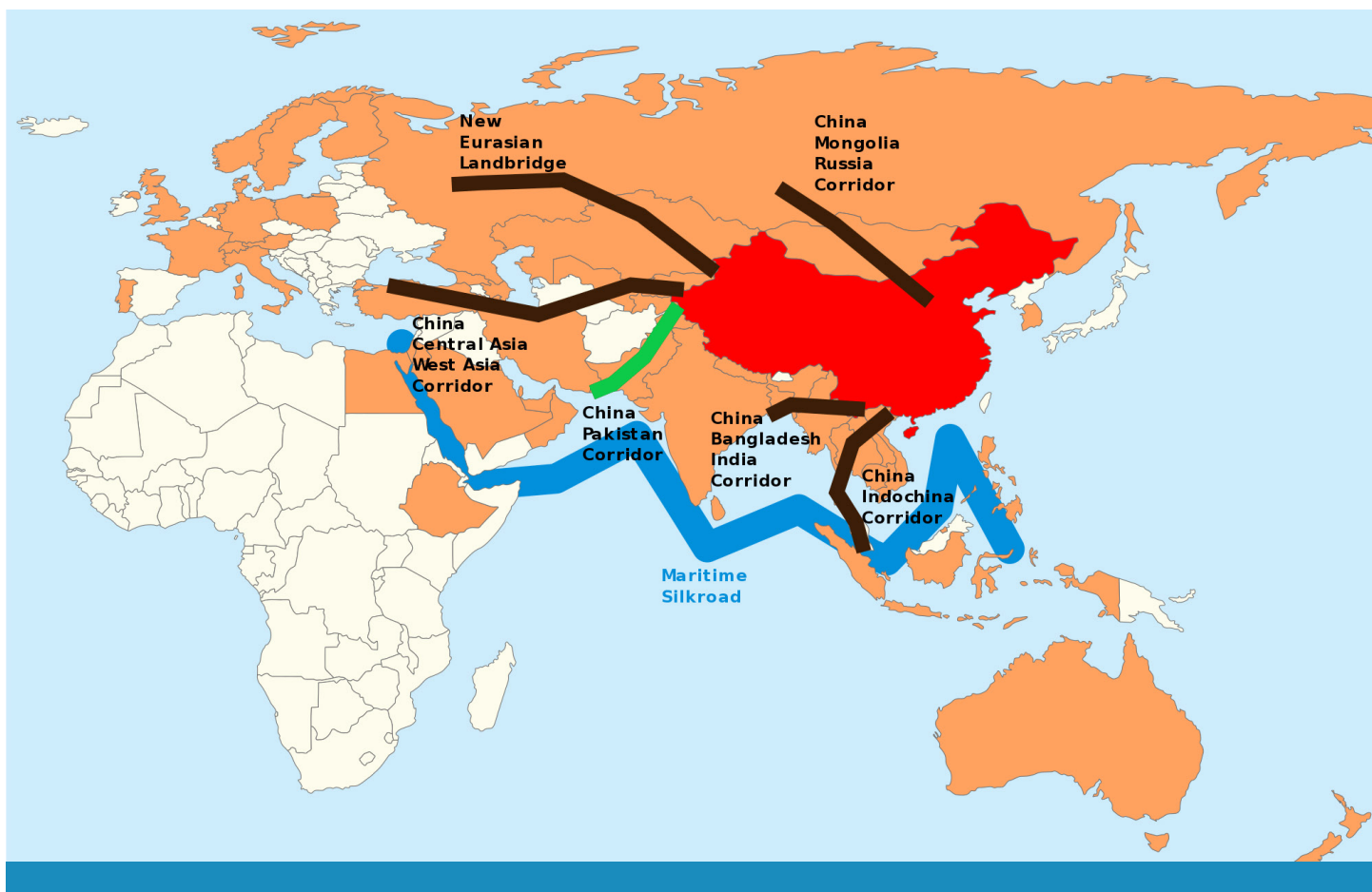




GRADING METHODOLOGY

A pioneering concept of joint grading is being introduced by CCXI, IIRA and VIS. Given an increasing investor activity across borders, these gradings are envisioned to benefit countries along the Belt & Road. The methodology would provide a rank system appraising the investment strength and prospects of a

INVESTMENT STRENGTH, GOVERNANCE, ENVIRONMENT & SOCIAL (ISG/ES) GRADING



A joint product by

China Chengxin International Credit
Rating Company Limited (CCXI);

VIS Group of Companies; &

Islamic International Rating Agency
(IIRA)

particular player within an industry group. This initiative would provide value addition for investors/stakeholders to enable long-term cross-border equity investment, ease the path for cross listing, and deepen the capital markets. It is also expected to facilitate China Pakistan Economic Corridor related activities which may further strengthen trade relations through better accessibility. Through a wider and relative ISG/ES grading and research, this methodology seeks to address a broad range of potential investors — lenders, private and public investors, venture capitalists, etc., by facilitating informed and effective investment decision-making not just confined within a single country but extending beyond borders along the One Belt One Road.

