ICICI Lombard
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CORPORATE INDIA RISK INDEX

2022

Intelligence partner FROST & SULLIVAN

SECTOR REPORT 2022
AUTOMATIVE & ANCILLIARY


RISK

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Preface

Corporate India Risk Index is primarily an academic exercise to understand the level of risk that companies are facing and also assist in developing a successful risk aversion plan, CIRI is a first-of-its-kind risk measurement tool to gauge the level of a company's risk exposure and preparedness.

This Corporate risk comprises of various aspects of the business–spanning customer, competition, regulatory environment, business operations, technology finances, environmental factors etc. The impact of unprecedented events is significantly higher now.

This Index is a comprehensive framework that draws upon global risk management best practices and comprises of 32 risk elements across 6 broad dimensions. The Risk Index is based on the principles of Lean and Six Sigma that qualify business processes by measuring effectiveness and efficiency.

ICICI Lombard's Corporate India Risk Index provides a crucial tool for assessing and addressing risks, fostering resilience and adaptability in the ever-evolving global landscape. In the current climate of increasing macroeconomic uncertainties, it is essential for corporates to prioritize robust risk management. We believe that a proactive approach to risk management not only fortifies individual businesses but also contributes significantly to India's overall economic growth and stability.

Executive Summary

India has set its goal to become a 5 trillion economy by 2025 and be a developed economy by 2047. Infrastructure development will be of utmost critical to achieving this ambitious target. The infrastructure industry consists primarily of roads, telecommunications, railways, water supply and sanitation, ports, airports, warehousing facilities, and oil and gas pipelines. To attract FDI and boost India's manufacturing output, the Government of India is heavily investing in Infrastructural projects. This was conspicuous in the country's capex outlay which stood at Rs 10 Trillion and witnessed a steep increase of 33%

The growing Indian GDP is supplemented by rapid urbanizatio
migration from rural areas, and a shift from the agrarian econom
real estate sector.

Macroeconomic factors such as inflation, environmental laws, a
industry. But then, recent policies such as the National Infrastructure Pipeline (NIP) and National Logistics Policy (NLP) show the GoI's positive outlook and provide confidence in the Indian economy.

Introduction

ICICI Lombard Corporate India Risk Index is a one of its kind, unified, credible, standardized corporate Risk Index that spans over the country level, the industry level, and the company level. The index has a comprehensive sector coverage.

Aerospace and Defense, Agriculture and Food Processing, Automotive and Ancillary, BFSI, Biotech & Life sciences, Chemicals and Petrochemicals, Education Skill Development, Energy, FMCG, Healthcare Delivery, Infra and Realty, IT/ITES, Manufacturing, Media and Gaming, Metals and Mining, New Age & Startup, Pharmaceuticals, Telecom and Communication Technology, Tourism and Hospitality, Transportation and Logistics.

The impact is identified across key business risk (internal and external) under the following 'Strategic Risk Areas', The ICICI Lombard Corporate India Risk Index Framework comprises of 32 risk elements across 6 broad dimensions.

Market and Economic Risk

Corporate Risks arising due to market and economy related factors, such as internal or external political uncertainty, global slowdown, taxation-regulatory changes etc. Market and economy related risks are also identified as 'Systematic Risks', we have further classified the risks into below mentioned categories.

- **Inflation:** Inflation is the general increase in prices within the economy. The rising prices for businesses could result in bigger production spending and a fall in profitability. The companies should be attentive, acute, and responsive to changes in inflation to efficiently manage the prices of final products.
- **Taxation:** In a large democracy like India, complexity of multiple taxes (multiple taxes like GST, custom duties, central excise duty, etc.) is a major concern. The changing legislations, increased scrutiny by tax authorities and increasing public attention are together resulting in tax risks for organizations. There is, thus an increasing urgency for firms to manage their tax affairs efficiently to minimize tax risks.

- **Regulatory Risks:** Regulatory risk is the risk of changes in regulations and laws that might affect an industry or businesses. The regulatory changes can pertain to tariffs and trade policies, business laws pertaining to employment, minimum wage laws, financial regulation, Foreign Direct Investment etc.
- **Foreign Exchange Risk:** The exchange rate plays an important role for firms who export goods and import raw materials. The fluctuations in foreign exchange will have great impacts on the prices of traded goods. For example, if the currency depreciates (devaluation), the exporting firms will benefit. However, the firms importing raw materials will face higher costs on imports. The firms need to hedge their exposure to foreign exchange risks to insulate themselves from the impact from forex changes.
- **Geo-political Tension:** Geopolitical risk means the political and economic risks that are a potential threat to the financial and operational stability of companies.
- **Competitive risk:** Competitive risk is the risk associated with the fact that there are multiple companies competing in the market, each seeking to obtain the highest position and consumer ratings, to gain maximum benefits for themselves. The companies devise different strategies to garner a higher market share and acquire customers from competitors. Any failure in managing the competitive stand could lead to losses in business, thereby making marketing and competition a major risk in market.

Technology Risk

Technology risks are also identified as information technology related risks which may arise due to failure of any installed hardware or software system, spam, viruses or any malicious attack. Also delay/over/under adoption of trending disruptive technologies can lead to technology related risks. We have classified the risks in below mentioned categories.

- **Innovation Risk / Obsolete Technology**: Innovation is the key to success in all the industries. Risk of redundancy and losing out to competition on account of poor R&D is a major concern.
- **Intellectual Property risk:** Dependence on trade secrets and unpatented proprietary know-how.
- **Disruptive Technologies:** These will fundamentally alter the financial prospects of the industry.

Data Compromise: Hardware failure refers to malfunctions within the electronic circuits or electromechanical components (disks, tapes) of a computer system; Software failure refers to an operating system crash. Such failures lead to stoppage of entire computer or operating systems creating substantial losses to business.

Operational and Physical Risk

Risk of losses caused due to faulty or failed processes, systems or human resource related inefficiencies are classified as operational and physical risks. We have classified Operational & Physical risks in below mentioned categories.

