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FROST & SULLIVAN

## COUNTRY REPORT 2022





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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

CIRI is a first-of-its-kind risk measurement tool to gauge the level of a company’s risk exposure and preparedness. A higher score signifies more effective risk management, enabling companies to adopt appropriate risk management practices for the risks they are exposed to.

ICICI Lombard 3rd edition of Corporate India Risk Index showed a slight improvement despite the global headwinds related to inflation, geo-political tensions, and slowed global economic activities. However, in India the economic activities kept up the pace and registered a ‘Corporate India Risk Index 2022’ score of 63, which is up from 62 in 2021, representing “optimized risk handling” with a scope of further improvement. These findings are a part of the third edition of ICICI Lombard’s Corporate India Risk Index (CIRI). The company has released the study in continued collaboration with Frost and Sullivan, a leading global management consulting firm.

## Key Stats

Optimized Risk Index Score was aided by improvement in risk management, though the risk exposure increased due to multiple global factors.

Key Factors Comparison	2022	2021
Corporate India Risk Index	63	62
Corporate India Risk Management	66	65
Corporate India Risk Exposure	64	62

The finding of 2022 edition of risk index show that Telecom & Communication, Pharmaceuticals and Automotive and Ancillary are among the five sectors which show cased ‘Superior Risk Index’ showcasing better risk handling/management related to Operational and Market and Economy related risks. Chemicals & Petrochemical and Metals & Mining were at the border of ‘Optimized Risk’ Handling / management, being adversely impacted due to global factors like inflation, elevated crude oil prices, Russia-Ukraine border tensions, slowed global economic activities etc., however some risk was mitigated for the Chemical & Petrochemical sector by purchasing cheaper crude from Russia thus helping to reduce risk significantly.

The maximum improvement in risk index score was witnessed in Infra & Realty sector and Aerospace & Defense sector which secured a score of 59 & 62 up from 46 & 52 in 2021 respectively. The sectors bounced back due to the increase of demand and multiple government initiatives to boost the sectors by new strategic initiatives and business models. However, sectors like Chemical & Petrochemicals and Agriculture had a maximum downgrade in the index score due to high inflation and geopolitical tumult.



