Internal Controls

Management meetings are an integral component of the ratings exercise which allow VIS team to understand the profile of the team beyond what is reflected in numbers and plans. 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 succession planning, heavy orientation towards family versus professional management, indistinct management structure, too much interference by the board in day-to-day operations, absence of delegation, etc. become rating constraints. The formulation of a vision by the top management and its communication at all levels is 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.

The legal structure of a company also has a strong bearing on the ratings. Sole proprietorships and partnerships generally lack appropriate governance and reporting mechanisms which may affect credit ratings as operational risk for such entities is generally higher. Key man risk is more prominent in sole proprietorships, making succession planning analysis more pertinent. Similarly, due to unlimited liability, ring fencing of personal and business assets and set-off clauses particularly in case of litigation are also taken into account since eventual recovery prospect for lenders is given due weightage particularly for investment grade ratings.

If the composition of ownership is within a family structure, it is important to distinguish the management control from ownership structure, i.e., determining silent majority partners. Here the important element is to study the partnership agreement between the partners to understand the nature and extent of sharing of profit and loss, particularly between investing partners and the working partners to identify potential conflicts. Drawings by the partners over time need to be reviewed.

Other important factors in assessment of sole proprietors and partnership entities include the length of time the entity has been in operation and the educational, work experience and financial strength of controlling partners to support business operations, when needed. Historical track record through various business cycles is a key rating consideration.

Given the changing business dynamics and higher exposure to business risk, review frequency for sole proprietorships and partnerships may be higher compared to other corporate structures.

In limited liability companies whether listed or not, the extent of disclosures beyond minimum statutory requirements are important from risk assessment perspective. Also the voluntary adoption of governance best practices reflects positively on the objective and transparent approach of management.

Over time, assessment of **management information systems** for their adequacy together with a review of security features, disaster recovery and business continuity plans has become increasingly important for credit ratings. The level of IT integration with core operations may help determine the operational risks associated with the entity.

Internal controls play a critical role in both public and private companies because they not only safeguard an organization from financial loss but also assist in maintaining reliable financial reporting and maximizing effective operations. In a non-regulated industry, aggressive financial policies supported by a weak internal risk management framework are assessed as high risk.

iii. Operational Risk

The company’s product lines and its **market share** for each determines its ability to govern the market supply and, hence, output prices and may render it an advantage over other market players. VIS is cognizant that large shares are not always synonymous with industry dominance and if an industry is highly fragmented, even the large firms may lack pricing leadership potential. The textile industry is an example with several large players in the local market.

Companies with a **competitive advantage** generally allow for better margins and greater stability and control over output price. Leading brands are generally associated with superior pricing power and more stable earnings due to customer loyalty. Factors that could contribute to competitive advantage include the size of the entity, diversity of product or services, strategic location, demonstrated track record of superior service or product development, efficient distribution channels and significant intellectual property. While there is no specific criterion for size associated with different rating bands, size becomes an important factor if it is able to translate into market advantage. On the other hand, small companies can also possess competitive advantage in rare situations.

OPERATIONAL RISK SUB-FACTORS
Market Share
Competitive Advantage
Diversification
Access to Raw Material
Availability of Skilled Labor
Financial Flexibility
Growth Potential
Quality of Plant & Machinery
Regulatory issues
Availability of Substitutes

Diversification within the industry including variety in product lines and target markets in most contexts is viewed favorably as it mitigates business risk to operations. Larger well diversified companies generally have greater resilience due to their extensive resource base and stronger shields in terms of economies of scale, broader market access or customer base and large number of products which may enable them to better withstand economic downturns. 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.

Similarly, **the supply and price risk of raw materials** is assessed including the availability and nature of market of raw materials together with foreign markets, supplier relationships and substitutes, if any. For industries / companies dependent upon foreign markets for input supply or for sales, timely access and fluctuations in exchange rate pose major risks.

Over time, while labor union issues have become less common, **availability of skilled labor** has gained greater importance. For instance, technology has had profound effects on labor markets. Automation and digital advances have shifted labor demand away from routine low- to-middle-level skills to higher-level and more sophisticated analytical, technical, and managerial skills, which may be particularly relevant for industries such as engineering. The widening skills gap poses challenges for industries looking to move towards automation.