- **Critical Infrastructure Failure / Machine Breakdown:** Industries with a heavy dependence on machinery consider any rise in machinery breakdowns a hindrance to their businesses operations. An untimely equipment breakdown can bring businesses to a standstill or be the root cause for fires and explosions. Mostly, human errors and deferred maintenances are the major reasons for such breakdowns. The companies should actively invest in timely maintenance of all machineries.
- **Business Continuity / Sustainability:** Non adoption of Business Continuity/ Sustainability Plans and Lack of Internal Control tools would result in: Failure of businesses, Brand Equity / Loss of reputation, Financial Loss, Business model Failure, Ineffective engagement/communication with stakeholders, Losses in productivity, Lack of opportunity monitoring.
- **Supply chain risk:** Raw Material unavailability and Heavy Dependence on Global Supply Chains / Supplier concentration risk. Unavailability of raw materials owing to disruption in the supply chain or heavy dependency on one source (company/country) which is unable to supply owing to some geo-political tensions, fires, or any other incidents. Transportation is one of the key activities for companies making it an important risk to mitigate. The loss of goods in transit and spillage is one of the major concerns as it accounts for a sizeable loss of revenue to companies.
- **Commodity Price Risk - Volatility in prices of raw materials:** The fluctuations in raw material prices creating a margin pressure / top-line pressure in the scenario of rising input costs.
- **Portfolio Risk:** Loss of key customers, Customer concentration - Key customers accounting for a larger share of revenue, Over-dependence on suppliers, Business Model Risk: Transformative changes in business model, Tail Risks: Ability to overcome or manage extreme worst-case scenarios.
- **Environmental Hazard Risk:** Any environmental hazard having the potential to affect the surrounding environment.
- **Workplace Accident:** Fire and Explosion Hazards, Containment Incidents, Workplace Injuries
- **Human Resource:** Key person risk: This risk occurs when a business or business unit becomes heavily reliant on a key individual. Talent acquisition and retention - The companies require a highly skilled labor force for R&D as well as continuous production. Accessing skilled resources and expertise on an on-going basis is one of the major challenges; moreover, retention of trained staff is imperative. Labor shortages, Union Strikes & Industrial Actions, Employee health, safety, and security (SHE/Sustainability risk).
- **Financial Risk:** Financial Reporting Risk: Material misstatement of Financial Statements, whether due to fraud or error. Interest rates and equity prices: Interest rate risk arising out of working capital borrowings at variable rates. Equity price fluctuations affect the Company's income or the value of its holdings of financial instruments. Liquidity Risk (Credit Risk / Receivables).
- **Breaches of law (local/ international):** Voluntary/ involuntary breaches of law can lead to costly lawsuits.

Crime & Security Risk

Cybersecurity risks relate to the loss of confidentiality, integrity, or availability of information, data, or information (or control) systems and reflect the potential adverse impacts to organizational operations. These attacks can cause major financial losses, reputational harm, and a loss of client trust. Regarding cybersecurity, the BFSI industry in India has several difficulties, including difficult-to-secure legacy systems, a shortage of qualified cybersecurity personnel, and the requirement for ongoing system and network monitoring. There is a significant investment in cybersecurity tools like network monitoring, endpoint security, access control, and threat intelligence. Many organizations are also implementing cutting-edge technology like artificial intelligence and machine learning to strengthen their security posture. Around 7.4% of the attacks in the Asian region were targeted at India in 2022.

We have classified Crime & Security risks in below mentioned categories.

- **Cyber Crimes:** Data Theft, Spam, scams and phishing, Hacking, Malwares and Viruses, Piracy, Fraud, Corruption, Malicious attacks
- **Counterfeiting:** Counterfeiting of goods/services leads to loss of revenues, profits and ultimately affects the brand equity
- Threat to Women Security
- **Terrorism:** Un-lawful use of violence and intimidation, especially against civilians, in the pursuit of political aims.

Natural Hazard Risk

A natural hazard is the threat of an event that will likely have a negative impact. A natural disaster is the negative impact following an actual occurrence of natural hazard if it significantly harms a community. Due to India's geographical structure, it is one of the most disaster-prone countries in the world. Natural hazards like floods, earthquakes, landslides, and cyclones are common risks faced by India. The situation has worsened due to rise in GHG emissions, loss of biodiversity, deforestation, and degradation of environment. From Surat Gas leak to landslides in the north and cyclones in Bay of Bengal, the year 2022 was no exception. Such natural disasters hamper the day-to-day operations of corporates, and it is important for them to understand that such risks cannot go unheeded. Over the years, Indian corporates have learnt to mitigate such risks by diversifying their supply chains, having multiple logistics partners, diversified geographical presence and multiple vendors.

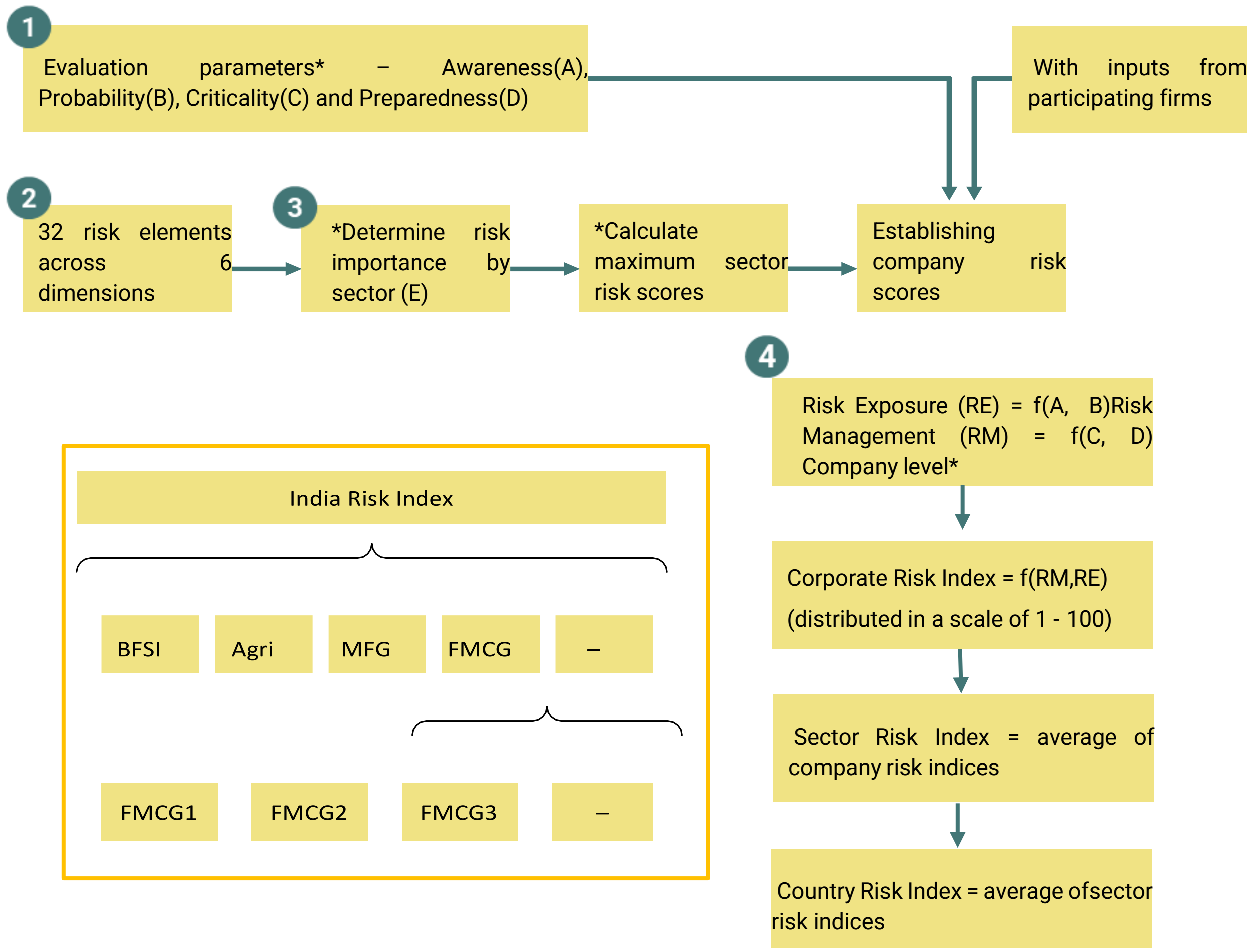
- **Pandemic and other global epidemic diseases:** Risk to business owing to disruptions caused by COVID-19 pandemic and similar another global epidemic.

