

JCR-VIS RATING METHODOLOGY

General Insurance

An Insurer Financial Strength (IFS) rating is an assessment of an insurance company's capacity to meet its contractual obligations that mainly constitute claims on insurance policies; timeliness of these payments is however not commented on as is the case in conventional entity credit ratings. The level of risk faced by an insurer is a function of the type of business being underwritten. An IFS rating entails an evaluation of the company's ability to bear that risk as reflected in the strength of its cash flows, its liquidity reserves, access to credit or capital and most importantly, the strength of its reinsurance arrangements.

As per JCR-VIS' general insurance methodology, insurance industry is subdivided into three segments based on their Relative Market Shares (RMS); large having RMS above 3.0x of 3-year trailing average industry premium, medium having a share between 0.75x and 3.0x and small having RMS of below 0.75x. Each segment has well defined benchmarks against which a company is analyzed.

Key factors that are considered in assessing financial strength of an insurance company include:



- Political Risk
- Economic Risk
- Financial System Risk
- Market Growth Aspects
- Regulatory Regimes



- Relative Market Share
- Product Suites
- Depth of Marketing Channels
- Geographical Diversity



- Capital Strength
- Underwriting Exposure
- Investment Portfolio
- Quality of Underwriting
- Claims Management
- Reinsurer Strength



- Compliance with Exposure Policies
- Impact of Exposures on Capitalization and Liquidity
- Financial System Risk
- Per Party Exposure Limit
- Soundness of Reinsurance Arrangements



- Relative Strength of Solvency Ratio
- Assessment of Liquid Assets



- Quality of Board
- Management Team
- Board Effectiveness & Independence
- Organizational Complexity

JCR-VIS analyses both the intrinsic fundamental characteristics of the insurer along with the environment in which the company operates. The existing legal and regulatory environment, the number and size of the players operating in the market, and the entry & exit barriers in effect, have a bearing on the opportunities that the company can capitalize upon, and threats it may encounter.

Company specific analysis includes a combination of quantitative and qualitative factors. Management expertise and strong internal controls eventually translate into a healthy financial position. Furthermore, ownership structure, business strategies and corporate thinking that drives the institution, are important determinants of an entity's prospects.

QUALITATIVE ELEMENTS

Board & Management

The strength of the sponsors and composition of the board and its committees are important features of a sound business. The profile of the board members may be a considerable advantage and may be gauged through their contribution to the company in terms of providing it a vision and being the main source of business strategy. JCR-VIS considers management quality and organizational structure a key element in the rating process since it is critical to the overall performance of a company. Team experience & competence, corporate structure and decision-making hierarchy are also looked into. A good management develops the company's competitive position and manages resources in a prudent manner.

Vision, objectives and strategies are viewed in relation to the existing macro environment. Evaluation of the management's strategies, operations, efficiencies and risk tolerance, as well as an insurer's competitive advantage in the marketplace will influence our opinion of future financial performance. Our analysis also considers whether vision cascades down to lower management, ensuring a high level of commitment. Details regarding succession planning are also taken into account to evaluate the extent of stability in the management hierarchy.

Controls & Risk Management

Insurance companies are normally exposed to a large number of risks, the exact quantum of which is not known at the inception of a policy. As such, it is vital for these companies to develop strong risk management systems, which can help identify concentration levels and assist in mitigating the risk of extraordinary losses. Internal audit systems should be comprehensive and reliable. Risk management involves diversifying sector exposures, minimizing single event risks and identifying recurrent loss areas. Management Information System (MIS) needs to be robust enabling the company to undertake scenario testing. While evaluating MIS, the extent of networking between branches, which may enable ready and immediate access to branch data, and the level of data backup and security are also taken into consideration.

Diversification of risks is considered to be a primary source of risk mitigation. Larger companies that demonstrate a spread of business in terms of business lines or geographic dispersion are less exposed to risks associated with particular types of exposures. The company's presence in different geographical areas, branch & agent network and its marketing strategy are also viewed to identify its growth potential. In captive insurance companies the evaluation of concentration related risks becomes even more important. In Pakistan, where not many large diversified conglomerates are present, small companies are often exposed to greater sectoral concentration.

Controls also involve the systems in place for managing the distribution channels. Quality of agreements with insurance agents, the checks & constraints imposed on the agents' business and timely monitoring of the same are important.

QUANTITATIVE ELEMENTS

An insurance company's ability to withstand shocks is usually affected by its market reach and the spread of business. Development of efficient internal systems and depth in management also requires an adequate resource base. Smaller companies are generally exposed to higher concentration risks emanating from a weak reinsurance arrangements and corresponding higher internal risk retention. These companies face greater competitive pressures and may not have easy access to external capital and liquidity support. These factors, if found to be present, will typically tend to constrain ratings. Individually, primary quantitative drivers of IFS ratings and key benchmarks for the same have been discussed below as part of this rating methodology.



