

# VIS

Credit Rating Company Limited

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## CONSTRUCTION INDUSTRY RATING CRITERIA

### Table of Contents

RATING METHODOLOGY.....	3
1) INDUSTRIAL INFRASTRUCTURE:.....	3
2) REAL ESTATE PROJECT:.....	3
3) CIVIL INFRASTRUCTURE:.....	4
EXHIBIT I: RATING FACTORS.....	4
RATING FACTORS.....	5
MARKET SHARE.....	5
DIVERSITY.....	5
MANAGEMENT.....	5
FINANCIAL STRENGTH.....	5
LEGAL.....	5
TEAM.....	6
BUILD, OPERATE & TRANSFER.....	6
FINANCING.....	6
EXHIBIT II: RISK FACTORS.....	7
RISK FACTORS.....	7
COMPLETION RISK.....	7
OPERATING RISK.....	7
DEMAND RISK.....	8
ESG RISK.....	8
RATING SCALE & DEFINITIONS.....	8

Construction industry plays a very important role in the economic development of any country. In fact, the performance of this industry is one of the key indicators used in many developed countries to monitor the state of the economy. The reason for using construction industry data is that trends in this industry generally mirror activity in the economy as a whole. Apart from the direct benefits of the creation of new housing and infrastructure, construction activity yields several other benefits.

A close examination of the dynamics of this industry highlights its critical role in economic development:

- Foremost, any construction activity, whether it is related to infrastructure or industrial development or housing or recreation, represents a very long-term investment and hence a significant commitment by the investor to the economy he is investing in. Since construction involves the creation of immovable assets, it represents a far more permanent creation of wealth.
- Secondly, the construction industry is a major end consumer for several capital-intensive industries such as steel and cement and for smaller industries such as paints, pipes, wiring etc. Thus, a robust construction industry spurs economic activity in a large number of upstream industries, therefore attracting investment in these sectors and creating employment.
- Thirdly, construction activity by itself is highly labor intensive, requiring large number of skilled, semi-skilled and unskilled personnel. Again, in developing economies, where unemployment tends to be a concern, this is an invaluable advantage.

In view of the above factors, it is not surprising that investment in construction projects, either directly by the government itself or through encouragement of private sector activity (or even a combination of both), has been a popular tool for governments to boost economic activity.

## RATING METHODOLOGY

The entities operating in this sector can be broadly categorized into developers/contractors (these terms are used interchangeably) who generate revenue by executing projects falling under the following main categories:

### 1) INDUSTRIAL INFRASTRUCTURE:

This involves construction work associated with establishing and expanding manufacturing facilities across various industries. Key sectors like steel, chemical, textile, cement, and other several sectors.

### 2) REAL ESTATE PROJECT:

This category focuses on construction projects catering to the needs of the real estate market like commercial and residential buildings, construction of office buildings, residential complexes, housing projects, and mixed-use developments. Specialized Infrastructure may include hospitals, shopping malls, educational institutes, and other specialized structures to meet the demands of urbanization and modern living.

### 3) CIVIL INFRASTRUCTURE:

This category encompasses a wide range of projects aimed at developing and improving public infrastructure like projects related to roads, bridges, tunnels, railways, ports, and civil aviation infrastructure. Large scale projects like construction of dams, power plants, and other utilities essential for public services and infrastructure development.

Overall, these entities play a crucial role in shaping the physical infrastructure and urban landscape, contributing to economic development and societal well-being.

Before commencement of the analysis of individual construction projects being executed by the contractors/developers being rated, VIS would carry out an in-depth review of the abilities of the developer itself.

This would typically cover a study of the track record of the developer to see the performance of past projects, particularly with a view to examining project initiation and monitoring procedures and the availability of the resources required to implement these procedures, including areas such as criteria for pre-qualification of other project participants, evaluation of tender documents and performance guarantees, procedures for awarding contracts, quality controls and ability to monitor the progress of the various project participants in relation to their respective deadlines. The developer must also be in a position to deal with potential non-technical issues pertaining to the project such as obtaining of permits, etc.

## EXHIBIT I: RATING FACTORS



## **RATING FACTORS**

### **MARKET SHARE**

While evaluating a contractor, VIS also takes into consideration the company's competitive advantage. The competitive advantage of company can be gauged by the size and market share of the company. The size in revenue base and unit sales volume is assessed to know the strength of a developer. The order pipeline is reviewed to ascertain revenue visibility and viability of project execution.

### **DIVERSITY**

Competitive advantage also stems from geographic, product and price segment diversity. A developer/contractor with high geographic diversity across different markets faces fewer cyclical downturns and secular changes that may affect performance as compared to those that have limited presence in the region in which they operate. In product type diversity, the developer proposal is weighed on the type of offering including civil, industrial and real estate projects like high-rise commercial, residential, offices, malls, etc. Moreover, price segment diversity is also important as high-end consumers may be less impacted by economic slowdown and shield company revenues.