Financial flexibility is an important factor assessed by VIS in their ratings. Well-developed multiple banking relationships with access to full array of banking facilities and competitive pricing are viewed favorably. Lack of adequate working capital lines or asset mismatch is usually a negative factor in the case of small companies. Short term funding coverage against liquid assets of less than 1x is assessed as high risk.

Future earnings **growth potential** of the company and management plans for achieving that growth is of particular importance. At a first glance, a mature cash generating company may come across as favorable, however, if the company fails to achieve earnings growth over the long run, it can become a limitation. For rating purposes, companies with a lack of growth potential are considered high risk.

Business risk of manufacturing concerns is also affected by the **quality of plant and machinery**, capex spends and optimal utilization of existing capacity together with timely execution of expansion plans. This becomes more important for businesses that are technology dependent. Failure to keep up with competition in terms of technology upgrades may affect the ratings negatively.

Regulatory issues facing the company are duly weighed upon. Regular instances of non-compliance may signal higher operational risk impacting the rating assessment accordingly. Additionally, long standing legal disputes may create reputational issues for the company and ultimately result in financial costs.

The **availability of substitute products** can create more competition and decrease profit potential for the company. Examples of substitute products include sugar and artificial sweeteners, powdered milk and fresh milk and newspapers and digital news channels. The existence of substitute products may lead to greater marketing spend to protect market share which in turn may affect the operating profitability of the company; hence considered high risk for rating purposes.

B. FINANCIAL RISK ASSESSMENT

The financial risk assessment is primarily driven by an objective analysis of the company's performance against predefined benchmarks. In undertaking this analysis, VIS not only looks at the absolute levels of ratios, we also focus on trends and compare these ratios with those of competitors. Financial ratios are also evaluated in context of a firm's business risk. A company with stable cash flows and favorable business prospects may take up added financial risk than a company having higher business risk.

FINANCIAL RISK SUB-FACTORS

Capital Structure & Access to Capital

Profitability

Cash Flow Generation

Liquidity

i. Capital Structure & Access to Capital

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 vis-à-vis pure debt instruments as the dividend payments are made out of available profits, although they pose a greater strain on cash flows 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 intent 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 instruments may also carry options for conversion into equity; however, such is not accounted for until the event takes place as the interest payments are most likely fixed and payable by the company till conversion. Sponsor loan may also be considered as quasi-equity for rating purposes if the same is fully subordinated, interest free and repayable at the discretion of the company. Any un-provided losses or provisions are typically 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 shareholder's 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.

The capital structure of the company will also affect the profitability through the burden of debt servicing costs and unless matched by high gross margins is detrimental to financial risk profile. As the risk associated with the capital structure increases, lenders may demand greater compensation for their exposure.

VIS also examines company's **access to capital** 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. Also, limited domestic capital market may prevent a company from accessing local markets at reasonable rates or at times of stress. In case of outstanding lawsuit against a firm, suppliers or customers may be reluctant to continue doing business, and the company's access to capital may also be impaired, at least temporarily.

Large firms have substantial staying power and banks may have high level of exposure to these firms within their loan books. This may sometimes create a reluctance to abandon them during times of stress. On the other hand, liquidity may be pulled back more easily from small companies, even with previously committed lines. Investor perception and confidence in the company's viability is critical to have access to capital.

ii. Profitability

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

Sales stabilize and gross margins improve generally as a company moves towards value-addition, develops a differentiated product or a market niche, operates at higher capacity utilization and develops economies of scale. For commodities, there may be 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 or where prices are linked with international markets.

The profitability position of a company ultimately attests to the management quality and the value of the assets it holds. While the level of profitability in and of itself is important, the extent to which it translates into balance sheet strength by way of retention of earnings assumes greater importance in ratings process.

iii. Cash Flow Generation

Cash flow analysis is the single most critical aspect of all credit rating factors. While there is generally a strong relationship between profitability and cashflows, it is ultimately the free cashflows available for debt servicing that would enable a company to meet its debt obligations in a timely manner. The current and projected level of debt and debt servicing requirements vis-à-vis the cashflows generated annually are examined to determine the projected risk 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. At the level of Free Cash Flow (FCF), company's capability to service both regular and strategic expenditures is considered. Since the assumption is that of a going concern, VIS evaluates the company's ability to internally generate funds to modernize / maintain its assets as well as to obtain external funds for expansions.