- **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

### Operational & 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.

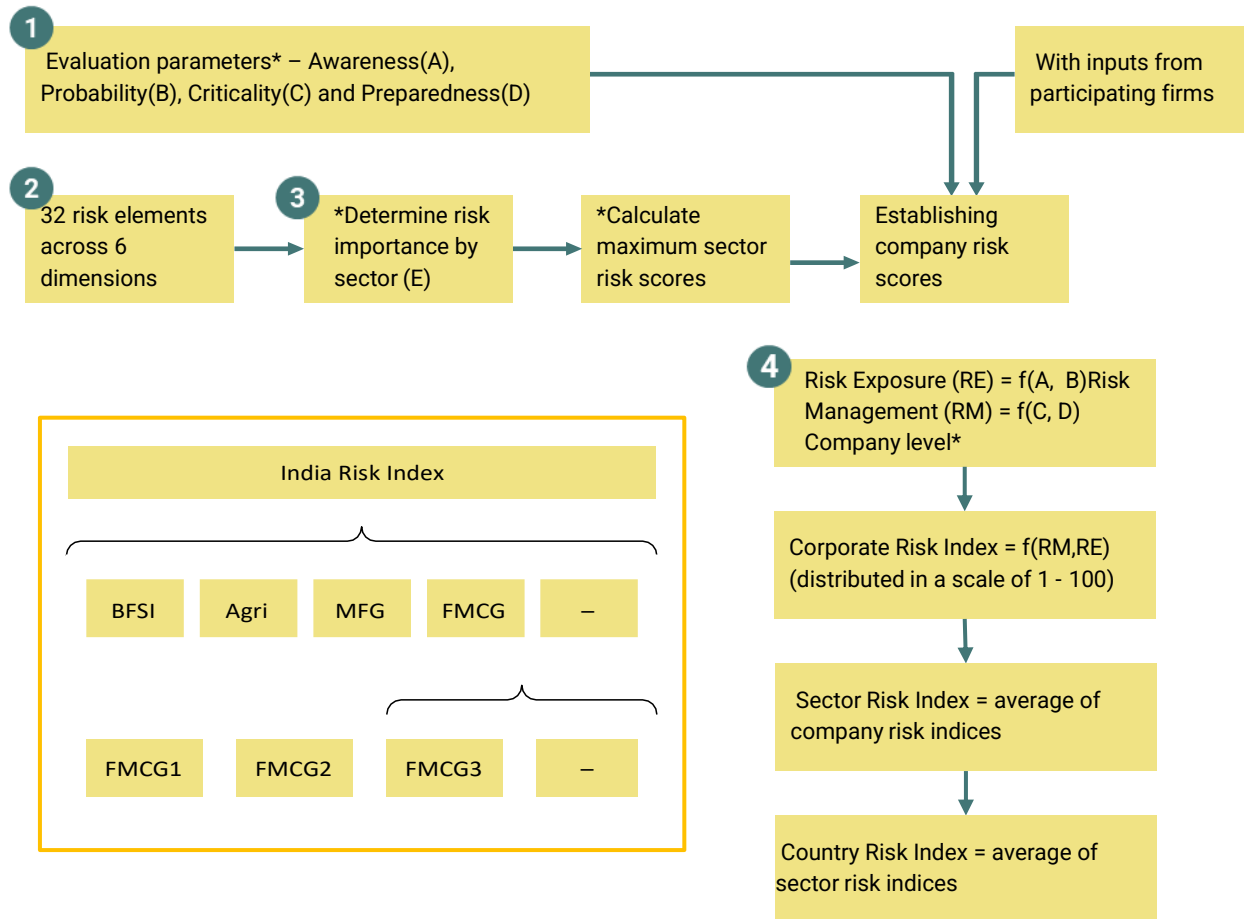


## Natural Hazard Risk

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 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



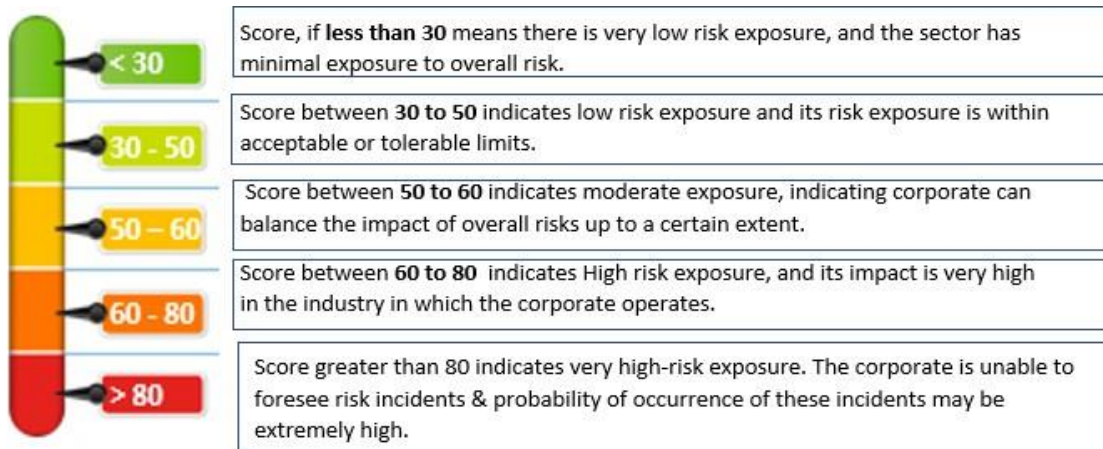
- 1. Evaluation Parameters\*:** The index maps the risks faced by any enterprise basis of Awareness, Probability, Criticality and Preparedness against the defined Risk elements. The evaluation Parameters are defined as: Awareness - Level of awareness of potential risk affecting the firm. - Likelihood 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.