Capitalization

Strong capitalization enables an insurer to better withstand large underwriting losses and minimize impact of volatility in investment income while also allowing management to take advantage of growth opportunities in the market. While the Insurance Ordinance 2000 has set minimum capital requirements (MCR) for insurance companies, meeting the MCR alone does not necessarily imply sufficient capital. Adequacy of capital is evaluated in the context of the segment-wise exposures and historical loss trends in these segments. JCR-VIS analyses the strength of an insurer's capital base through various leverage ratios measuring the level of business underwritten and technical reserves against the level of capitalization. The soundness of operating and financial leverage alongwith quantum of technical reserves and surplus are important rating factors.

While determining the level of capitalization, hidden reserves and impairments are also taken into consideration. Furthermore, composition of technical reserves is evaluated to assess the extent to which these are held against payable claims or unearned premiums. The Insurance Ordinance prescribes creating an additional 'premium deficiency reserve' if a time series analysis shows technical reserves have been insufficient, on an average, to meet losses net of reinsurance recoveries.

If a company is part of a larger group, any form of implicit or explicit support available from the sponsors and group serves as credit enhancement. For this purpose, strength of the sponsoring group as well as diversification of business lines is analyzed.

Liquidity

A general insurance company's liabilities contain an additional uncertainty factor; both, the timing and the amount of the liability are uncertain imposing additional liquidity requirements. A high level of internal cash generation enables an insurer to meet its need for cash without sale of its investments. The primary source of liquidity is the operating cash flows, while liquidation of the investment portfolio is considered to be a secondary source, necessitated only in the event of extraordinary claims. JCR-VIS forms an opinion about the health of the invested asset portfolio in terms of liquidity, impairment if any, concentration of exposure and returns. Quality and liquidity of an insurer's investment portfolio is assessed to determine the level of coverage against its insurance related liabilities. The solvency margin is also used to assess coverage against obligations. The Insurance Rules 2002 have guidelines for the admissibility of assets to determine the solvency margin of a company.

The level of insurance debt is evaluated as an indicator of the insurer's cash cycle and its relationship with, and dependence on its agents, co-insurers and re-insurers. Aging of insurance debt and its overall mix allows for an assessment of the quality and recoverability of these receivables. Lower levels of insurance debt as a proportion of gross premium are considered as indicators of adequate level of liquidity.

Earnings and Franchise Value

Profitability of an insurance company is a function of its underwriting and investment strategy. The choice of business segment, geographical outreach and diversification of underwritten risks are the key determinants of claim incidence, operating expenditure as well as the company's cash cycle. Large swings in business segments may indicate a shift towards riskier business lines and may be impelled by liquidity or growth related objectives. Conversely, a shift in focus may also be motivated by a need to minimize running costs or avoid excessive claim losses. Rapid premium growth, particularly for smaller, less diversified companies may indicate excessive risk undertaken. Sudden increments in premium written during any one year may be motivated by large losses from old policies, and need to be monitored closely.

A company's pricing strategy and whether it is in consonance with risks underwritten is also an important element affecting performance over the longer run and in assessing sustainability in earnings. Trends on claims and expenses are also assessed. Segment-wise analysis of claims is carried out to determine each business line's impact on overall profitability. To determine operating efficiency, business generation and operational costs are also evaluated in relation to the premium generated.

Investment income serves to dampen the stress on underwriting streams. Well-diversified and mature insurance companies often post underwriting losses, which are offset by returns on the investment portfolio. The quality, diversity and returns of different segments of the investment portfolio are important determinants of investment support to underwriting risk. They are therefore an area of interest, while assigning ratings.

Reinsurance

Reinsurance arrangements are integral to the mitigation of insurance risks. An insurer's relationship with its reinsurers and the financial standing of reinsurance companies on its panel are an important consideration in assigning ratings. Ratings of reinsurers assist in forming an opinion on their financial strength.

Reinsurance treaty terms determine the capacity of an insurer to take risks and changes in terms often indicate an insurer's track record of risk management. There are different kinds of covers provided by a reinsurer. Covers such as surplus, quota or excess of loss are most commonly used. These covers are negotiated for every business segment individually and are based on the company's expectations for losses in these segments. Certain exposures, e.g. terrorism cover, are also being negotiated by the foreign reinsurers and local insurance companies. As a result, dependence on higher rated reinsurers is increasing as the capacity of these reinsurers to meet claims obligations becomes critical. The international ratings of the reinsurers and soundness of negotiated treaties with them have a bearing on assignment of IFS ratings to the local insurers.

