ICICI Lombard
Nibhaye Vaade

CORPORATE INDIA RISK INDEX

Intelligence partner FROST & SULLIVAN

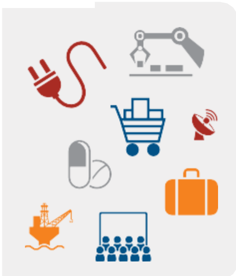
Sector: Chemicals & Petrochemicals

ICICI Lombard Corporate India Risk Index - Introduction

- ICICI Lombard Corporate India Risk Index is the first ever unified, credible, standardised corporate Risk Index that spans over the country level, the industry level and the company level
- This index maps the risk to a company on the basis of awareness, preparedness, probability and criticality across 15 sectors in India
- It will help the companies understand the level of risk that their business is facing and assist them in developing a successful risk aversion plan

ICICI Lombard Corporate India Risk Index - Sector List

- IT/ITeS
- BFSI
- Healthcare
- Pharmaceuticals & Biotech
- Energy
- Automotive & ancillary
- Hospitality/Tourism
- Manufacturing
- FMCG/Retail
- Infrastructure & Realty
- Metals & Mining
- Transportation & Logistics
- Media & Telecommunications
- Chemicals & Petrochemicals
- E-commerce/New-age



ICICI Lombard Corporate India Risk Index - Risk Framework

The ICICI Lombard Corporate India Risk Framework comprises of 32 risk elements across 6 broad dimensions:

Market and Economy
- Inflation
- Taxation
- Regulatory Risks
- Foreign Exchange Risk
- Geo-political Risks
- Competitive Risk

Technology
- Disruptive technology
- Intellectual property
- Data compromise
- Counterfeiting
- R&D / Innovation failure
- Infringement / violation

Crime and Security
- Cybercrimes
- Counterfeiting
- Harassment/Bribing
- Executive threat/ Impresonation
- Physical violence/ abuse

Operational and Physical
- Accidents/Fire Safety
- Strikes/Closure/Unrest
- Supply Chain Risk
- Environmental Risk
- Terrorism and Insurgency
- Equipment Malfunction