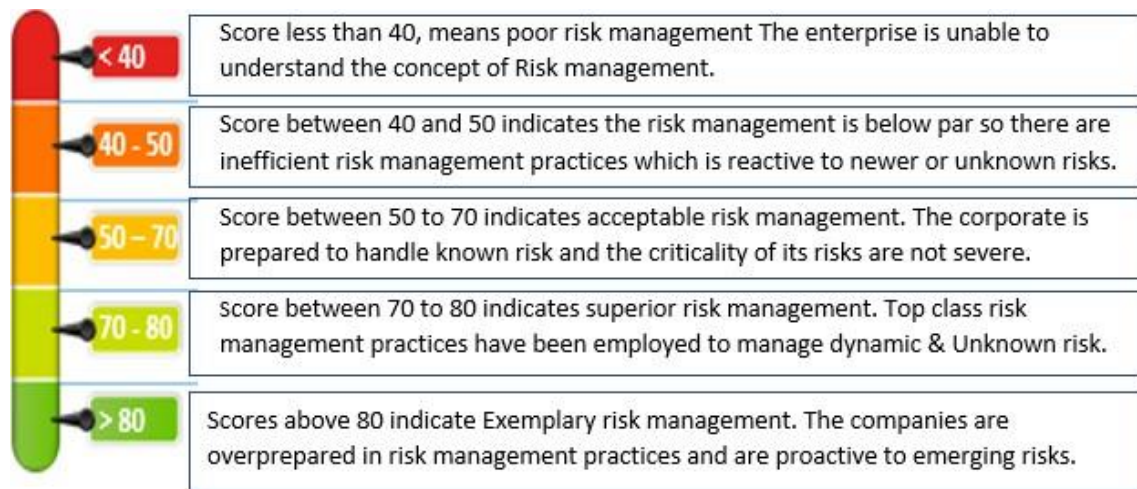
## A. ICICI Lombard Corporate Risk Exposure – Scale

**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.



## B. ICICI Lombard Corporate Risk Management – Scale

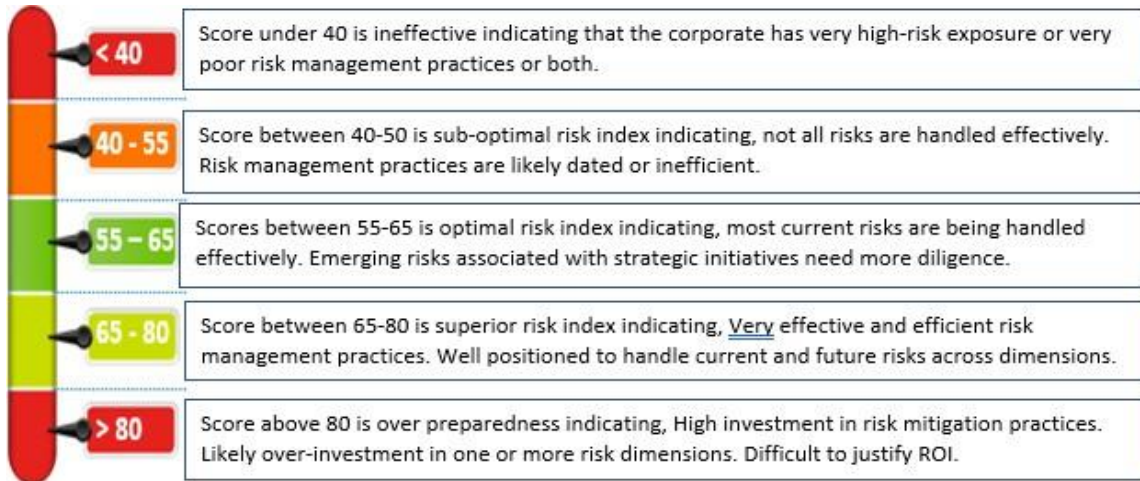
**Risk Management:** Identification, Evaluation and Prioritization of corporate risks followed by well-coordinated steps to minimize the occurrence of uncertainties in the foreseeable future is defined as the Corporate Risk Management. The risk management scale works in the opposite to that of the risk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