The reinsurers' performance is also indicated by the quantum and aging of reinsurance receivables. The extent of impairment is also determined to evaluate stress on liquidity. Timely cash collection is important, especially for smaller insurance companies, which may not have readily available liquidity to meet large losses.

An insurer's retention ratio determines the proportion of risk retained by the company. Ideally, an

insurer's own retention should be between 40-60% of gross premium. Unusually high retention levels could signal inadequate reinsurance protection, while low retention could hamper profitability. In companies with excess of loss (XOL) coverage for a significant portion of their business, the retention ratio would tend to be high. The adequacy of this cover can be assessed through a comparison between the treaty's protection level and average claim size over the period of assessment.

GENERAL INSURANCE RATIOS & DEFINITIONS

Underwriting

Gross Claims Ratio	Claims Expense / Premium Earned
Net Claims Ratio	Net Claims Expense / Net Premium Revenue
Cession	Reinsurance Ceded / Premium written

Capitalization

Gross Financial Leverage	Gross Technical Reserves ¹ / Adjusted Shareholder's Equity ²
Net Financial Leverage	Net Technical Reserves ³ / Adjusted Shareholder's Equity
Operating Leverage	Net Premium Revenue / Adjusted Shareholder's Equity

Liquidity

Insurance Debt to Gross Premium	Insurance Debt ⁴ / Premium Written
Liquid Assets to Technical Reserves	High Quality Liquid Assets / Net Technical Reserves
Liquid Assets to Gross Claims Outstanding	High Quality Liquid Assets / Provision for Outstanding Claims
Net Operating Cash Flow	Cash Flow from Operations + Dividend Income + Rental Income + Recurring Investment Income
Cash Premium Written	Premium Written - Reinsurance Ceded + Change in Outstanding Premium

Profitability

Underwriting Profit	Net Premium Revenue - Net Claims - Operating (Management) Expenses (+)/- Net Commission - General & Admin Expenses
Underwriting Expense Ratio	[Management Expense (+)/- Net Commission + General & Admin Expenses] / Net Premium Revenue
Combined Ratio	Net Claims Ratio + Underwriting Expense Ratio
Net Operating Ratio	Combined Ratio - [Recurring Investment Income / Net Premium Revenue]

¹ Provision for Outstanding Claims + Provision for Unearned Income + Commission Income Unearned

² Equity + [unrealized surplus on all investments]

³ Gross Technical Reserves - Prepaid Reinsurance Ceded

⁴ Premiums due but unpaid + Amount due from other insurers & reinsurers

RATING SCALE & DEFINITIONS: INSURER FINANCIAL STRENGTH

<p>AAA Highest capacity to meet policyholder and contract obligations; Risk factors are negligible.</p>	<p>B+, B, B- Low capacity to meet policyholder and contract obligations; Risk factors are capable of fluctuating widely with changes in business/economic conditions.</p>
<p>AA+, AA, AA- Very high capacity to meet policyholder and contract obligations; However, risk is modest, but may vary slightly over time due to business/economic conditions.</p>	<p>CCC Very low capacity to meet policyholder and contract obligations; Risk may be substantial.</p>
<p>A+, A, A- High capacity to meet policyholder and contract obligations; Risk factors may vary over time due to business/economic conditions.</p>	<p>CC Weak capacity to meet policyholder and contract obligations; Risk may be high.</p>
<p>BBB+, BBB, BBB- Adequate capacity to meet policyholder and contract obligations; Risk factors are considered variable over time due to business/economic conditions.</p>	<p>C Very weak capacity to meet policyholder and contract obligations; Risk may be very high</p>
<p>BB+, BB, BB- Marginal capacity to meet policyholder and contract obligations; Risk factors may vary widely with changes in business/economic conditions.</p>	<p>D Extremely weak capacity to meet policyholder and contract obligations; Risk is extremely high.</p>
<p>Rating Watch: JCR-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.jcrvis.com.pk/images/criteria_watch.pdf</p>	<p>'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.jcrvis.com.pk/images/policy_ratings.pdf</p>
<p>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.jcrvis.com.pk/images/criteria_outlook.pdf</p>	



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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



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Muniba Khan is involved in the credit analysis of various industrial companies and financial institutions. She has been associated with JCR-VIS since 2013 and her overall experience in ratings includes insurance, microfinance banks, commercial banks and manufacturing sectors. She holds a Masters degree in Business Administration from Institute of Business Administration, Karachi (IBA). She is also currently pursuing a Masters degree in Economics from IBA.”

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

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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