Strategic risk

Strategic risk is the risk that failed business decisions may pose to a company. Strategic risk is often a major factor in determining a company's worth, particularly observable if the company experiences a sharp decline in a short period of time. Several factors, such as unethical or unlawful activities, poor customer service, product recalls, data breaches, or unfavorable media coverage, can lead to strategic risk. An organization's reputation can be severely harmed by a single negative incident, such as a high-profile data breach or fraud scandal, resulting in a loss of clients, income, and market share.

- **Resource scarcity / Misutilization / Overall Utilization:** Difficulties in acquisition of land, water, fuel, or other resources for operations of business.
- **Public Sentiment:** Current events playing out in the public scene can change the public sentiment.
- **Delay in execution of projects:** Delays in execution of projects can surge in the capex.
- **Increased number of recalls and quality audits:** Impacts both the brand equity and increased operational expenses.
- **Failed / Hostile Mergers & Acquisitions:** High dependence on inorganic growth.

Bottom-Up Risk Assessment Approach



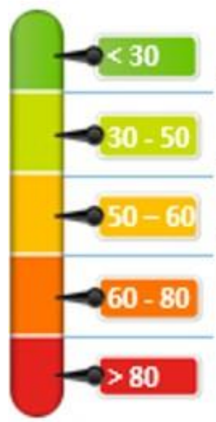
1. **Evaluation Parameters*:** The index maps the risks faced by any enterprise basis of Awareness, Probability, Criticality and Preparedness against the defined Risk elements. The evaluation Parameters are defined as: Awareness - Level of awareness of potential risk affecting the firm. - Likelihood of risk to affect the business goals of the firm adversely. Criticality - Level of impact of the identified risk on the success of business goals. Preparedness - Risk handling practices/ mechanisms already in place to handle the risk.
2. **Determining Risk Importance*:** Importance/Impact of individual risk element is established against individual sector based on the published corporate risk reports, in depth sector understanding by F&S team and SMEs.
3. **Calculating Maximum Sector Risk Score**: Weighted Sum of all risk elements based on their importance to the respective sector.
4. **Company Level*:** All the Risk Index scores for companies in a sector are averaged to represent the sector; and sectors average to India. Risk Exposure is defined as the function of corporate's Risk Awareness and Probability of risk occurrence. Risk Management is defined as the function of an enterprise risk preparedness and criticality risk impact assessment.

Defining the Risk Scale

We have selected 20 sectors to understand the current stand of our country today in terms of risk. Risk for various sectors is measured on the risk exposure scale and risk management scale.

A. ICICI Lombard Corporate Risk Exposure – Scale

Risk Exposure: The impact of any internal, external or strategic occurrence on the financial performance of an organization is defined as the corporate risk exposure. Risk has traditionally been seen as something to be avoided – with the belief that if behavior is risky, it's not something a business should pursue. But the very nature of business is to take risks to attain growth. Risk can be a creator of value and can play a unique role in driving business performance. Let's look at the risk exposure scale.



Score, if **less than 30** means there is very low risk exposure, and the sector has minimal exposure to overall risk.

Score between **30 to 50** indicates low risk exposure and its risk exposure is within acceptable or tolerable limits.

Score between **50 to 60** indicates moderate exposure, indicating corporate can balance the impact of overall risks up to a certain extent.

Score between **60 to 80** indicates High risk exposure, and its impact is very high in the industry in which the corporate operates.

Score greater than 80 indicates very high-risk exposure. The corporate is unable to foresee risk incidents & probability of occurrence of these incidents may be extremely high.

B. ICICI Lombard Corporate Risk Management – Scale

Risk Management: Identification, Evaluation and Prioritization of corporate risks followed by well-coordinated steps to minimize the occurrence of uncertainties in the foreseeable future is defined as the Corporate Risk Management. The risk management scale works in the opposite to that of the risk exposure scale. Let's look at the risk management scale.

Score less than 40, means poor risk management The enterprise is unable to understand the concept of Risk management.

Score between 40 and 50 indicates the risk management is below par so there are inefficient risk management practices which is reactive to newer or unknown risks.

Score between 50 to 70 indicates acceptable risk management. The corporate is prepared to handle known risk and the criticality of its risks are not severe.

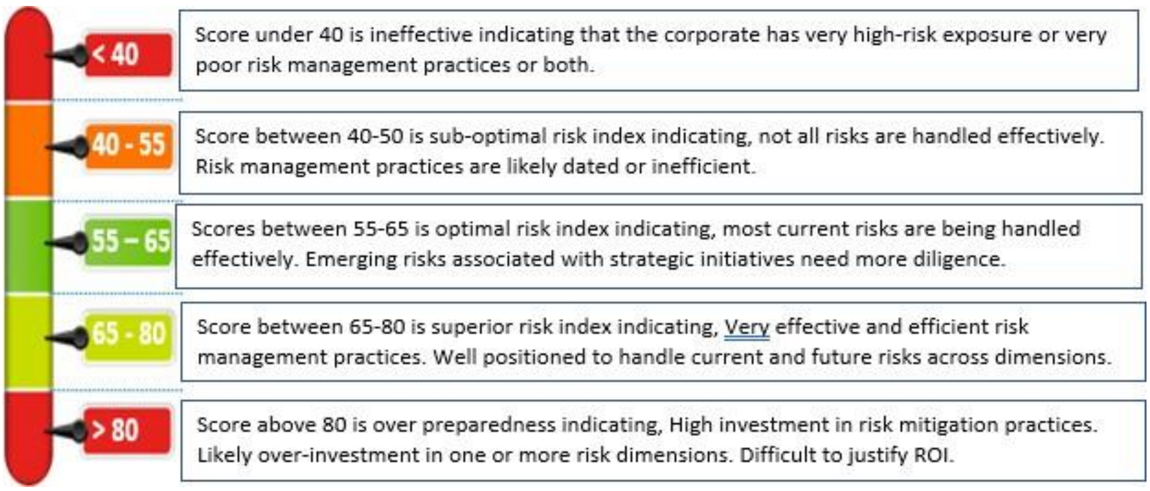
Score between 70 to 80 indicates superior risk management. Top class risk management practices have been employed to manage dynamic & Unknown risk.

Scores above 80 indicate Exemplary risk management. The companies are overprepared in risk management practices and are proactive to emerging risks.

C. ICICI Lombard Corporate Risk Index – Scale

Risk Index: Risk Index is a measurement tool to gauge the level of Risk Exposure against Risk Preparedness. The score intends to give companies/Sector/Country access to an extensive and quantifiable metrics of risk management.

Let's look at the risk Index scale.