SCREENING CRITERIA

Target Universe...

Companies operating in countries along the OBOR, including financial institutions, would be the target of the ISG/ES grading project;

Eligibility...

To be included in the ISG/ES grading pool, there are pre-defined criteria;

The selection process...

Based on outstanding credit ratings from CCXI and/or VIS, market share, threshold of top line revenue, total equity and other quantifiable aspects as may be mutually agreed upon by VIS, IIRA and CCXI;

VIS, IIRA and CCXI would conduct this grading exercise jointly.

...country-specific national scale criteria would provide additional guidance to determine the finer distinctions between grading on the regional scale.

METHODOLOGY

ISG/ES will provide a rank-order of risk and return within the region. Currency risk assessment will be out-of-scope as this exercise seeks to encourage investments in local currency. As such, convertibility factor will not be applicable; however country risk will still be an overlay factor in the grading criteria. Moreover, country-specific national scale criteria would provide additional guidance to determine the finer distinctions between grading on the regional scale. While assigning ISG/ES, business risk, financial strength/investment prospects of a company, factors such as dividend payout history, governance framework, environmental & social grading parameters will be considered.

This is somewhat a divergent approach to most of the existing conventional analysis that places substantial importance to an institution's monetary gains / benefits. Further, this is to imply that under ISG/ES, a company operating with an objective of maximizing investor returns would be positioned favorably vis-à-vis other players if it has also consistently invested towards causes that positively affect the community at large. The underlying principle of ISG/ES methodology lays in the ability of a company to create economic and social value over the long-term.

The overall assessment indicating the Investment Strength Prospect of an applicant would be derived from a combined weighted score of individual four factors assessed. The definition of the factors and the sub-factors are described below:

INVESTMENT STRENGTH ("IS")

Under this, an entity would be assessed on two key components – a) Business Risk; and b) Financial Performance. These components are further divided into sub-factors to capture comprehensive assessment.

A. BUSINESS RISK (IN GENERAL):

For any entity, business risk is a combination of its specific operational risk along with industry risk.

In general, business risk is often categorized into **systematic risk** and **unsystematic risk**. Systematic risk refers to the general level of risk associated with any business enterprise, the basic risk resulting from fluctuating economic, political and market conditions. Systematic risk is an inherent business risk that companies usually have little control over, other than their ability to anticipate and react to changing conditions.

On the other hand, **unsystematic risk** refers to the risks related to the specific business in which a company is engaged. A company can reduce its level of unsystematic risk through good management decisions regarding costs, expenses, investments and marketing. Further, a company's product lines and its market share for each determine its ability to govern the market supply and, hence, output prices and may render it an advantage over other market players. Serving niche markets may also be an advantage or disadvantage depending upon the elasticity of demand for the limited target market. Vertical integrations also provide greater control of costs and prices.

Industry Risk: The analysis focuses on the strength of industry prospects, as well as competitive factors affecting that industry. These factors include sales and revenue prospects for growth, stability and the pattern of business cycles. It is critical to determine vulnerability to technological change, and stability of regulatory interference. Knowledge of investment plans, in terms of capital expenditure, of the major players in any industry is important to assess both competitive prospects and barriers to entry.

The regulatory framework governing the industry may place the company at a significant advantage or disadvantage. The degree of regulatory support directed towards an industry is also a function of its contribution to economic growth which acts as a determinant of the industry's importance to the economy and to policy makers. For industries / companies reliant on foreign markets either for input supplies or for sales, timely access and fluctuations in exchange rate pose a major risk factor.