### 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.

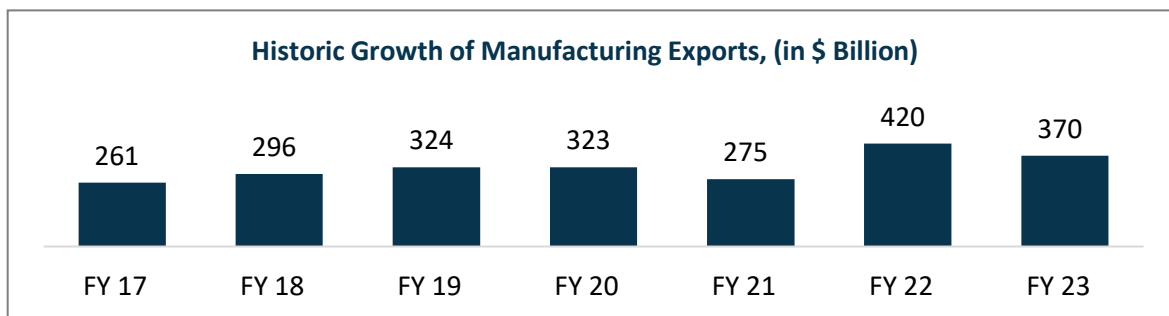
Let's look at the risk Index scale.



# 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.



*Figure1: 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



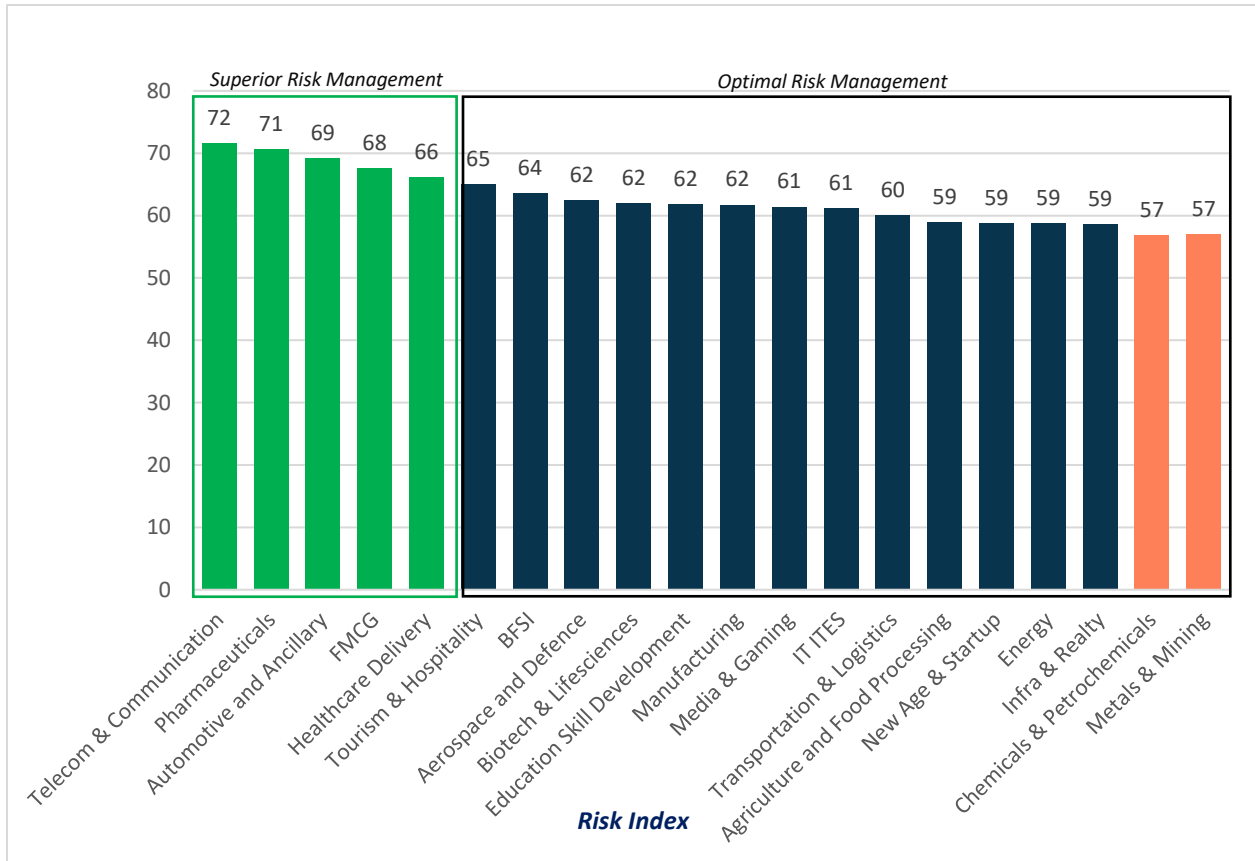
*Figure 2: Corporate India Risk Index 2022*