India - Emerging Superpower with Optimized Corporate Risk Handling

Manufacturing sector contribution to India's GDP in 2022 stands at 17% and is expected to grow to 25% by 2025, the expected growth is attributed to various favorable schemes initiated by Government of India like 'Make in India', 'Digital India', Improved Road Infrastructure, implementation of modern technologies of manufacturing resulting in optimized and effective production, Also the pandemic has made business realize that they cannot just rely on a single manufacturing hub; hence notion of "China+1" is making the world realize the significance of India. China is in a trade war with the USA, which is positively shaping the role India will play in the global arena.

The below chart showcases the gradual increase in India's manufacturing exports.

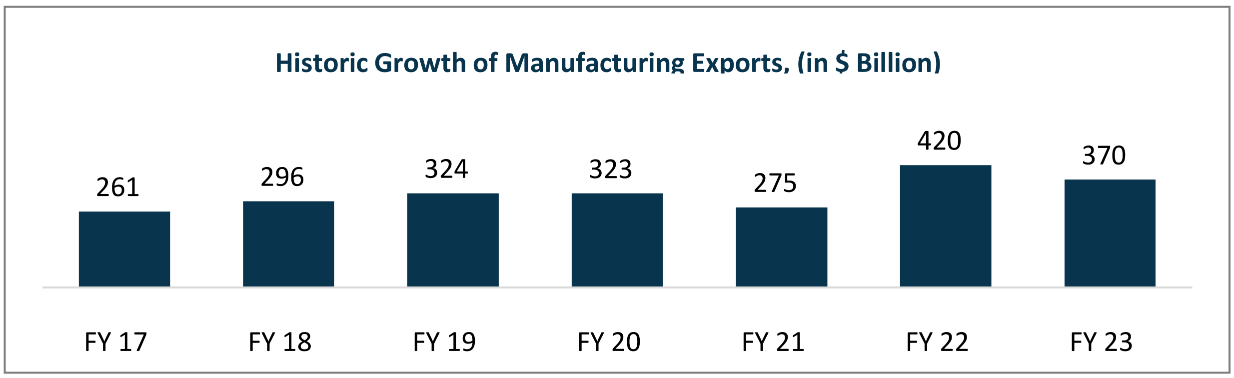


Figure 1: India's Growth of manufacturing exports. (Source: Redseer)

Indian manufacturing sector is also focusing on electronics manufacturing like mobile phones, industrial electronics consumer electronics, etc. due to government initiatives the production has doubled

since 2015.

Aerospace and defense sector in India have evolved significantly, Govt. of India have identified A&D as area of focus due to the belligerent neighborhood, steps like Make in India(Atmanirbhar Bharat) is helping the overall defense sector, however India still remains the largest importer of arms and ammunition, favorable policies and ease in regulations is helping the drone industry in India and many new start-ups and big players are entering in this space.

Urbanization is another phenomenon evolving in India and it is estimated that by 2030 more than 400 million people will be living in cities, due to this megatrend huge push towards realty and infra sector is observed which is also the growth of ancillary industries like metals, cement, water availability, sanitation, mobility etc., the government along with the private sector is working on multiple initiatives to manage the huge inflow.

India has observed a steady adoption towards EVs in recent years, though India adoption still remains very low in comparison to Europe, Canada, China, however all big auto players are coming with new lines of EVs, and significant strategic investment have been made. The adoption is primarily due to lower running costs, lower maintenance, zero tailpipe emissions, tax and financial benefits by the government, convenience of charging.

BFSI sector in India is showcasing a significant robustness in the time of global crisis, there is a growing demand for financial services as there is a gradual rise in income across income brackets, with a rapid increase in mobile penetration and internet availability more than 2100 fintech companies have emerged in India, the traditional banks are also adopting the digital technologies at a required pace, investment on making the systems secured from cyber threats is utmost priority. Policy support by the government in the union budget 2021-22 is taking up shape and is helping the BFSI sector in 2022 and coming years, like government approval of 100% FDI for insurance intermediaries have increased the FDI limit to 74% from 49%.

Healthcare sector is also continuously growing healthcare has become the one of the India's largest employers, employing around 4.7 million people, though in 2021-22 India only spends 2.1% of its GDP in healthcare, in the union budget 2022-23, US$ 11.28 billion was allocated to the Ministry of Health and Family Welfare (MoHFW). there is still huge room for improvement in the overall healthcare system in India. Efforts towards having well trained medical professionals in India is top priority. There were exemplary development in the vaccine manufacturing by India, Bharat Biotech Covaxin and Oxford AstraZeneca's Covishield manufactured by SII, helped India get a protection shield against Covid. There is a plan by the government of India to infuse US $ 6 billion to boost the healthcare infrastructure in India.

The IT/ITes sector is a key engine for fueling India's economic growth and contributing to 7.5% of India's GDP in 2021-22, the Big four IT firms in India have recruited over 1 million employees, As the world is moving towards era of digital economy Indian IT-sector will be contributing significantly towards this journey, the rollout of 5G communication technologies and adoption of new age technologies across industries; like AI, Robotics, Internet of Things will further increase the size of Indian IT sector.

Indian enterprises are also concerned about the risks emerging out of the growing economy and the globalization India is heading towards, its observed that Indian enterprises are taking significant steps towards risk management and keeping budget allocated to implement best in class risk mitigation practices.

India Showcasing an Optimized Risk Handling

Figure 2: Corporate India Risk Index 2022

Corporate Risk Index Score of 63 implies that Indian enterprises are handling the risk in an optimal way but still there is scope of improvement to get into superior risk handling territory, Indian enterprises have a well-defined risk management practice in place for inherent risks, however risk management can be improved further as a potential buffer against potential risk events arising from market & economy, operational and technology related Risk events, openness towards adoption of technology and having a well-defined risk management team was observed across enterprises in India.

Sectorial categorization across above stated five categories, it was found that risk management is getting a paramount importance in the growth strategy of every organization and all the organization fell either into 'Superior Risk Management' or 'Optimal Risk Management' category.

From a risk exposure front the intensity of impact due to market and economy related risks increased due to the heightened inflation, global recession, and geopolitical tensions though from a regulation point the sector specific policies by the government helped the industries. Some of the inherent risks exposure due to the operational aspect did not see a significant change as compared to previous year, however companies are adopting diversification, technologically enabling the supply chain, and creating better hedging against financial related risks, whose results will be seen in coming years.