Porter's Five Forces provides a broad framework for industry risk analysis; however some of the sub-factors that form basis of consideration are listed below:

- Market opportunity – Sales prospects;
- Business Cycle;
- Industry hurdles and barriers to entry;
- Government Support & sectors' placement with respect to Governments long term vision and strategy;
- Regulatory environment;
- Technology;
- Global competition;
- Customers / Suppliers;
- Capital Intensity

Business risk of financial institutions (FIs) including commercial banks and insurance companies would also depend on the financial institution's level of exposure to a certain industry. Generally, financial institutions have diversified exposure on various industries; as such the business risk for FIs is usually considered low vis-à-vis industrial corporates.

B. FINANCIAL PERFORMANCE (IN GENERAL):

In general, financial strength of a corporate entity is determined from quantitative metrics. Select indicators that would be considered for ISG/ES for corporate assessment are:

Capital structure Debt-equity Mix:

The financial policy of the management is assessed to determine the degree of flexibility in the capital structure of the company. Leverage translates into higher returns enhancing shareholder's value, however, at the same time, increases the risk level as fixed obligations increase. A higher leverage, while enhancing profitability, would generally be considered risky and viewed with caution in analysis.

Profitability Indicators:

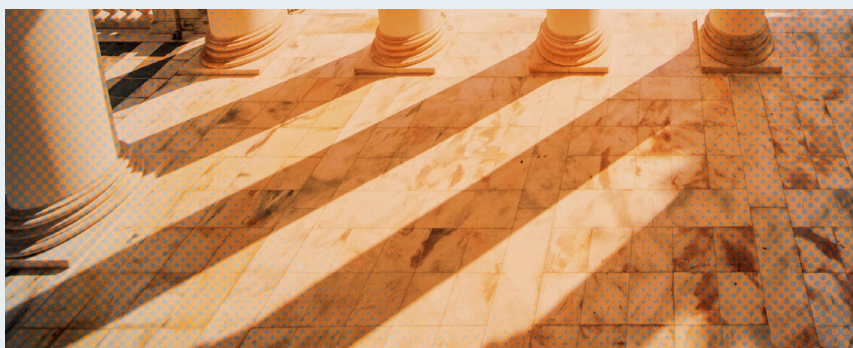
In assessing quality of earnings, diversification and stability are important factors. Historical trends, current and expected market situations are examined to project future profitability. This would also enable forecasting optimistic and stress case to reflect potentially improving or deteriorating profitability position in the intermediate to the long-term.

Sales stabilize and gross margin improve generally as a company moves towards value-addition, develops differentiated products or market niche, operates at higher capacity utilization and builds economies of scale. Global supply and demand risk is also evaluated for companies with significant exports or imports.

Cash Flow Indicators:

The current and projected requirements for capital expenditure, debt servicing and dividend payments are examined with respect to the cash flows generated.

The Funds from Operations level reflects the capacity of the cash generated from operations to meet working capital, capital expenditure and debt servicing requirements. At the level of Free



*A relatively
good financial
performance does
not necessarily
warrant presence
of good governance
in an entity...*

Cash Flow, company's capability to service both regular and strategic expenditures is considered.

Dividend Paying Ability & History:

The dividend paying capacity is evaluated at the level of Discretionary Cash Flow. The company's dividend payout history coupled with future cash generation ability helps us in determining dividend yield, going forward.

Financial Performance of Commercial Banks and Insurance Companies:

Financial strength of commercial banks is determined by analyzing different quantitative factors including capitalization, asset quality, earning quality & stability including cost of funding and spreads and liquid assets carried on balance sheet. Moreover, assessment of market access is reflected in market share of the institution and funding profile. While sustainable earnings of the institution are given due coverage in the analysis, the bank's franchise value and the ability of the management to enhance and capitalize on this value, determines its financial strength over the long term. The bank's dividend payout history along with future profitability helps in determining dividend yield, going forward.

For financial strength assessment of general insurance companies, we evaluate the company's ability as reflected in the strength of its cash flows including sustainable investment income, its liquidity reserves, access to credit or capital and the strength of its reinsurance arrangements. An insurance company's ability to withstand shocks is usually affected by its franchise value, market reach and the spread of business.

GOVERNANCE ("CG")

ISG/ES grading mechanism considers governance as a pivotal factor in the assessment of an entity. While analysis of financial indicators is important to gauge an entity's capacity and growth potential vis-à-vis other players, intangible aspects including governance framework also requires due consideration. A relatively good financial performance does not necessarily warrant presence of good governance in an entity.