The dividend paying capacity is evaluated at the level of Discretionary Cash Flow (DCF). A stable dividend payout history provides investors with confidence in their investment and encourages them to contribute to future capital requirements of the company.

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. VIS places significant emphasis on the level of cash flows from operations and its relation to the outstanding debt level, i.e. debt servicing coverage from cash flow.

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 cash flows can undertake a comparatively aggressive capital structure without largely compromising creditworthiness. For example, the cash flows 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, cash flows tend to be volatile and low debt leverage is preferable for the sector. On the other hand, the pharma industry exhibits comparatively stable demand patterns, and hence, stable cash flows, and can afford comparatively higher debt leverage.

iv. Liquidity

Liquidity remains a key consideration in VIS ratings as a company with the healthiest balance sheet and strongest competitive position can fail if it does not have appropriate levels of liquidity.

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 borrowings to finance inventories and then declines. For such industries, average liquidity position is assessed through the cycle as well as the maximum stress on the financials during the peak production time. It is important in assessing liquidity to determine the ease of marketability of the inventories. Products such as sugar, wheat, raw cotton, petrol, diesel, edible oils, etc. have ready marketability and can be offloaded to an extent to generate liquidity.

Other sources of liquidity on the balance sheet are also accounted for during the ratings process. These may include marketable investments that may readily be liquidated without loss in value. The availability of undrawn working capital lines, and the extent of unencumbered assets are factors considered in analyzing liquidity. Unencumbered assets can more easily be used to obtain additional facilities in times of need. Any reliance on investment sales, external support or any future liquidity events are all accounted for.

If a company is part of a business group, often access to borrowings at favorable terms for weak companies is also achieved through obtaining guarantees from the stronger group companies. It is also 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 or future potential commitments on behalf of weaker associated concerns and is accordingly reflected in the ratings.

Liquidity is an important factor for corporates more exposed to cyclicity. For sole proprietorship concerns, this assumes greater importance as their access to capital may be weaker than other corporate structures.

Working capital cycle also reflects on the liquidity of the company. The quality and concentration of trade debtors and the credit terms extended to them are evaluated, past track record of payments is analyzed, including its 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.

KEY RATIOS

Cash Flow & Coverage 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 Ratios: $(\text{FFO} + \text{financial charges paid}) / (\text{Periodic principal repayment} + \text{financial charges paid})$

Liquidity Ratios

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

Profitability Ratios

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

Capitalization

- Gearing: $\text{Borrowings} / \text{Net Worth}$
- Debt Leverage: $\text{Total Liabilities} / \text{Net Worth}$

RATING SUPPORT FACTORS

Entity ratings may be enhanced on the basis of the extent of support from sponsors / shareholders, associated companies, etc. VIS 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. VIS 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 in the past. 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 and timely 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. Details on government support are outlined in the 'Government Supported Entities' criteria.

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.

Debt instruments may be notched from entity ratings on considerations of asset protection and ranking. For details on notching, please see 'Rating the Issue' by VIS.

THE RATING SCALE & HORIZON

VIS Credit Rating Company Limited (VIS) conducts local currency credit ratings on national scale in which transfer risks by a sovereign are ignored and the Government of Pakistan is considered risk free i.e. AAA rated.

Along the rating spectrum, all ratings of BBB- and above are investment grade while ratings below BBB- are speculative grade. 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. Highly rated companies may have to sacrifice aggressive growth opportunities to maintain their overall risk profile.

The lowest rating 'D' stands for default and is the only rating which is based on the historical event whereby an obligor fails to make timely payment of principal and/or interest under contractual terms of any financial obligation. A distressed restructuring whereby lenders have diminished financial returns relative to the original obligation and the restructuring has the effect of allowing the obligor to avoid a bankruptcy or payment default is also rated 'D'. Default is generally recognized after the expiry of grace period. However, if VIS believes that the requisite payment will not be made in full by the due date (including the pre-specified grace period), then default may be recognized immediately.