### **MANAGEMENT**

Management quality is assessed through evaluating factors such as industry experience, execution track record, risk tolerance levels and accuracy of financial disclosures. Seasoned professionals with extensive prior experience provide confidence in execution capabilities and strategic planning. Firms with a successful track record in delivering the large-scale, complex projects demonstrate reliable project monitoring procedures and resource availability.

Management's willingness to undertake higher risk projects indicates confidence in successful execution. Reliability of the financial reporting and disclosures provides insights into overall corporate governance and risk management practices which in turn provide perspective on transparency and compliance levels. Issues in any domain may translate into reputation impact, delays, and cost overruns.

### **FINANCIAL STRENGTH**

The financial strength of the developer (including potential impact of off-balance sheet contingent liabilities such as litigation and performance bonds) is considered along with an examination of the presence of any credit enhancing features e.g. guarantees, support of multilateral institutions, parent company support, etc. Such an analysis would typically emphasize on cash flow coverage's along with debt leverage and property value to loan ratios. Developers exhibiting a higher degree of financial flexibility would be able to achieve better ratings.

Analysis focuses on factors such as status of requisite approvals to estimate realistic timelines, firm commitment towards order execution to classify them as active or passive orders, credit quality of counterparties to evaluate payment reliability, and historic order inflow volatility to appropriately model future revenue projections.

### **LEGAL**

Once a basic assessment of the expertise and financial strength of the contractor/developer has been completed, our methodology calls for the evaluation of each individual project being undertaken by the contractor/developer at the time

of the rating along with any planned projects covered in the rating horizon. The first factor to be considered is the possession of clean title to the project property by the owner and consequently his ability to transfer the title onwards. If a project does not meet this criterion, the litigation risk alone arising from such a situation would be so high as to preclude the issuing of an investment grade rating to the entity.

## **TEAM**

The next factor is the participant risk of the project. This is a large area covering construction contractors, equipment suppliers, architects and any other independent experts involved in the project (e.g. engineering consultants, surveyors etc.). The construction contractors are examined for their in-house design capability, proven ability to meet deadlines, and the availability of the right team for the project. Similarly, resource assessment is also carried out which involves matching project requirements outlined in the order pipeline with equipment/asset availability and specialized manpower to gauge execution capabilities.

Skilled manpower and specialty sub-contractor availability allows for estimating ability to execute diverse, complex projects. Benchmarking current orders against past executed projects provides perspective on capabilities. Other project participants are also evaluated with respect to their ability to deliver the required services in their area of expertise. Limited resources relative to project pipeline requirements can hamper timely execution through delays.

## **BUILD, OPERATE & TRANSFER**

In case of BOT projects, an additional factor of post-completion maintenance of the project is also considered. Internationally, specialist managers are appointed in order to ensure that the intrinsic value of the project does not deteriorate. This is very important from the point of view of the lending institutions as the project is usually the primary collateral securing the financing.

## **FINANCING**

Once the project viability is determined based on the above criteria, we commence the analysis of the financing of the project. Obviously, the greater the equity participation by the sponsor the more confidence will be generated. The external financing obtained for construction projects should generally be long-term in nature and ideally heavily back loaded even to the extent of a single bullet payment scheduled to coincide with the scheduled completion and sale of the project. In the case of BOT projects, the repayment schedule can be based on installments after an appropriate grace period covering the construction and commencement of commercial activity. Risks associated with public private partnership (PPP) projects and special purpose vehicle (SPVs) are evaluated through analyzing factors such as cost overruns, revenue shortfalls straining SPV finances, debt levels limiting ability to meet obligations and adequacy of the sponsor support as contingency. SPV cash flows are stress tested for fluctuations in costs, revenues, interest rates etc. to ascertain financial flexibility.

As can be seen, the risks associated with civil, industrial and real estate projects are varied and one or more risks may be realized during the course of any project. This is not unlike other green field projects, where the risk levels are also very high. Therefore, ratings for developers/contractors will tend to be constrained unless substantial external support is available or risk has been diversified in a way so as to mitigate some of the factors mentioned above.

### EXHIBIT II: RISK FACTORS



## RISK FACTORS

### COMPLETION RISK

Once the ability of the various participants to execute the given project has been established, VIS’ methodology calls for a study of the completion risk of the project. This is a critical part of the rating exercise because repayment schedules are generally tied to projected completion times. In order to assess the completion risk, the first step is the evaluation of the project schedule. Ideally, the project should be divided into several distinct parts, each of which has to be completed by a specific date. Enough room should be left in the schedule to cover for unforeseen events. Experienced sponsors and constructors can determine this flexibility by looking at previous projects and the nature of the project in hand. An appropriate mix of contractual bonuses and penalties must be used to reward timely work and discourage the missing of targets respectively. Also, there should be as little reliance as possible on external factors. As the number of such factors grows, the control of the project participants over timely completion diminishes. Completion risk levels are also determined by the engineering complexities associated with the project. The greater the complexities, the higher are the probability of difficulties faced in the execution stage and consequently the risk of exceeding the budgeted timeframe. Time overruns generally also cause cost overruns, the impact of which on a construction project is discussed below.