Corporate Governance standards and their evaluation is undertaken to ensure that the organization fairly protects the interest of all stakeholders. Sub-factors which will be considered during assessment are as follows:

- Ownership structure;
- Board level oversight — committees;
- Experience and composition of Board;
- Policy Framework;
- Timely provision of information;
- Level of transparency in discourses to stakeholders;
- Benchmarking against global corporate standards for accountability, fair play and transparency;
- Management profile and operations;
- Control infrastructure;
- Self-regulation;
- Internal audit function independence and reporting;
- Related party transactions

The Corporate Governance structure is the result of the interaction between sponsor, the BoD and the management, which acts on behalf of the shareholders. The form of ownership structure also has bearing on corporate practices.

Board of Directors (“BoD”) plays a vital role as it has the responsibility of endorsing the business strategy, monitoring performance, appointing, supervising and remunerating senior executives and ensuring accountability and transparency. We evaluate the governance standards of an entity to assess the composition of the board and experience of the board members. The Board exercises its powers directly and through various committees functioning at the Board level to provide a broad policy framework and maintain independent oversight of operations.

Timely provision of information and transparency in disclosures allows all stakeholders to make informed decisions and is considered an overriding necessity. The corporate governance practices of an individual institution will be evaluated against global best practices. We also determine the extent to which corporate governance practices are put in place by the management to help in achieving transparency, accountability and fair play.

Management and organizational structure are another important element in the evaluation of governance quality. Experience and skills of upper management, its stability and its compatibility with the strategic vision of the board are closely evaluated.

A strong internal audit and risk management function is central to an institution’s self-regulation capacity.

Board’s role in reviewing and approving related party transactions is an important consideration while forming an opinion. Existing policies are assessed to ensure that the related party transactions are carried out at arm’s length and are appropriate in terms of quantum and do not expose the organization to undue financial or non-financial risk.

Scope of **corporate governance for FIs** may further extend to adoption of ethical practices. For instance, a bank that follows responsible lending / financings procedures and mechanism that inhibit overburdening an already highly leveraged borrower, would be viewed favorably over a peer that lends aggressively without giving due consideration to the financial flexibility of the customer. In this illustration, a trade-off may ideally be desirable between gaining market share in a highly competitive environment while also functioning as an ethically responsible entity. Likewise, the rights of liability providers of such FIs (depositors for banks) would need to be protected.

SOCIAL RESPONSIBILITY (“SR”)

The ISG/ES methodology draws specific inference from the social factors of United Nations-supported Principles for Responsible Investment (“PRI”). At the foremost, management strategies that drive SR initiatives are reflected in the entity’s behavior towards its employees and community at large. A few of these factors assessed under this methodology primarily include the following:

Internal-stakeholders i.e. employees:

- Providing a safe and secure working environment;
- The entity encourages and acknowledges merit with regards to education and experience;
- Entity is an equal-opportunity employer that appreciates and adopts an inclusive culture as reflected in the religious, ethnic and gender diversity;
- Arrangement for retirement benefits for employees including provident fund, gratuity, superannuation etc.;
- The entity has a documented policy to encourage knowledge upgradation of its employees and also provides full / partial financial and/or non-financial support;
- A documented health policy is in place for utilization by employees.
- Further, the entity also invests in the empowerment of its blue-collar employees through financial and other sponsorship of self and/or children education by incentivizing merit.

Community-conscious approaches:

- Social-causes are paid due attention to in an entity;
- Protection/policy against human rights abuse;
- Preventing of child labor;
- Arranging/ sponsoring /supporting (partial or full) the establishment of a social service facility like educational/vocational institution, medical care facility, or sports activity for its workforce;
- Regular or ongoing contribution towards charity, donations, etc.





*While ISG/
ES would rely
on the entity
for providing
information
to assess its
environment
conscience,
an external
ratification may
be sought from
independent
bodies...*

In this context, it becomes **crucial for FIs also** to abstain from undertaking transactions that have any adverse moral implications on the society. For this, the institutions must take utmost care to understand and assess the penultimate use by the customers of the products / services.

ENVIRONMENTAL ACCOUNTABILITY ("EA")

With increasing global emphasis on the environment conservation efforts, an entity's strategies, in terms of mitigating environmental risk, may be assessed on the below mentioned aspects. Similar to SR, most of these EA assessment factors are derived from UN PRI.