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





# AEROSPACE & DEFENCE





## Aerospace & Defence

Indian Aerospace & Defense Industry is an up and rising sector experiencing rising government interest and regulatory action in an effort to attain self-reliance. Regulatory relaxation, incentivization of private players, encouraging FDI and technology transfers from MNCs are some of the measures Indian government has taken since 2020 to make the sector vibrant.

Recent modernization plans for the Indian armed services and the excessive reliance on arms imports along with the fast-pacing race for space economy, this sector has become a major focus area for the country where “indigenous manufacturing infrastructure is being supported by requisite research and development ecosystem.”

The present size of the industry is close to \$38.96 billion in 2020 and is expected to reach, \$53.06 billion by 2025, with a cumulative FDI inflow of \$15.07 billion between 2000 & 2020. Earnings for companies in this sector have grown at a staggering 26% over the last 3 years. This heavy push for production localization, high budget allocation (~13% CAGR), import restrictions, booming role of startups and know-how sharing agreements with established defense manufacturers, reinforces the heavy government interest. Not just the manufacturing boost, given the existing large fleet of aircrafts in India, Maintenance, Repair and Overhaul (MRO) companies have also started setting themselves up with joint ventures, growing at 10% to reach \$2.6 billion by 2021.

Major risk factors for this industry include intellectual property rights management while setting up a vertically integrated ecosystem with OEMs, quality testing agencies & MROs, long delays in order finalization & deliveries, sensitivity & secrecy of industry, excessive competition from foreign companies and monopsony structure. However, Government of India’s Atmanirbhar Bharat Push, setting up of dedicated defense corridors and the increasing budgetary allocation, are testimony to the promising sustenance of the sector.



# AGRICULTURE & FOOD PROCESSING





## Agriculture & Food Processing

The Indian agriculture sector that employs around 58% of the population and contributing almost 17% in the GDP, warrants its performance to be critically important for the employment and growth opportunities in the country.

The factors that drive the agriculture production in India entails – rainfall due to south-western and north-eastern monsoon; availability of seeds, fertilizers, and pesticides; supporting infrastructure i.e., credit, marketing, irrigation, power etc.; and the regulatory mechanisms of the government that facilitates the optimal procurement facilities through the minimum support price and the other subsidy schemes. The scale of produce is also prone to certain risks that stem from these factors of production.

Geographically, the climate, the rainfall, the soil, and the sunlight play a defining role in agriculture production. Although the rainfall due to south-west monsoon in 2022 was above normal but its uneven distribution had an adverse effect on the kharif crops. However, the delayed withdrawal of monsoon led to the higher reservoirs level and better soil conditions. The early heat wave during the harvest season of wheat also adversely affected production.

Due to the lockdown post the outbreak of covid, there was a disruption in supply chain due to delayed shipments in the overseas region, increased cost of transportation channels etc. This refrained the farmer's access to market and credit facilities, but the favorable monsoon and reverse migration of labor bolstered the agriculture production in India.