### OPERATING RISK

Timely completion by itself does not guarantee in any way the success of the project, as a significant operating risk also exists. Operating risk for construction projects basically takes two forms: quality and costs. Quality can in turn take the form of technical performance i.e. whether the engineering of the project is up to the desired specifications or aesthetics. In both cases, a failure to achieve the desired standard will either result in time and cost overruns or the value of the project being reduce for industrial/civil or real estate projects.

Operating cost risk implies that the project may be significantly over budget even while meeting the project specifications and time schedule. A cost overrun resulting from any of the two quality risks (or from delayed completion as discussed earlier) can pose significant problems to the project sponsor as it involves arranging of further financing, to be repaid out of the same inflow from the sale of the project, which is already being used to pay off the original debt. Therefore, depending on the extent of the cost overruns, the project viability may be adversely affected.

In order to understand the degree of operating risk, VIS takes an in-depth look at the feasibility study of the project. Our study involves a close look at the underlying assumptions in the feasibility and sensitizing these to determine the margin available in case of changes in key variables.

## DEMAND RISK

A significant demand risk is also present in any construction project, even though it is sometimes mitigated through advance bookings in case of real-estate projects. These have the double advantage of securing customers before completion of the project as well as reducing the amount of external financing required during the construction stage of the project. However, since such advance bookings are usually on an installment basis after a minimal down payment, this gives rise to credit risk due to the possibility of default on installments by the customer.

## ESG RISK

Environmental, Social and Governance (ESG) risks have started gaining importance across the globe and are increasingly influencing investment decisions. The companies may have to incur additional operational or capital costs towards mitigating these risks. VIS ratings analyze the impact of ESG risks on the credit profile of the developers by assessing the expected impact of these costs on the future earnings/revenue/cash flows of the entities. Environmental risk emanates from the disruption of economic resources while construction activities are under progress. Various construction projects, especially in the transportation and industrial segment may result in environmental pollution and ecological dislocation thereby necessitating requisite regulatory approvals. In absence of adequate approvals in place, projects may face time overrun thereby resulting in increased cost, blocking of funds and impacting the liquidity profile.

Construction being labor intensive activity has high social impact on overall employment generation but entails labor relations risks and other risks related to labor employment. Governance risk in an entity is determined by a host of factors, which includes and is not limited to the following, i.e. financial reporting, corporate practices, adherence to code of conduct, board composition, whistle-blower policies, investor relations, etc. The quality of financial reporting and adequacy of disclosures among others are also evaluated.

For credit ratings of developers/contractors, VIS used this criteria to analyze factors over and above the broad corporate rating methodology.

## RATING SCALE & DEFINITIONS

Rating scale and Definitions may be accessed at (<https://docs.vis.com.pk/docs/VISRatingScales.pdf>)





### Faheem Ahmad

President & CEO, VIS Credit Rating Company Limited  
 Founder, VIS Group Chairman,  
 Vice-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.



### Muhammad Abu Bakar

Group Head Research & Business Development

Muhammad Abubakar graduated from University of Engineering & Technology, Lahore in Dec 2000 with a Bachelor in Chemical Engineering. He also holds a Master's degree in Business Administration from Lahore University of Management Sciences (LUMS), June 2006. He began his professional career from Dawood Hercules Chemicals as a Trainee Engineer. Later, he joined Nimir Chemicals Pakistan Limited as an Assistant Production Manager, where he handled production and planning activities of the plant, for a period of two years. He then changed his career after his MBA, joined UBL as a Risk Analyst and worked there for about one and half year, carrying out credit analysis of commercial clients of the bank. In Jan 2008, he joined Standard Chartered Bank as a Relationship Manager and fulfilled the role of business development of their corporate clients. In June 2011, he got a chance to join Dubai Islamic Bank as a Unit Head Credit Approval and held the responsibility of credit evaluations and approvals for corporate clients of the central region. In Oct 2018, Abubakar joined VIS Credit Rating Company Limited as a Group Head Business Development-North. During this period, he looked after business development activities of the central and north region. He was promoted to Group Head Research & Business Development in Oct 2023 where he also looked after Research department in addition to countrywide business development activities.

## NATIONAL EXCELLENCE

## INTERNATIONAL REACH

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 genrosity 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.

**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 endeavour to remain an emblem of trust.

## INTERNATIONAL

## Affiliates

Islamic International Rating Agency – **Bahrain** – iira.com  
Credit Rating Information & Services Ltd. – **Bangladesh** – crislbd.com

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