- Biodiversity loss due to various factors including pollution, climate change, urbanization etc;
- Carbon footprint: Greenhouse gas emissions by an entity with implications on local climate;
- Usage of renewable energy (including production, transmission, appliances and products);
- Resource depletion including deforestation. Environmentally sustainable management of living natural resources and land use (including agriculture; animal husbandry; fishery and aquaculture; forestry; climate smart farm inputs such as biological crop protection or drip-irrigation, and preservation / restoration of natural landscapes);
- Promoting energy efficiency (such as in new and refurbished buildings through energy storage, district heating, smart grids, appliances and products);
- Adoption of day-light savings;
- Waste management and control (including water — treatment and conservation, sewage – disposal and treatment, soil remediation, waste – prevention, reduction and recycling, and associated environmental monitoring);
- Climate change adaptation (including information support systems, such as climate observation and early warning systems);
- Eco-efficient adapted products, production technologies and processes (such as development and introduction of environmentally friendlier products, with an eco-label or environmental certification, resource-efficient packaging and distribution);
- Green buildings which meet regional, national or internationally recognized standards or certifications.

Given that most of the above factors do not have measurable output, it is important that the entities have related policy documents in place. While ISG/ES would place reliance on the entity for providing information for assessment of its environment consciousness, an external ratification may be sought from independent bodies that may provide specific certifications to support the view.

Over and above, **FIs** that support and serve environment-friendly counter-parties may also be viewed favorably.

THE SCORING FRAMEWORK

The above mentioned factors are inputs in determining the overall ISG/ES Score which would be reflected in respective range-bound scales as below:

INVESTMENT STRENGTH SCORING SCALE

Scale	Score Range	Definition
IS 1	(91–100)	Very Strong Investment Strength
IS 2	(76–90)	Strong Investment Strength
IS 3	(61–75)	Good Investment Strength
IS 4	(40–60)	Medium Investment Strength
IS 5	(less than 40)	Low Investment Strength

SOCIAL RESPONSIBILITY SCORING SCALE

Scale	Score Range	Definition
SR 1	(91–100)	Very Strong Social Responsibility
SR 2	(76–90)	Strong Social Responsibility
SR 3	(61–75)	Satisfactory Social Responsibility
SR 4	(40–60)	Adequate Social Responsibility
SR 5	(less than 40)	Weak Social Responsibility

CORPORATE GOVERNANCE SCORING SCALE

Scale	Score Range	Definition
CG 1	(91–100)	Very Strong Corporate Governance
CG 2	(76–90)	Strong Corporate Governance
CG 3	(61–75)	Satisfactory Corporate Governance
CG 4	(40–60)	Adequate Corporate Governance
CG 5	(less than 40)	Weak Corporate Governance

ENVIRONMENTAL ACCOUNTABILITY SCORING SCALE

Scale	Score Range	Definition
EA 1	(91–100)	Very High Environmental Accountability
EA 2	(76–90)	High Environmental Accountability
EA 3	(61–75)	Good Environmental Accountability
EA 4	(40–60)	Medium Environmental Accountability
EA 5	(less than 40)	Low Environmental Accountability

Based on the above discussed parameters, the overall ISG/ES would be derived at using a weighted average score.

COMPONENT WEIGHTS

Components of ISG/ES	Weights
Investment Strength	60% (Business Risk 35%/ Financial Performance 25%)
Governance	30%
Social Responsibility	5%*
Environment Accountability	5%*

**Weights of these factors may increase upto 35% on a cumulative basis in entities where Social and Environment assessment is comparatively higher in significance.*

OVERALL ISG/ES SCALE

Scale	Score Range	Definition
ISG/ES 1	(91–100)	Very Strong Investment Strength Prospects
ISG/ES 2	(76–90)	Strong Investment Strength Prospects
ISG/ES 3	(61–75)	Good Investment Strength Prospects
ISG/ES 4	(40–60)	Medium Investment Strength
ISG/ES 5	(less than 40)	Low Investment Strength Prospects

A single (+) sign or a double (++) could be added to express relatively higher investment strength prospect within the category.



*Shari'a Governance
Grading would take
into account the
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assess conformance
with Shari'a
principles...*

ISLAMIC SHARI'A PERSPECTIVE IN ISG/ES

The scope of ISG/ES grading would be extended to entities that operate on Islamic-faith based principles, as a second-tier assessment to cover degree of entity's broad-based Shari'a governance ("SG") and compliance. As such, the assessment under SG grading would take into account the entity's practices to assess conformance with Shari'a principles. Some important aspects that require deliberation in the assessment of SG are, but not limited to:

- Nature of business activity;
- Financial aspects including but not exhaustive:
 - Proportion and trend of non-compliant income — ideally should be less than 5% of total income;
 - Liquidity in asset mix — best practices suggest limiting liquid assets to one-fourth of total assets;
 - For leveraged entities, debt types would be considered and limit the use of interest-based debt (~33% of total debt);
 - If an entity enters into derivative transactions, the quantum of such derivatives and the impact thereof would also need to be assessed.
- Presence of an effective Shari'a governance infrastructure:
 - Legislative impetus in this regard would carry positive implications in the assessment;
 - Entity's internal Shari'a governance framework would be assessed in the light of information flow, guidance, oversight and control from the Shari'a function to the other units

Besides the above stated parameters, SG grading may be further enhanced through an independent evaluation of asset manager quality and governance which could then be supplemented in the IS and CG assessments.

SHARI'A GOVERNANCE SCORING SCALE

Scale	Score Range	Definition
SG 1	(91-100)	Extremely strong adherence to Shari'a principles
SG 2	(76-90)	Strong adherence to Shari'a principles
SG 3	(61-75)	Substantial adherence to Shari'a principles
SG 4	(40-60)	Adequate or reasonable adherence to Shari'a principles
SG 5	(less than 40)	Inadequate or low adherence to Shari'a principles

CHINA CHENGXIN INTERNATIONAL CREDIT RATING COMPANY LIMITED



中诚信国际
CCXI

China Chengxin International Credit Rating Co., Ltd. ("CCXI") was founded in October 1992. Approved by the head office of the People's Bank of China, CCXI was the first nation-wide credit rating agency in China.

CCXI, together with its wholly-owned subsidiaries CCXR and CCXAP, is officially qualified to provide full-range rating services in China's inter-bank bond market and exchange bond market, as well as offshore market.

With the largest business operations and the best quality of services, CCXI enjoys the highest reputation of credit rating services in capital markets.

Leading China's credit rating industry in the past 26 years, CCXI has maintained the largest market share across the capital market, winning a dominant position in structured products and panda bonds. Almost all the first ratings of bonds and financing instruments in China were undertaken by CCXI.

CCXAP is the first mainland Chinese rating agency to obtain Type 10 rating license in the strictly-regulated HK market. Qualified to provide credit rating services in the offshore and international market, CCXAP has already served clients from more than a dozen industries.

CCXI has operations and offices across China with regional headquarters in Beijing, Shanghai, Shenzhen, Wuhan and Hong Kong. CCXI has nearly 700 analysts, more than half of whom have overseas education and/or working background.

ISLAMIC INTERNATIONAL RATING AGENCY



IIRA has been set up to provide independent assessments to issuers and issues that conform to principles of Islamic finance. IIRA's special focus is on development of local capital markets, primarily in the region of the Organization of Islamic Countries (OIC) and to provide impetus through its ratings to ethical finance, across the globe.

IIRA was founded as an infrastructure institution for the support of Islamic finance as conceived by the Islamic Development Bank (IDB). This puts IIRA in league with system supporting entities like AAOIFI and IFSB. The IDB remains a prominent shareholder, and maintains oversight through its nominee, as Chairman to the Board of Directors.

Headquartered in the Kingdom of Bahrain, IIRA commenced operations in 2005 and launched its series of conceptually distinctive methodologies, beginning 2011. IIRA believes that the strength of Islamic finance lies in its commitment to fairness. This renders the manner in which a transaction is carried out, as important as the transaction itself. IIRA's specialized focus on organizational governance and conduct of Shari'ah, augments the rating process, and incorporates the unique features of Islamic finance in a way that broadens the quality perspective.

VIS GROUP OF COMPANIES



VIS always strives to take guidance from the success stories of the global business leaders and has developed a unique business model in order to achieve its goal of becoming a leading provider of independent insight and information. The Group started operations with the inception of Vital Information Services (Pvt.) Limited in 1994. Since inception, VIS has expanded as a group of companies involved in various areas of information-based services and, due to its broad product/service mix, has now evolved as a major source of independent information in the region. VIS Group has grown in various segments of financial services by developing a diverse line of products and services through its subsidiaries.

Having been remarkably successful in Pakistan and having activated plans of international expansion, now the Group has entered into joint venture arrangements in various regional markets. The vision is to replicate our unique business model in other countries in order to cater the need of the respective local markets as well as provide a window on the region to the rest of the world.

VIS Group entered into credit ratings in Pakistan in 1997. Group's credit rating agency is approved by Securities & Exchange Commission of Pakistan and State Bank of Pakistan and provides independent rating services in Pakistan.

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