VIS assigns both long-term and short-term issuer credit ratings, with these two being related and based on an assessment of future events to the extent that they are known or can be anticipated. Hence, the ratings are prospective in nature. 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 VIS does not expect a change in long-term performance. Short-term ratings are assigned to obligations which have a maturity time horizon of not beyond one year, while a long-term rating takes a longer analytical view of obligations maturing between 1-3 years. As the time horizons are different, one of the two may change independently.

The three outlooks 'Positive', 'Stable' and 'Negative' qualify the potential direction of the long-term assigned rating. An outlook is an assessment of the long-term trend of the rating direction based on certain plans or events within or outside the business environment of the issuer/issue which may be in the process of unfolding. An outlook is not necessarily a precursor of a rating change.

VIS 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. VIS also designates direction 'Positive', 'Negative' or 'Developing', to ratings placed under 'Rating Watch'. This shows VIS's opinion regarding the likely direction of a rating placed under the 'Rating Watch' status; this however does not bind VIS 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'. A rating remains under Rating Watch till the time VIS consider that conditions which necessitated the Rating Watch are non-existent.

RATING SCALE & DEFINITIONS

Medium to Long-Term

AAA

Highest credit quality; the risk factors are negligible, being only slightly more than for risk-free Government of Pakistan's debt.

AA+, AA, AA-

High credit quality; Protection factors are strong. Risk is modest but may vary slightly from time to time because of economic conditions.

A+, A, A-

Good credit quality; Protection factors are adequate. Risk factors may vary with possible changes in the economy.

BBB+, BBB, BBB-

Adequate credit quality; Protection factors are reasonable and sufficient. Risk factors are considered variable if changes occur in the economy.

BB+, BB, BB-

Obligations deemed likely to be met. Protection factors are capable of weakening if changes occur in the economy. Overall quality may move up or down frequently within this category.

B+, B, B-

Obligations deemed less likely to be met. Protection factors are capable of fluctuating widely if changes occur in the economy. Overall quality may move up or down frequently within this category or into higher or lower rating grade.

CCC

Considerable uncertainty exists towards meeting the obligations. Protection factors are scarce and risk may be substantial.

CC

A high default risk

C

A very high default risk

D

Defaulted obligations

Rating Watch: VIS places entities and issues on 'Rating Watch' when it deems that there are conditions present that necessitate re-evaluation of the assigned rating(s). Refer to our 'Criteria for Rating Watch' for details. www.vis.com.pk/images/criteria_watch.pdf

Rating Outlooks: The three outlooks 'Positive', 'Stable' and 'Negative' qualify the potential direction of the assigned rating(s). An outlook is not necessarily a precursor of a rating change. Refer to our 'Criteria for Rating Outlook' for details. www.vis.com.pk/images/criteria_outlook.pdf

(SO) Rating: A suffix (SO) is added to the ratings of 'structured' securities where the servicing of debt and related obligations is backed by some sort of financial assets and/or credit support from a third party to the transaction. The suffix (SO), abbreviated for 'structured obligation', denotes that the rating has been achieved on grounds of the structure backing the transaction that enhanced the credit quality of the securities and not on the basis of the credit quality of the issuing entity alone.

Short-Term

A-1+

Highest certainty of timely payment; Short-term liquidity, including internal operating factors and /or access to alternative sources of funds, is outstanding and safety is just below risk free Government of Pakistan's short-term obligations.

A-1

High certainty of timely payment; Liquidity factors are excellent and supported by good fundamental protection factors. Risk factors are minor.

A-2

Good certainty of timely payment. Liquidity factors and company fundamentals are sound. Access to capital markets is good. Risk factors are small.

A-3

Satisfactory liquidity and other protection factors qualify entities / issues as to investment grade. Risk factors are larger and subject to more variation. Nevertheless, timely payment is expected.

B

Speculative investment characteristics; Liquidity may not be sufficient to ensure timely payment of obligations.

C

Capacity for timely payment of obligations is doubtful.

(blr) Rating: A suffix (blr) is added to the ratings of a particular banking facility obtained by the borrower from a financial institution. The suffix (blr), abbreviated for 'bank loan rating' denotes that the rating is based on the credit quality of the entity and security structure of the facility.