The occurrence of heat waves during the harvest season of kharif crop and the geo-political conflict has led to the soaring prices of wheat in the market. The fluctuation in foreign currency and exchange rates discourage the investment in this sector which caters to the increase in the prices of imports like fertilizers, pesticides etc. This further lowers the income of the farmers which is not favorable to the economy.

Although, the Covid has immensely affected the agriculture sector, but its impact could largely be seen in the kharif crops as the Rabi crops were least affected as they were on the verge of completion but the allied sectors like poultry, fisheries etc. saw a drastic fall in the demand due to rumors which led to the huge decline in production. The risks in the different factors of production are always going to be a major challenge thus advance readiness is extremely required to tackle any unforeseen threats.





# **AUTOMOTIVE & ANCILLARY**





## Automotive & Ancillary

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, extensive infrastructure projects, 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 catalyze 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.



**BFSI**



 **BFSI**

The Indian Banking, Financial Services, and Insurance industry is becoming a five trillion-dollar company. In 2022, the BFSI's share has increased to 12% of the GDP and has a market capitalization of 90 lakh crores. There have been significant developments in the BFSI sector related to technology. With the help of telematics, data is analyzed to evaluate consumer behavior. With the help of AI, work in the insurance industry has been easier. IRDAI's introduction of the 'Use & File' reform in 2022 has helped customization and meet industry demands. Also, the year 2022 has witnessed more and more people joining the digital distribution route. The year 2022–2023 also saw significant advancements in other facets of banking, such as asset quality and capital sufficiency. The scheduled commercial banks' gross non-performing assets (NPAs) decreased overall to 5.0%, and the CRAR for the banking sector remained robust at 16%.

Indian economy faced some challenges. Inflation rates were high, around 6.8%, and the chances of recession will be seen in 2023. In the first half, inflation rates were controlled by RBI, but later on, the rates were hiked, which affected the Indian banking sector badly. Public banks' credit-to-deposit ratio has increased compared to last year and stood at around 66-67%, which shows that the Indian banking sector may be more conservative in its lending practices and may have more liquidity available to cover unexpected withdrawals or other financial obligations. Government initiatives such as PM-JAY, PMFBY, PMJJBY, PMSBY etc., are increasing insurance penetration.

The India Post Payments Bank (IPPB), a "Digital-First Bank" operating under the Ministry of Communication, Government of India, has significantly advanced towards attaining its financial inclusion objectives through digital banking. The IPPB stated in January of this year that it had reached the five-crore customer milestone three years after operations began, making it one of the nation's fastest-growing digital payments banks. Even though the bank's book looks good with fewer bad loans, the reality is that they wrote off a majority of the bad loans, but eventually, they remain in the system. The banking sector faced another big scam of around 23,000 crores, affecting the banking sector. Physical risks are also a significant concern for the BFSI sector, as climate change, natural disasters, and pandemics pose substantial threats. Rising sea levels and extreme weather events could result in billions of dollars in damage to coastal infrastructure and cause business operations to halt. There has been an increase in the number of phishing attacks in India, at 7.4% targeting banks. 20% were targeted at digital banking, 18% at malware-based incidents, and 50% were data breaches. India still has the highest Fintech adoption rate globally at 87%. Growth in Tier II and III cities is fueled by rising income levels, growing risk appetite, and urbanization. The industry will change in the following years due to improved distribution capacities. BFSI sector development will be impacted by variables such as rising income levels, more sophisticated clients, and a gradual drop in personal income tax rates.



# BIOTECH & LIFESCIENCES





## Biotech & Lifesciences

According to the market research firm AWACS, Indian Biotech and Lifesciences sector grew by 8% YOY to 1.8 Lakh Crore Rupees in 2022, primarily attributed to price increase as the volume sold remains similar to the previous years.