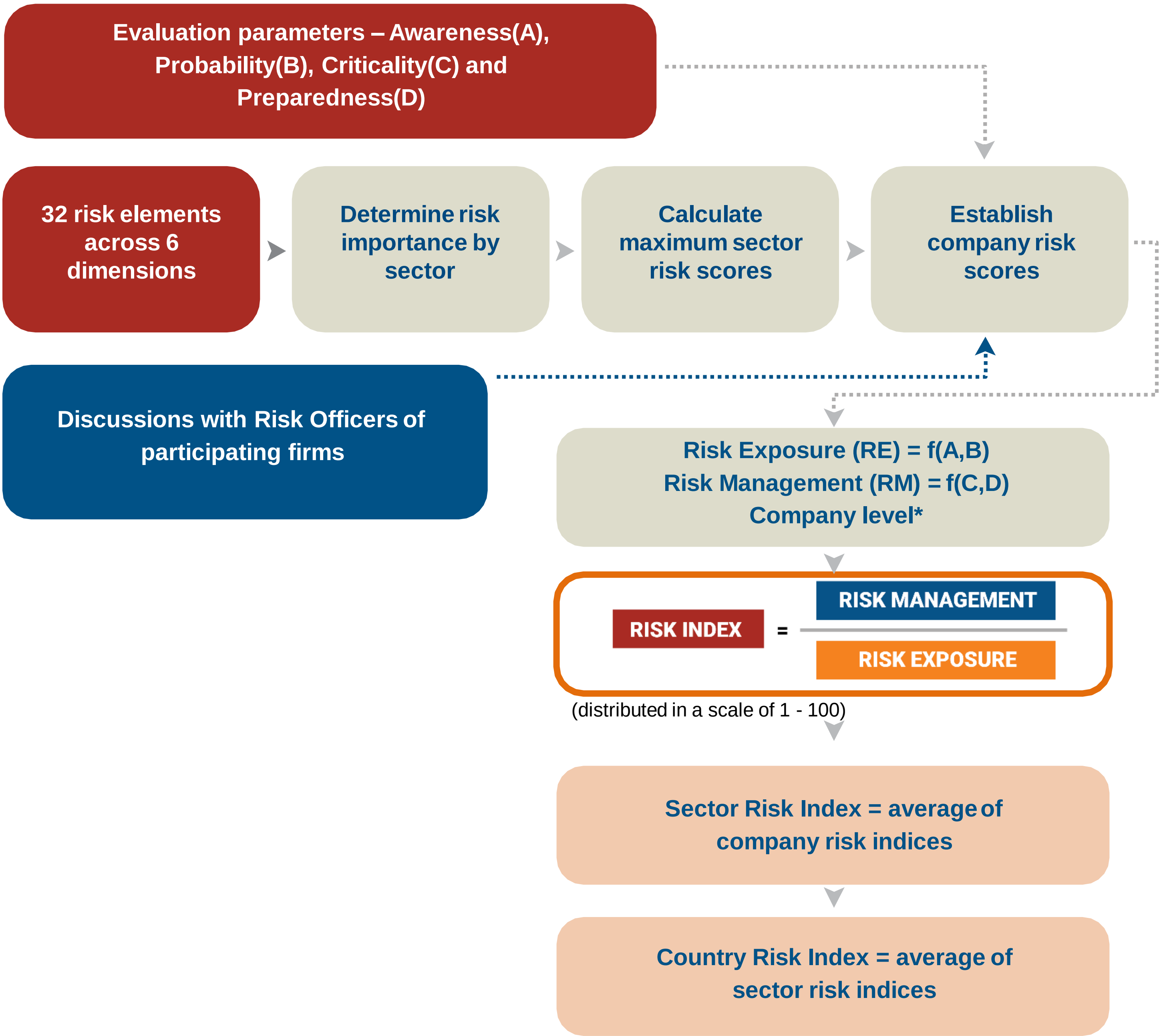
Natural Hazard and Event
- Natural Hazards like flood, drought, famine, earthquake, landslide, etc.
- Pandemic (e.g. COVID)

Emerging
- Resources scarcity and/or misutilization
- Public sentiment
- Failed/Hostile M&A

ICICI Lombard Corporate India Risk Index - Methodology

- **ICICI Lombard Corporate Risk Index** is based on the principles of Lean and Six Sigma that qualify business processes by measuring Effectiveness and Efficiency
- **Corporate Risk Index score** measures the risk mitigation practices undertaken by a company relative to its Risk Exposure
- **The Corporate Risk Index for 2020** is based on published business performance reports, assessments, and insightful discussions with key executives of **150 companies in India across the key 15 sectors**

ICICI Lombard Corporate India Risk Index - Approach



ICICI Lombard Corporate Risk Index – Formulation

The Risk Framework comprises of 32 risk elements across 6 broad dimensions

Measured across 4 parameters spanning exposure and management

$$\text{RISK INDEX} = \frac{\text{RISK MANAGEMENT}}{\text{RISK EXPOSURE}}$$

ICICI Lombard Corporate Risk Index – Scale

Score	< 30	30 - 50	50 – 60	60 - 80	> 80
	Ineffective	**Sub-optimal**	**Optimal**	**Superior**	**Over-prepared**
Category	The corporate has very high exposure or very poor risk management practices or both	Not all risks are handled effectively. Risk management practices are likely dated or inefficient.	Most current risks are being handled effectively. Emerging risks associated with strategic initiatives need more diligence.	Very effective and efficient risk management practices. Well positioned to handle current and future risks across dimensions.	High investment in risk mitigation practices. Likely over-investment in one or more risk dimensions. Difficult to justify ROI

Corporate India Risk Profile

Risk Exposure Score: 66

Risk Management Score: 64

Risk Index

57

Corporate India's Risk Exposure and Risk Management scores are 66 and 64 respectively; this indicates the country's marginally inferior risk management abilities and mitigation strategies for risk aversion.