'p' Rating: A 'p' rating is assigned to entities, where the management has not requested a rating, however, agrees to provide informational support. A 'p' rating is shown with a 'p' subscript and is publicly disclosed. It is not modified by a plus (+) or a minus (-) sign which indicates relative standing within a rating category. Outlook is not assigned to these ratings. Refer to our 'Policy for Private Ratings' for details. www.vis.com.pk/images/policy_ratings.pdf

'SD' Rating: An 'SD' rating is assigned when VIS believes that the ratee has selectively defaulted on a specific issue or obligation but it will continue to meet its payment obligations on other issues or obligations in a timely manner.



Faheem Ahmad

*President & CEO, VIS Credit Rating Company Limited
Founder, VIS Group
Chairman, Association of Credit Rating Agencies in Asia*

Mr. Ahmad possesses 30+ years experience in financial risk assessment with focus on Islamic finance, venture capital and general management. He has top level management experience at international level in the fields of credit ratings, Islamic and conventional financial risk assessment modeling, industrial management and construction engineering. Mr. Ahmad is an active participant at international forums on Credit Ratings. He obtained his B.S in Civil Engineering from NED University of Engineering and Technology, Karachi. He also has Masters Degrees in Engineering and Business Administration from USA.



Sobia Maqbool

Advisor

Sobia Maqbool is a risk specialist with over fifteen years of experience in Pakistan & the Middle East. She has been engaged in the credit ratings of a broad spectrum of banks & corporates in addition to sovereigns, in multiple countries. Her engagements with regulators have paved the way for improved risk assessments in various markets. More recently, she was engaged with a think tank and engaged in matters of public policy. Sobia has done her MBA from the Institute of Business Administration and MPA from the Harvard Kennedy School. She was also a recipient of the Fulbright Scholarship.



Sara Ahmed

Director

Sara Ahmed possesses 17+ years of experience in financial risk assessment and credit structuring. She has worked in Corporate Banking & Risk Management functions locally as well as internationally. Sara has been involved in the entity ratings of numerous corporate organizations as well as financial institutions besides being part of the Methodology and Criteria Development team. She holds a Master's degree in Business Administration from the Institute of Business Administration, Karachi (2001).

Jahangir Kothari Parade (Lady Lloyd Pier)
Inspired by Her Excellency, The Honorable Lady Lloyd, this promenade pier and pavillion was constructed at a cost of 3 Lakhs and donated to the public of Karachi by Jahangir Kothari to whose generosity and public spirit the gift is due. Foundation stone laid on January 5, 1920. Opened by Her Excellency, The Honorable Lady Lloyd on March 21, 1921.

Dome: A roof or vault, usually hemispherical in form. Until the 19th century, domes were constructed of masonry, of wood, or of combinations of the two, frequently reinforced with iron chains around the base to counteract the outward thrust of the structure.

Origins: The dome seems to have developed as roofing for circular mud-brick huts in ancient Mesopotamia about 6000 years ago. In the 14th century B.C. the Mycenaean Greeks built tombs roofed with steep corbeled domes in the shape of pointed beehives (tholos tombs). Otherwise, the dome was not important in ancient Greek architecture. The Romans developed the masonry dome in its purest form, culminating in a temple built by the emperor Hadrian. Set on a massive circular drum the coffered dome forms a perfect hemisphere on the interior, with a large oculus (eye) in its center to admit light.



*Jahangir Kothari
Parade*

National Excellence, International Reach

VIS Credit Rating Company Limited is committed to the protection of investors and offers a blend of local expertise and international experience to serve the domestic financial markets.

With its international reach, VIS is positioned to aim for an international mark. In this regard, the global experience of our international affiliates and partners have been invaluable towards adding depth to our ongoing research endeavors, enriching us in ways, that enable us to deliver our responsibilities to the satisfaction of all investors.

The edifice of the Jahangir Kothari Parade has stood proudly through the years and is a symbol of our heritage. Its 'Dome' as the most stable of building structures, exemplifies architectural perfection. Committed to excellence, VIS continues its endeavor to remain an emblem of trust.

VIS Credit Rating Company Limited

International Affiliates

Islamic International Rating Agency - **Bahrain**
Credit Rating Information & Services Ltd. - **Bangladesh**
Borhan Credit Rating Company Ltd. - **Iran**

International Collaborations

Japan Credit Rating Agency, Ltd. - **Japan**
China Chengxin International Credit Rating Company Limited - **China**

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