According to Union Minister Jitendra Singh, India's Bio-economy has grown eight times in the last eight years to 80 billion USD by 2022. A total of 1128 startups in Biotech were registered in 2021. There are around 5300 biotech startups in India as of Dec 31, 2022. The investment in Biotech firms increased from 10 crores INR in 2014 to 4500 crores INR in 2022, creating over 25000 highly skilled jobs. Also, the number of biotech incubators rose from 6 in 2014 to 75 in 2022.

In 2022, Despite geopolitical concerns, India continued to supply medicines to over 200 countries, living up to its reputation as the world's pharmacy. The biotech industry crossed 1 billion USD in Research and Development spend due to the Covid economy, which was 320 million USD in 2020. The sale of antibiotics declined by 5% in 2022, and volume decreased by 1%.

Prime Minister Narendra Modi inaugurated the Biotech Startup Expo on June 9, 2022, in Pragati Maidan, New Delhi. Around 5000 participants from 20+ countries visited in 2 days.

Global companies partnering with UN supported health organizations to grant voluntary, royalty-free licenses for producing generic drugs in 95 middle- and low-income nations, including India. India's drug regulator approved the antiviral medication Paxlovid on Thursday for restricted emergency use against Covid-19 amid rising infections in the country. Indian companies will be manufacturing the generic version of Pfizer's drug, anticipated as a game changer in the fight against Covid-19.

While the initial outlay in the Product Linked Incentive (PLI) schemes are encouraging, a lot more needs to be done, especially in the Active Pharma Ingredient (API) space. The industry needs to be encouraged further by extending the PLI schemes for several critical APIs as there is a dire need for several API players to backward integrate. Similar incentives are required for specific excipients which are not being manufactured in India and are crucial to the supply chain.



# CHEMICALS & PETROCHEMICALS







## Chemicals & Petrochemicals

The chemicals sector has been one of the key growth drivers of the Indian Economy. Due to its wide use case across sectors such as Agriculture, Pharmaceuticals, FMCG, Construction, Textiles, etc, the growth potential of this sector is immense. With over 80,000 products to offer, it is one of the most diversified sectors in India. Thanks to factors such as the China + 1 strategy, India's proximity to the Middle East - the world's source of petrochemicals feedstock and overall boost in consumption, Indian chemical industry is all set to outpace its Chinese counterpart and increase its share in the global markets to 6% by 2026. Not only this, analysts also expect the Indian specialty chemicals market to grow at a CAGR of 12%, reaching a staggering figure of \$120 billion by 2025 from \$70 billion in 2020 and generating employment for over 2 million people.

The year 2022 has been full of ups and downs for the Chemicals Sector. With reoccurrence of Covid in China, Russia's invasion of Ukraine, continuous increase in interest rates by the Fed, increasing focus on sustainability & reduction of carbon footprint and ease in regulatory environment – all these factors have significantly impacted the risk exposure of the Chemicals Sector. This includes high energy costs, rising raw material prices, limited shipping and container availability and ever-increasing costs of meeting ESG requirements. Despite the uncertainty, the Chemicals Sector has continued to grow and flourish with YOY increase in exports and revenues. Not only this, but the overall risk index has also reduced significantly when compared to 2021 – showing a positive trend for the entire sector.

In order to meet the growth objectives of the Chemicals sector and help India achieve the \$5 trillion-mark, Indian government is playing a pivotal role for the growth and development of the chemicals sector. Some of the leading initiatives taken by the government include establishment of industrial corridors, industrial parks, National Infrastructure Pipeline, robust investment policies, industrial licensing for hazardous chemicals and liberalization in licensing requirements. Further, to meet the global vision of a sustainable future, the government is increasing its focus to promote sustainable chemistry. This involves adopting a circular economy model and working collectively with the private players to reduce GHG emissions and plastic waste and using renewable raw materials such as agriculture and bio waste to make the entire manufacturing process eco-friendly. Additionally, government plans to introduce production-linked incentive (PLI) scheme to promote domestic manufacturing of agrochemicals could be a game changer for the entire sector.