The Corporate India Risk Index for Market & Economic Risk is low owing to a high exposure to geo-political tensions and competition faced from MNCs. Technological Risk is also a matter of concern as India predominantly uses outdated technologies which are less effective and reduce productivity and thereby profitability. Another area of concern is Crime and Security Risk due to the existence of corruption in the system along with poor government regulations.

Various sectors namely Automotive, Manufacturing, Metals & Mining, Healthcare, IT-ITES, BFSI, and Media & Telecommunication have risk indices above the country's risk index.

Sectors with risk indices lower than India's risk index are Chemicals, Hospitality, Pharmaceuticals, New Age, Energy, Realty & Infra,, FMCG, and Logistics.

Corporate India Risk Index at Glance

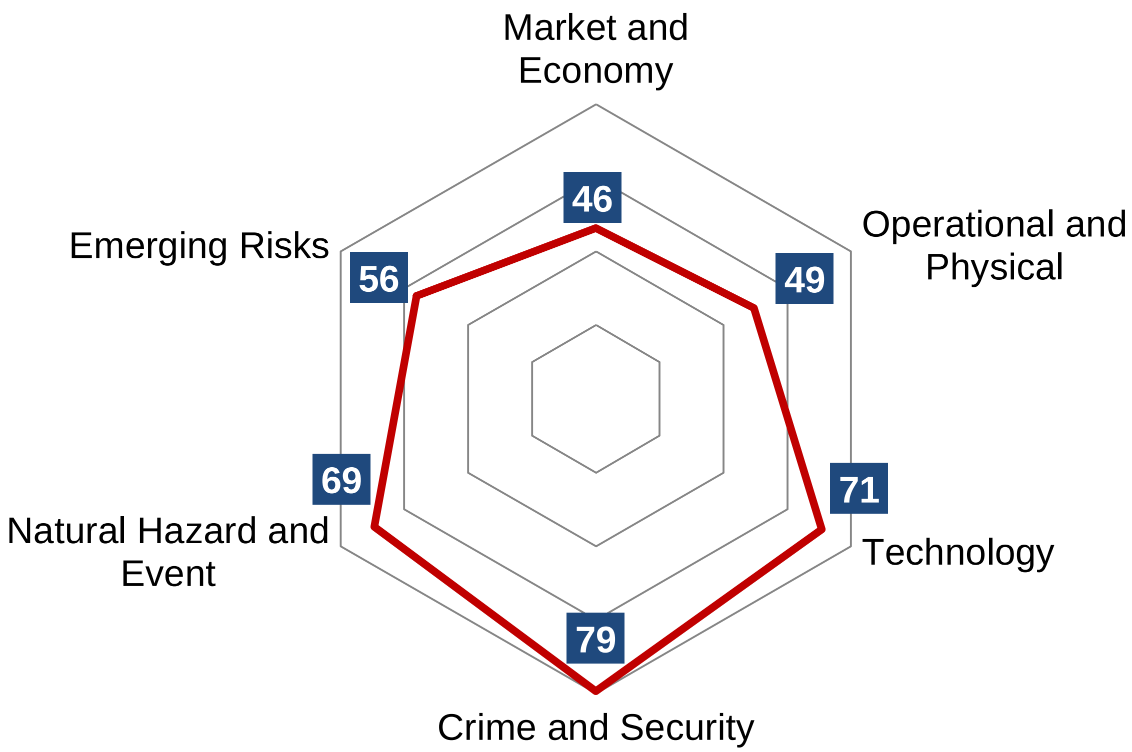
Sectors	Risk Exposure	Risk Management	Risk Index
Automotive	72	72	59
Chemicals	68	66	55
Pharma	69	65	52
New-Age	65	61	51
Energy	69	66	52
Manufacturing	65	64	57
Metals and Mining	54	54	60
Realty and Infra	63	62	57
Hospitality	68	64	50
FMCG	72	69	54
Logistics	71	65	47
Healthcare	55	59	70
IT-ITES	57	58	64
BFSI	73	76	65
Media-Telecommunication	64	64	60
Overall Score	**66**	**64**	**57**