Below is a broader categorization of sectors in terms of risk index:

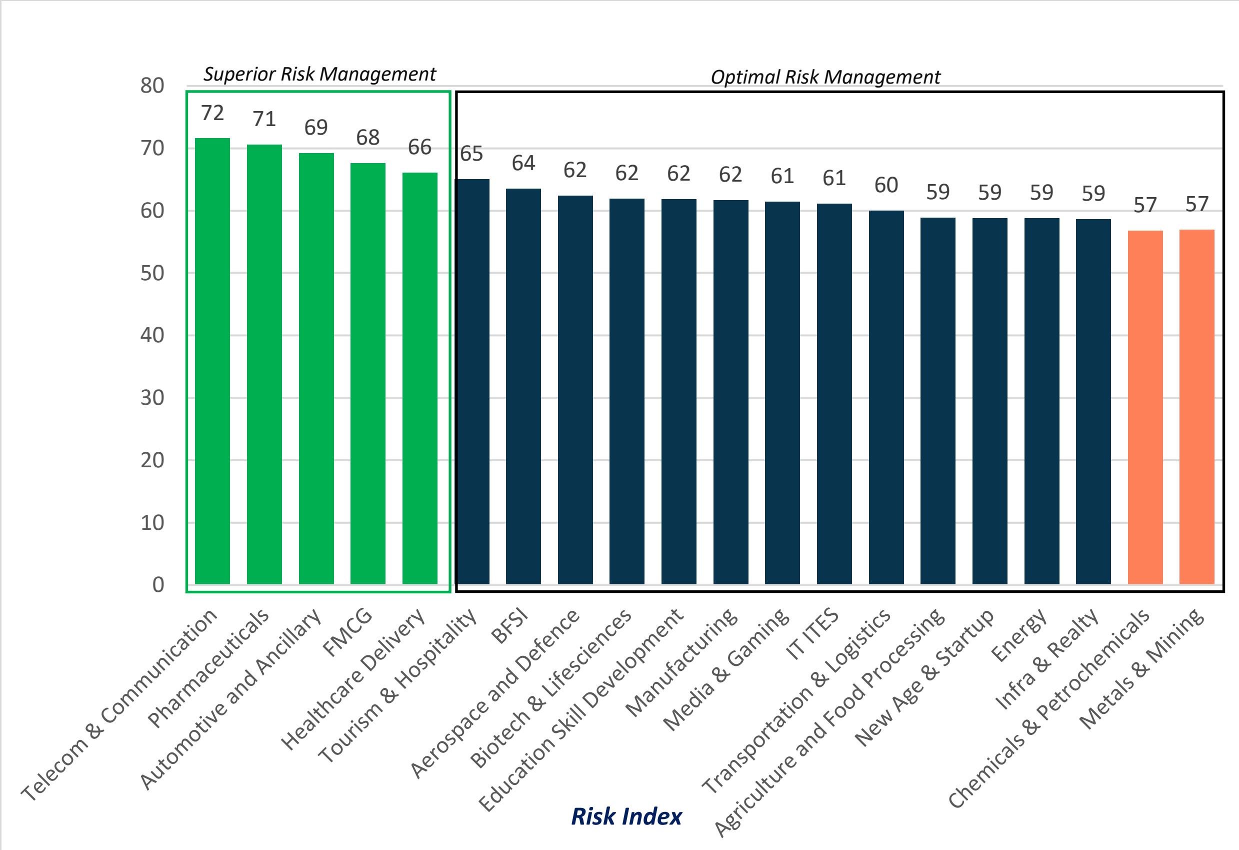


Figure 3: Corporate India Risk Index 2022 Sector Score

Superior Risk Index

Superior risk handling was found in five industrial sectors: Telecom & Communication, Pharmaceuticals, Automotive & Ancillary, FMCG, Healthcare Delivery.

Optimal Risk Index

Optimal risk handling was found in 15 industrial sectors: Tourism & Hospitality, BFSI, Aerospace & Defence, Biotech & Lifesciences, Education Skill Development, Manufacturing, Media and Gaming, IT & ITES, Transportation & Logistics, Agriculture and Food Processing, New Age & Startup, Energy, Infrastructure & Realty, Chemicals & Petrochemicals, Metals & Mining.

Sectorial Highlights 2022

The automotive sector is the backbone of any economy. Due to its capital - intensive and knowledge – intensive nature, it plays an important role in the socio – economic development of a country. In today's day and age, development of a country cannot be imagined without the growth of the Automotive sector. It ensures integration and interconnection of the entire country, thus, acting as a growth catalyst for all other sectors. As per statistics, about half of the world consumption of oil & rubber, about 1/4th of the glass output, and 1/6th of the steel output is accounted for by the automobile industry. Based on recent trends, it has been observed that a 1% growth in automotive industry, leads to a 1.5% growth in the GDP of that country. In India, Automotive sector is considered as one of the core sectors that are leading India's growth story. Not only this, it accounts for 12% of Gross Value Added (GVA) in the manufacturing sector, 49% to India's manufacturing GDP and 7.5% to the overall GDP of the country. It is so huge that it is responsible for generating livelihood for over 32 million people and based on future outlook, it is estimated to account for 65 million jobs by 2026.

Despite such bright future prospects, the sector had to go through a lot of tussles post the outbreak of Covid – 19. Some of the challenges that the sector had to face during this period include chip shortage, fuel – price led inflation, hike in commodity prices, disruption in supply chain and rise in shipping and container costs. Due to such factors, domestic automobile sales touched one of the lowest figures in nine years to 17.51 million in 2021 - 22. In order to revive the automobile sector and mitigate the challenges posed by Covid – 19, the government announced several measures in 2022. This includes expanding network of National Highways – which would improve fuel efficiency and productivity, extensive infrastructure projects – which would boost the commercial vehicle sector and lastly, MSP payments and other aids to the farming sector – which would boost the demand for new vehicles in the rural markets.

One of the biggest trends that is shaping the automobile sector is the increasing popularity of Electric Vehicles. As per the Economic Survey, the domestic electric vehicles (EV) market is expected to grow at a CAGR of 49% between 2022 and 2030 and is expected to hit 1 crore units in this period. This involves creation of over 5 crore jobs directly or indirectly by 2030. In order to catalyse the growth, the government has announced several measures such as Battery Swapping Policy and launch of Electric Vehicles in the Public Transport Sector.

To conclude, the automobile sector is one of the rising stars of the Indian economy and its growth dynamics will create new jobs and increase the average wage. Additionally, it will contribute to the expansion of the taxable base and revenues of the state budget, influence scientific and technical progress and improve standard of living of the population of the country.

Automotive & Ancillary Risk Index 2022 Vs 2021

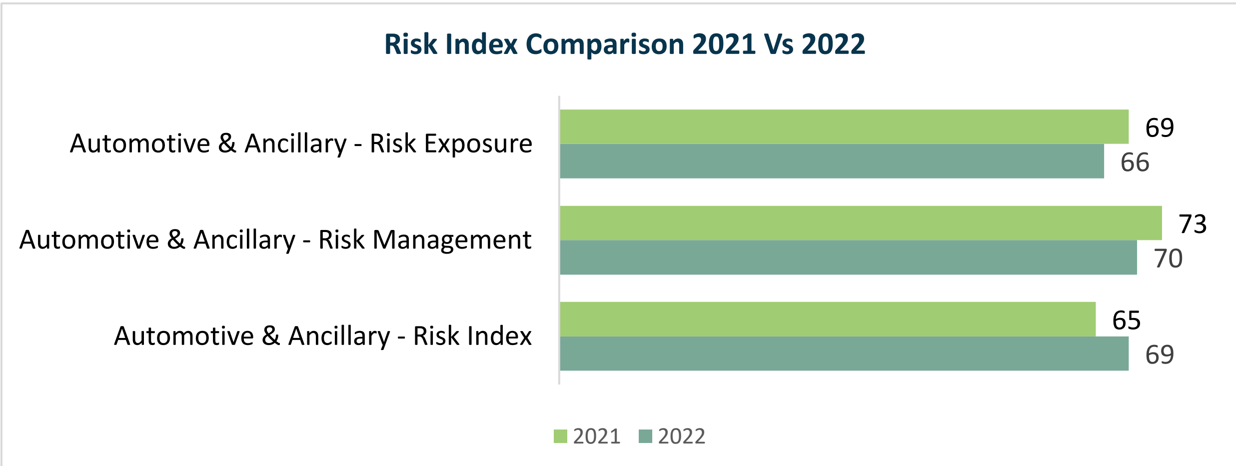


Figure 4: Comparative Analysis 2021 Vs. 2022

Automotive & Ancillary Risk Index 2022 Vs 2021

The risk index for the automotive sector increased from 65 to 68. The year 2022 was full of ups and downs which impacted different elements of an automobile supply chain. Further, the government is increasing its focus on safety of passengers and thus has issued new guidelines for Auto players while manufacturing vehicles. Additionally, there has been a significant increase in the number of recalls made by the major automotive players – which signals a negative impact on the auto industry.

