## **JCR-VIS**

## REAL ESTATE DEVELOPERS



## Rating Methodology

The 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. This is because 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 will clearly highlight 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 than say investment in the stock market, which can flow out very quickly in case a country faces an economic downturn.
- 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 up-stream industries, therefore attracting investment in these sectors and creating employment.
- Thirdly, construction activity by itself is highly labour intensive, requiring large amounts of skilled, semi-skilled and unskilled personnel. Again, in developing economies, where unemployment tends to be a chronic problem, 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 looking to boost economic activity.

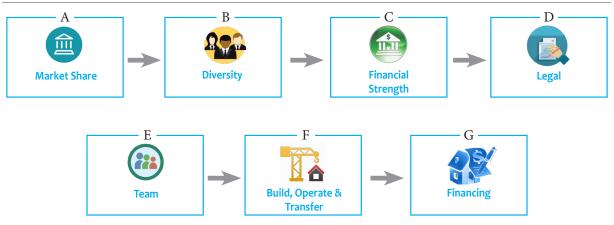
#### Rating Methodology

Before we elaborate our method of analyzing real estate developers it is necessary to define this term. For the purpose of this methodology a real estate developer is an entity whose primary aim is to build and sell a project or to function on a build, operate and transfer (BOT) basis. Hence, this definition is mainly limited to entities involved in the development of housing and commercial development projects, although it may also include infrastructure projects executed on a commercial basis.

Before commencement of the analysis of individual construction projects being executed by the real estate developer being rated, JCR-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 real estate 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 developer, JCR -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.

#### Diversity

Competitive advantage also stems from geographic, product and price segment diversity. A developer with high geographic diversity across different markets faces less 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 are weighed on the type of offering he is giving to the people including high-rise, residential, offices, shops, town houses etc. Moreover, price segment diversity is also important as high-end customers may be less impacted by economic slowdown and shield company revenues.

#### Financial Strength

Finally, the financial strength of the real estate developers (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, etc. Such an analysis would typically emphasize on cash flow coverage's along with debt leverage and property value to loan ratios. Real estate developers exhibiting a higher degree of financial flexibility would be able to achieve better ratings.

#### Legal

Once a basic assessment of the expertise and financial strength of the real estate developer has been completed, our methodology calls for the evaluation of each individual project being undertaken by the 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 real estate developer 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 real estate developer.

#### 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 most importantly the availability of the right team for the project. Similarly, other project participants are also evaluated with respect to their ability to deliver the required services in their area of expertise.

#### Build, Operate & Transfer

In case of BOT projects, an additional factor of post-completion maintenance of the project is also considered. Internationally, specialist real estate 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.

As can be seen, the risks associated with a construction project, and hence the real estate developer, are varied and one or more 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 real estate developers 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, JCR-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 i.e. whether the desired sensory affect has been created (the latter is more important in housing projects). In both cases, a failure to achieve the desired standard will either result in time and cost overruns or the sale value of the project being reduced.

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 badly affected.

In order to understand the degree of operating risk, JCR-VIS takes an in-depth look at the feasibility study of the project. Our study basically 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. 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.

### GRADING SCALE & DEFINITIONS: REAL ESTATE DEVELOPER GRADING

**PE1** Very strong project implementation capacity

**PE2++, PE2+, PE2** Strong project implementation capacity

PE3++, PE3+, PE3 Moderate project implementation capacity **PE4++, PE4+, PE4** Inadequate project implementation capacity

**PE5++, PE5+, PE5** Weak project implementation capacity

**Grading Watch:** 'Grading Watch' may be assigned to highlight identifiable grading events that necessitate reevaluation of the assigned grading. A 'Grading Watch' announcement means that the status of the assigned grading is uncertain and an event or deviation from an expected trend has occurred or is expected and additional information is necessary to take a grading action.

**Faheem Ahmad** President & CEO, JCR-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. He could be contacted at faheem@jcrvis.com.pk



Javed A. Callea

Advisor

Mr. Callea is a professional in the financial sector with over 35 years of experience mostly in the financial institutions with certain exposure to service and infrastructure sectors in Pakistan. He has held the position of Chief Ex-

ecutive of a leasing company for 10 years. His core areas of expertise cover leasing, development financing, project management, investment & merchant banking, strategic investment management and real estate.

Major financial institutions he worked for include Pakistan Industrial Credit and Investment Corporation, State Life Insurance Corporation, Bankers Equity, Crescent Leasing Corporation and Saudi Pak Ind. & Agri. Inv. Company. He has also served as Member Finance of Water & Power Development Authority of Pakistan and as member of the Inquiry committee on stock exchange crises in 2000 commissioned by the SECP. He earned his MBA degree from the Institute of Business Administration in 1974. 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.



Parade

#### National Excellence, International Reach

JCR-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, JCR-VIS is positioned to aim for an international mark. In this regard, the global experience of our principal, Japan Credit Rating Agency, Ltd. has 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, JCR-VIS continues its endeavor to remain an emblem of trust.

# JCR-VIS Credit Rating Company Limited

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