Chemicals & Petrochemicals Sector Risk Profile

Risk Exposure Score: 68
Risk Management Score: 66

Risk Index
55

Sector Risk Index - Six Risk Dimensions

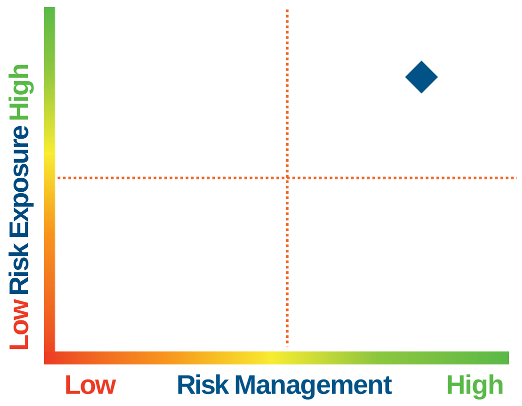


The Indian Chemical sector's Risk Exposure score is 68 mainly due to its high exposure to Operational risk and Market & Economic conditions. While the Risk Exposure of most companies is majorly due to internal factors, the external factors have a limited impact on the business performance.

The overall Risk Management score is 66; this indicates the need for companies to improve their Operational Risk Management practices especially the risks associated with portfolio, commodity pricing, and environmental hazards.

Risk Dimension Analysis: Market and Economy

Risk Exposure Score: 77.0
Risk Management Score: 70.9



Bulk of revenue from exports results in high exposure to forex fluctuation risk

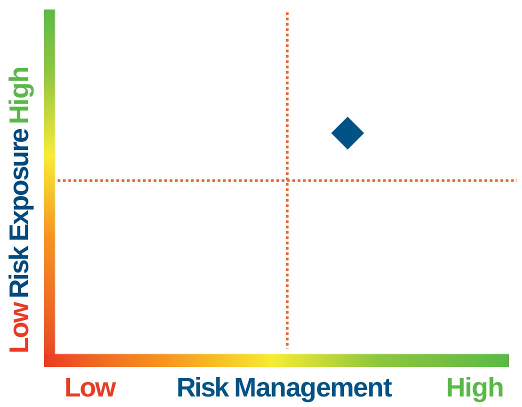
- Heavy dependence on trade resulting in forex fluctuation risk; this can be managed decently through hedging which has been undertaken by only a few companies with others depending on natural hedges
- Geo-political tension has a low impact as business continuity is indirectly dependent on political issues
- Inflation has a medium impact as most of the companies adopt a pass through model
- High competition risk from imports and MNCs

Recommendation:

The companies could globally increase internal touch-points to expand their revenues. The companies need to have a robust marketing and distribution team to cater to the customer requirements and be able to close contracts against imports in the country.

Risk Dimension Analysis: Technology

Risk Exposure Score: 56.5
Risk Management Score: 60.0



Niche industry driven by knowledge intensive products can limit innovation risk

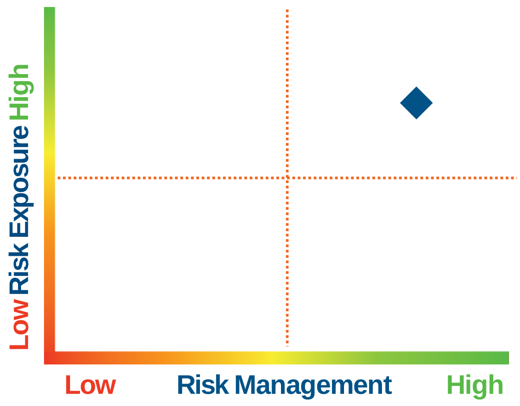
- Unique and patented technologies/ processes reduce the chances of technology obsolescence and limit the risk exposure
- New technologies for Bulk chemicals are easily available whereas for specialty chemicals, technology is typically developed in-house and is closely guarded thereby reducing the risk of duplication or data theft