Automotive & Ancillary Risk Management 2022 Vs 2021

The risk management score for the Automotive sector fell from 73 to 70. This has been due to greater challenges posed in front of the automobile players. With constant evolution of technology and rising competition, it has become a necessity for all automobile players to keep innovating their products. Additionally, several environmental regulations are imposed which makes the day to day operations difficult.

Automotive & Ancillary Risk Exposure 2022 Vs 2021

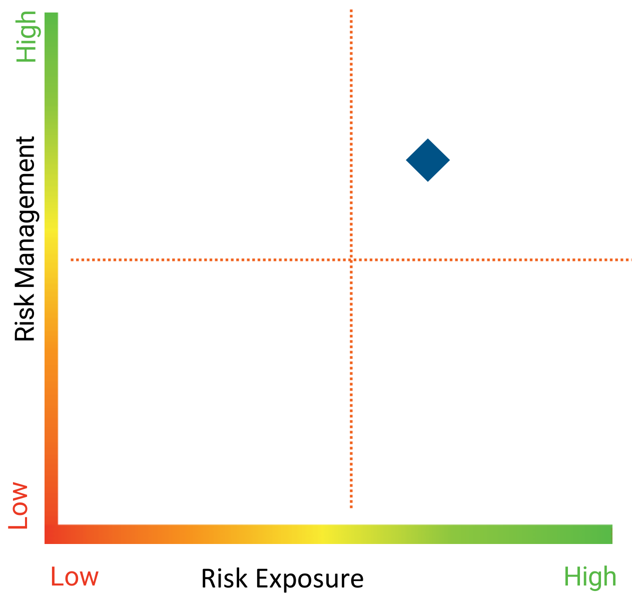
The risk exposure for the Automobile sector has fallen from 69 to 65. This is a positive change for the automotive sector. This has been possible as the automotive players are rapidly adapting to latest technologies which has made the entire manufacturing process more efficient. Additionally, government's growth plans and favourable economic policies have given a boost to the sector to face future challenges.

Key Highlights

Risk Dimension Analysis: Market and Economy

Risk Exposure Score: 69

Risk Management Score: 72



Inflation

- Thanks to the overall macroeconomic situation and rising geo-political tensions in 2022, the inflation rate had touched record levels. It was as high as 7% - triggering a rippling effect with higher overhead costs including labour, fuel, transport and insurance.

- As per statistics, the wholesale price index of motor vehicles across India during Financial Year 2022 was 122 - which suggests that the price index value increased by about 22% from the base financial year of 2012.

- This has made it difficult for automobile players to control input costs and maintain profit margins. The situation was further aggravated by semiconductor chip shortage which led to delays in manufacturing and further stressing the financial position of automobile players.

Taxation

- With regards to taxation, the automobile sector did not see any direct intervention from the government. There was no rationalization of GST or any tax incentive provided to automobile companies.
- However, there were several indirect bets played by the government in favour of the automobile sector.
- This includes enhanced allocation of capital expenditure - which would boost the demand for commercial vehicles, expansion of national highways network under PM Gatishakti mission, announcement of EV battery policy to promote electric vehicles and lastly increase in import duty on some automobile components, thus, boosting local parts manufacturing in India.

Regulatory Risks

- As per the Ministry of Road Transport and Highways, every year more than 1.5 lakh people die on Indian roads. In order to counter this, the Indian government undertook strict measures in 2022 to promote safety of passengers.
- Some of the key regulations of the government include rear passenger seat belt alarms, compulsion to install six airbags and lastly the announcement of Bharat NCAP as India's own vehicle safety testing agency.
- Additionally, to combat the rising vehicular pollution levels, BS 6 Phase 2 emission norms were announced, which are in line with Euro 6 emission norms.

Foreign Exchange Rates

- In Financial Year 2022, India exported over 56 lakh automobiles across the globe. This is equivalent to 24% of the total number of vehicles produced worldwide.
- Thus, due to high rate of exports, the Indian automobile industry benefited from the falling rupee as goods from India became cheaper.
- Additionally, around 41% of all auto part imports come from China and Germany. Thus, Rupee's depreciation against the dollar didn't have much impact on this trade.

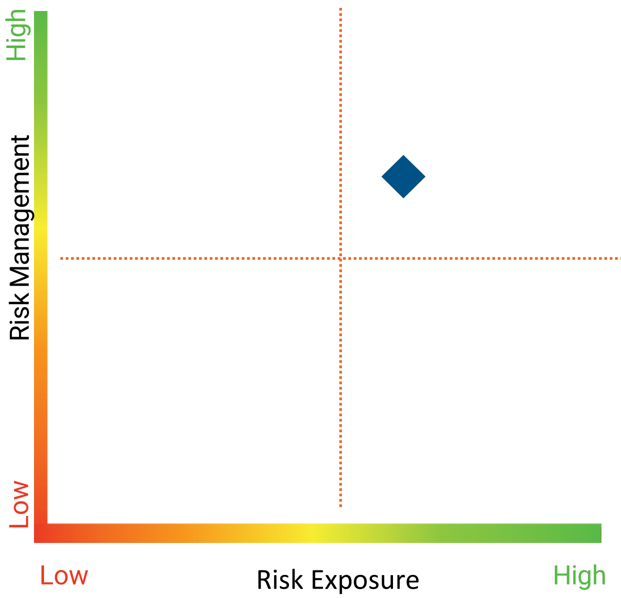
Geopolitical Risks

- The year 2022 started with Russia's invasion of Ukraine, which eventually turned into a mega geo-political event - affecting different industries across the globe.
- There was already a huge shortage of semiconductors across the globe and after Russia's invasion of Ukraine, the situation worsened as Russia is a key supplier of essential raw materials used in manufacturing semiconductor chips.
- Additionally, the war led to a rise in price of neon gas by 10 times, which significantly impacted the manufacturing of automobiles in India.

Risk Dimension Analysis: Technology

Risk Exposure Score: 66

Risk Management Score: 74



Disruptive Technology

- Over the years, latest technologies have been greatly integrated into the entire automobile manufacturing process. Not only in manufacturing, use of technology has expanded to car design, sales, marketing and servicing.
- Additionally, with greater use of robots and artificial intelligence - the manufacturing process has become much more efficient and effective.
- Apart from the conventional technology, there is an increasing focus on self-driving cars - which is seen as the next big trend in the automobile sector.