Recommendation:

The companies could introduce various digital technologies (AI, IoT, ML, etc.) for new use cases as well as to add value to the business. The companies could adopt models of risk analytics or advanced analytics to identify trends and patterns based on risk data.

Risk Dimension Analysis: Operational and Physical

Risk Exposure Score: 74.3
Risk Management Score: 69.7



Niche product segment with high customer concentration would be a concern area

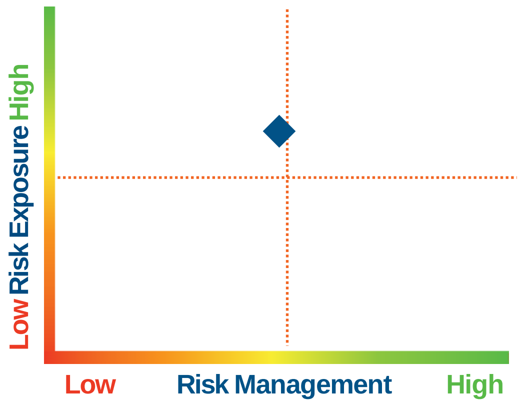
- Most of the companies have a concentrated product portfolio posing portfolio risk
- The customer concentration is high with 25-40% sales accounted by Top 5 customers
- There is medium-heavy dependence on imports for raw materials from China and other countries resulting in a high supply chain risk
- In the event of adverse price movements, the company is exposed to adverse market circumstances and price volatility risk

Recommendation:

The companies could issue a Blanket Policy to cover multiple facets of business risks. They need to de-risk by diverting their focus on multiproduct, multi-geography, multi-customer and multi-industry.

Risk Dimension Analysis: Crime and Security

Risk Exposure Score: 49.9
Risk Management Score: 55.5



Corruption & frauds not a major deterrent to the chemical sector

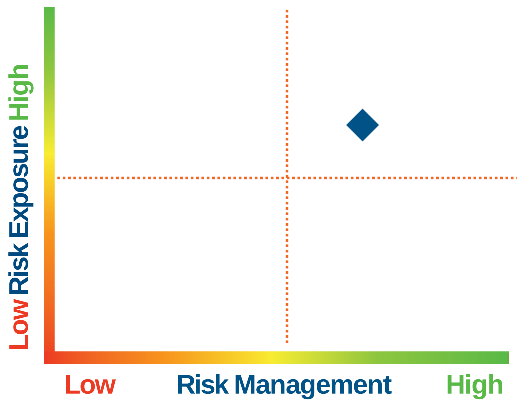
- The sector experiences low levels of corruption and security concerns
- Most companies have strong Whistleblower Policies in place
- Chemicals are more of B2B products with lower presence of middle-men, thereby limiting the cases of Counterfeiting and posing a lower risk to the business

Recommendation:

The companies could implement a consistent Cyber Risk Management programme; that involves periodic testing and improvement of controls through simulation.

Risk Dimension Analysis: Natural Hazard and Event

Risk Exposure Score: 59.8
Risk Management Score: 63.1



Natural hazards pose limited risks to the chemical industry

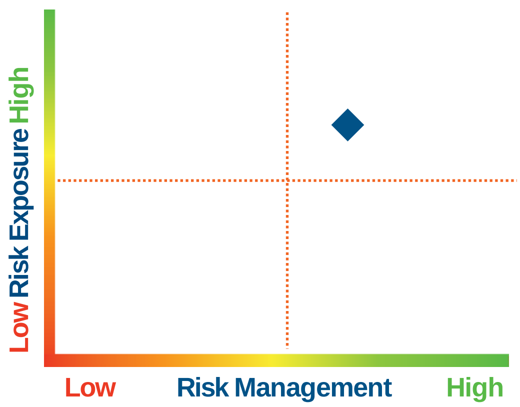
- The chemical industry did not experience any major losses over the past few years, and was largely spared from natural disasters in India
- The potential impact of natural disasters on manufacturing operations and the chemical supply chain would be limited
- Small sized companies having weak infrastructure could have some level of impact. There is a need to refurbish weak infrastructure

Recommendation:

The companies need to keep a track of mandatory constructions recommended by the government at their infrastructure facilities and deploy a disaster management team along with a disaster relief program.

Risk Dimension Analysis: Emerging Risk

Risk Exposure Score: 61.8
Risk Management Score: 60.4



M&A is a growing trend across the chemical industry to garner a higher market share

- Mergers & Acquisitions have been playing a critical role in shaping the Indian chemicals industry landscape in the past and are expected to continue doing so in the future
- Heavy dependence on due diligence and financial stability reduces the risk of failed / hostile ventures
- Chemical industry is constantly expanding with a huge capital expenditures involved; Delay in project execution pose a substantial financial risk

Recommendation:

The companies could evaluate the deal critically before entering into any JV or M&A. The companies could on-board an external financial organization or a consulting firm to undertake the due diligence and evaluate the financial feasibility study before the closure of any deal.

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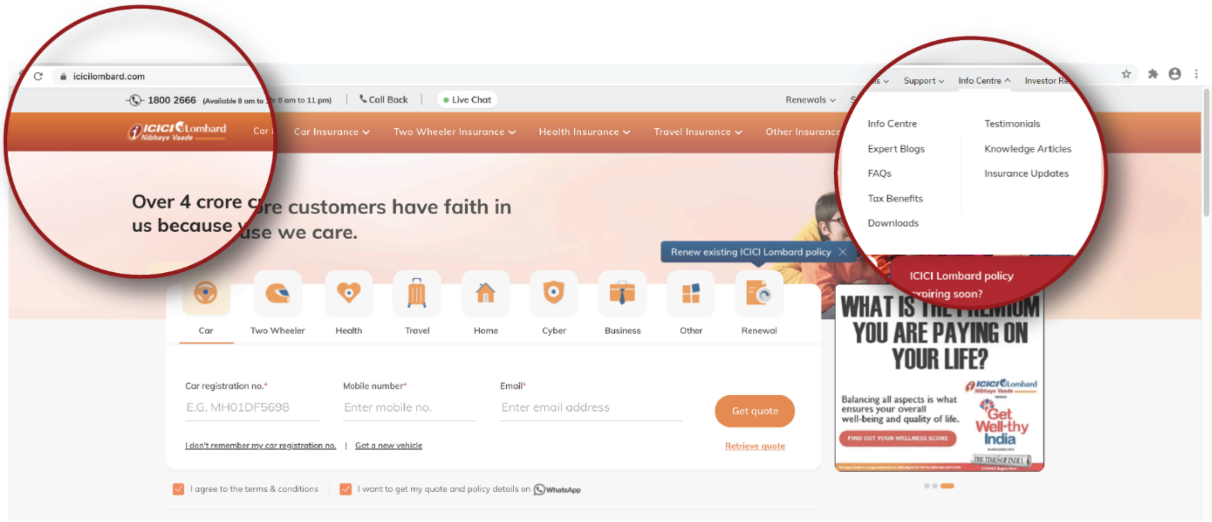

Please send a mail to riskindex@icicilombard.com to know more about ICICI Lombard Corporate India Risk Index

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