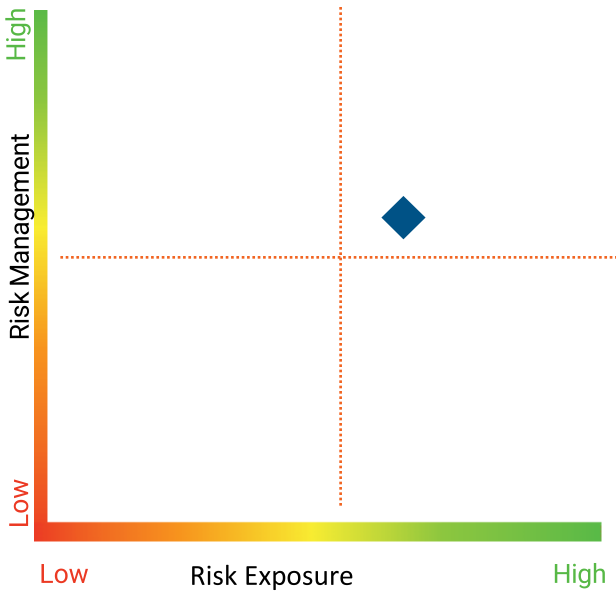
Intellectual property

- Since innovation and evolving technology are an inherent part of the automobile industry, Intellectual Property becomes one of the most valuable assets that an automobile company owns.
- Intellectual Property tools such as patents and copyrights have helped automobile players get an edge over their competitors.
- With greater integration of AI and rising innovation, the automobile players have started to understand that IP is the very essence of the present economy and it should be the goal of every automobile company.

Risk Dimension Analysis: Operational and Physical

Risk Exposure Score: 70

Risk Management Score: 75



Supply Chain Risk

- The year 2022 was a time period where the entire Indian automobile sector was recovering from a 2 year torrid period of raw material shortages, falling consumer demand and underutilization of production capacity.
- The supply chain of an automobile player saw several disruptions due to reoccurrence of Covid, Russia's invasion of Ukraine, semiconductor chip shortages and rising inflation.
- This time period is seen as one of the toughest for the entire automobile sector. However, it was a great learning opportunity for all automobile players as the macroeconomic factors helped them build a resilient, agile and digital supply chain with high levels of efficiency to control costs.

Commodity Price Risk

- Thanks to global events such as reoccurrence of Covid, Russia's invasion of Ukraine, semiconductor chip shortage, rising inflation and high costs of shipping and energy - led to rise in raw material costs, decline in profitability and higher working capital intensity for the automobile industry.
- Auto part suppliers were hurt the most due to elevated prices of key inputs such as steel, aluminium and energy.
- However, such commodity price risks in the automobile sector were mitigated by strong underlying car demand.

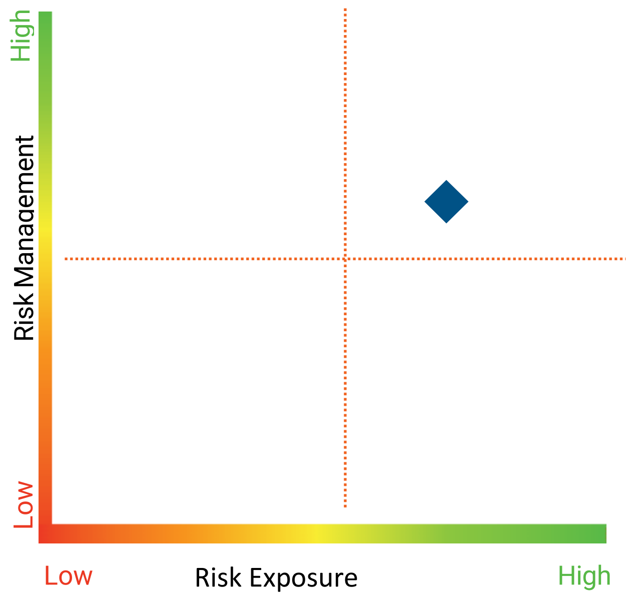
Environmental Risk

- As per statistics, motor vehicles collectively contribute to over 75% of carbon monoxide pollution. With rising demand for vehicles, the abundance of toxic gases released in the atmosphere keeps on increasing.
- As an important driver for growth, the government alongside private players are taking steps to promote Electric Vehicles and Green Hydrogen vehicles – which are more environmentally friendly than petrol or diesel based vehicles.

Risk Dimension Analysis: Crime & Security

Risk Exposure Score: 62

Risk Management Score: 67



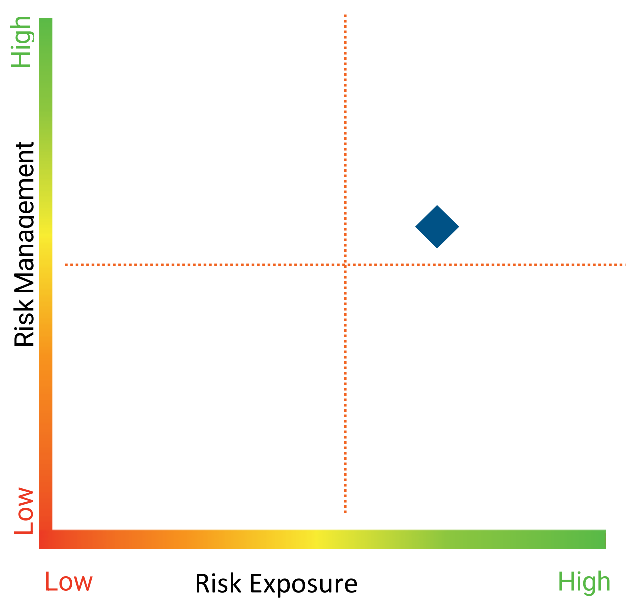
Cyber-crimes

- With greater use of technology and increasing popularity of a globally connected car market, it has opened doors for new technologies and information sharing across industries.
- However, with such greater inter-connectivity, there is a constant increase in the risk of cyberattacks including malicious attacks, unauthorized access, damage and interference with the safety functions of a vehicle.
- As the number of software components in a vehicle grow, hackers find backdoors to enter vehicles remotely as technology advances.

Risk Dimension Analysis: Natural Hazard & Event

Risk Exposure Score: 61

Risk Management Score: 67



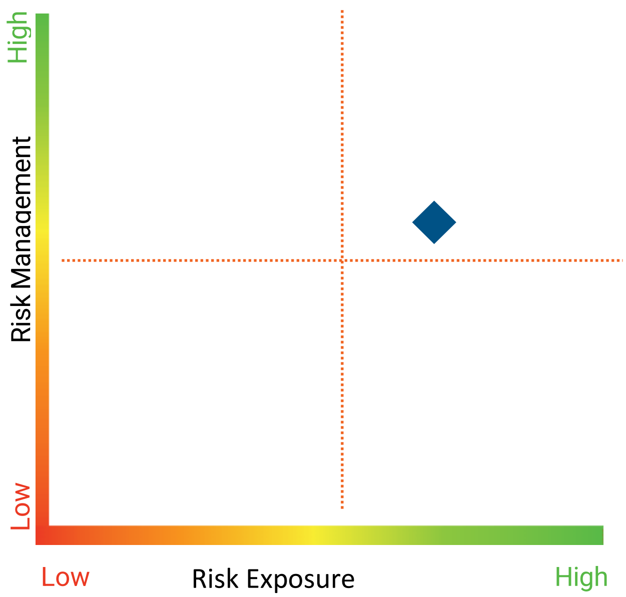
Pandemic and other global epidemic diseases

- The Covid - 19 pandemic brought several aftermaths for the entire Indian automobile sector. Automobile sector was one of the most adversely impacted sectors of India.
- The pandemic completely disrupted the supply chain and made operations difficult. The situation was further aggravated by indirect factors such as rising raw material prices, low demand and shortage of workers.
- Not only this, there was also a significant reduction in the number of auto dealerships in India which significantly impacted the sales volume and financial positions of Indian automobile companies.

Risk Dimension Analysis: Strategic Risk

Risk Exposure Score: 63

Risk Management Score: 66



Increased number of recalls and quality audits

- Vehicle recall is one of the key risks faced by the automobile industry. Despite hundreds of safety checks, plenty of computer simulations and stringent road & track tests, defects in vehicles post launch still exist in 2022.
- As per statistics, over 278,405 vehicles were recalled by manufacturers due to defects in manufacturing or process design.
- This recall exercise has become popular among automobile players post the launch of SIAM's Code of Voluntary Recall in 2012.

Resource scarcity and public sentiment

- With increasing focus towards sustainability and adoption of environmentally friendly practices, the government is increasingly promoting the use of electric vehicles and green hydrogen based vehicles.
- The conventional fossil fuel based vehicles contribute significantly to air pollution, thus proving to be harmful for the environment.
- Additionally, there is a constant threat of oil becoming extinct by 2050. So, automobile industry has started to leverage other technologies to find alternatives for fossil-fuel based vehicles.

ICICI LOMBARD: Key Solution Offerings

Property

a. Businesses are always prone to risks and fire eruption and fire insurance provides a comprehensive protection against damages caused due to fire explosion and other risks. Besides fire related perils, it also protect damages caused due to any natural calamity, bursting of water tanks, theft etc. The built in covers include alterations or extensions, stocks on floater basis, temporary removal of stock, cover for specific contents, start-up expenses, professional fees, costs for removal of debris etc

b. **Solutions**

   i. **Property Loss Prevention exercise** - We have developed the methodology of Property Value Added Services for corporate customers which focuses on technical engagement with detail risk visit, followed by benchmarking of the risk (Industry Risk Profiling).

   ii. **Fire Hydrant IoT** - Fire hydrant online monitoring devices use IoT to monitor fire hydrants and assure their availability in emergencies. We've helped multiple corporate customers maintain and monitor this important fire safety component in real time.

Marine

a. We offer specially curated plans for covering the risk of theft, malicious damage, shortage, and non-delivery of goods, damages during loading and unloading, and mishandling of goods/cargo

b. Marine Cargo insurance primarily covers loss during transit caused due to fire, explosion, hijacks, accidents, collisions, and overturning

c. **Solutions**

   i. **GPS Device Tracking**: With the help of our advance GPS devices we can have bird eye view on the consignment and vehicle from anywhere in the world. OurSAAS allows us to track and get the visibility of the vehicle on the basis of our requirements which is fully customizable

Liability

a. Comprehensive general liability:

i. This policy is important for every small and medium sized businesses to protect the insured entity against claims arising out of legal liability where they are heldresponsible for third party bodily injury or property damage due to insured's business, premises or products. It should be taken by every new business as it covers all risk a business may face.

b. Cyber - With cyber risk steadily increasing, security/ data breaches affect millions of records a year. Cyber Risk insurance coverage is designed to help an organization mitigate its risk exposure by offsetting costs involved with recovery after a cyber-related security breach or similar event.

c. Solutions

i. **Simulated phishing tests** - Simulated real looking phishing tests andrecord employee behavior to phishing attacks along with training collateral in form of co-brandable posters, infographics and videos

ii. **Cyber maturity assessments** - Assess the security posture of your organization and identify the potential risks with our assessment based on ISO 27001 Control measures for Information security

iii. **D&O** - The need of Directors & Officers Insurance is more than ever before. Any breachor non-performance in the duties can result in claims against directors, officers and employees by reason of wrongful act and need to incur various expenses like defense costs, damages or compensation and other incidental costs. This can affect company's growth and performance.

Group Health

a. Employees are the backbone of an organization and the most valued asset. OurGroup health insurance product is designed to offer health coverage to suit employees of all business types ranging from small & medium enterprises to large organizations.

b. Solutions:

i. **IL Take Care -** AI enabled mobile app for employees

ii. **Health assistance services -** Health Assistance is a dedicated medical care service that assists you in all your health related queries for identifying specialist/hospital/fixing an appointment with doctors/nutritionist /facilitating2nd opinion

iii. **Tele Consultation** – Hello Doctor

iv. The insured is eligible to avail unlimited General Physician consultations for routine health issues over the phone by aqualified doctor

v. **Diagnostics & pharmacy services** – Book a lab test or home delivery of medicines

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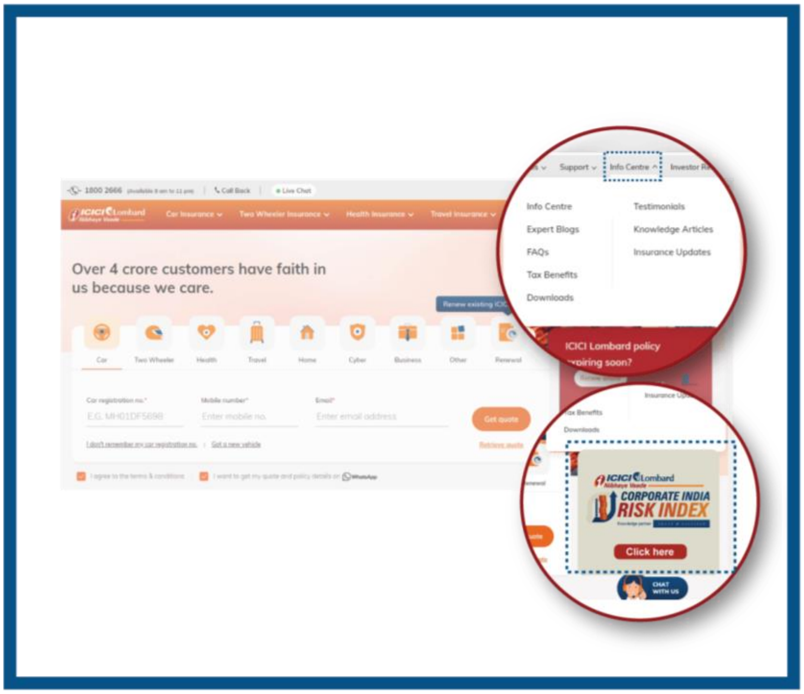
www.icicilombard.com/corporate-india-risk-index



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