To conclude, if the growth plans of the private players and the government are met, the chemicals sector could prove to be a goldmine and help India achieve the \$5 trillion mark.



# EDUCATION & SKILL DEVELOPMENT





## Education & Skill Development

Education in India sets a landscape for due interaction of private and public entities to deliver results and augmenting human resource development. However, an enhanced interaction of market forces triggers questions around financial feasibility, sustainable models, and legal compliances. Being a primary pillar of the economy, business decisions by educational entities must be driven by creating marginal social benefit for end users.

With a 500 million population in the age group of 5-24 years, there exists a market potential that demands embracing the Education 4.0 Revolution, therefore marking the onset of technology integration in education to innovate the customer value proposition. As a home to 36 Ed-tech unicorns, the footing in of technology creates intellectual property risks and data compromises. Often, test prep platforms engage in database exchanges, plagiarizing software etc.

In the Maslow's need hierarchy theory, education belongs to a physiological need. Therefore, a natural hazard such as the COVID-19 pandemic failed to disrupt market opportunity in the segment. Regardless, the inflation rates, recessionary tendencies and ever developing foreign non-cooperation bears a negative impact on cash flows across privately-owned avenues and stakeholder involvement at public avenues.

Contrary to the mass assumption, upward homogeneity among the educational service providers widens the scope for operational, financial and technical risks. Through primary and secondary data collection, an attempt is made to undertake comprehensive risk mapping and define the externalities flowing from them.



**ENERGY**





## Energy

The power sector in India is experiencing significant strain due to multiple reasons. Grid demand in April 2022 hit an unexpectedly high level of 207 GW, with peak demand projected to reach 210-215 GW for the current financial year. However, the supply side of the sector is struggling to keep pace.

Only a minuscule 1.4 GW of new conventional capacity was added in the previous financial year, with the pipeline for new projects also showing weakness. The cost of imported fuel has increased, and long-term contracts are inflexible in allowing the use of high-cost fuel even in emergencies. Domestic fuel is running out, and renewable energy projects are unable to meet the growing demand, with only 13.5 GW commissioned in the previous financial year, mainly in the solar sector, which cannot cater to evening peak demand. Furthermore, many SECI contracted projects have no off-takers, and volatile commodity and equipment prices in the international market make delays impractical. Finally, the stress caused by delayed payments by Discoms worsens the situation.

Despite claims of India being a power surplus nation, the reality is that demand for electricity will continue to increase with economic growth, and the country is not building enough capacity to keep up. By FY 24, peak demand is expected to reach 220-225 GW, and by FY 26, it could reach 243-250 GW, but the current capacity is insufficient to meet these demands. To address this issue, Load Serving Entities (LSEs), primarily Discoms, should be mandated to demonstrate capacity adequacy for the next three years and present credible supply options.

Brownfield power plants should be prioritized, and domestic coal supply should be supplemented with alternative sources like torrefied municipal solid waste and biomass. Renewables, including wind, must be rapidly increased to meet the commitment of 500 GW of renewables made by PM Modi. Storage should also be prioritized for peaking and ancillary requirements. The National Electricity Plan should be refreshed every two years, and stranded capacities must be utilized. To address the crisis, long-term planning approaches should be combined with short-term measures and diverse stakeholders must align. Well-crafted communication that stakeholders can relate to and align with will be necessary.



**FMCG**





## FMCG

The FMCG sector has undergone a drastic transformation over the decades and is estimated to be the fourth largest sector in India. It is expected that the sector will grow at a CAGR of 14.9% and reach \$220 Billion by 2025. The industry experienced a value growth of 8.4% in 2022, but there was a decrease of 1.5% in the volume.

The post covid era, the industry has displayed strong resilience and has successfully bounced back from the supply chain disruption with revenue growth of 10-12%, double the last fiscal year. The change can be attributed to price hikes across various product categories to offset the increase in raw. Despite an increase in advertising expenses and raw material prices, the operating margin for this fiscal year is expected to return to its normal level of 19-20%, albeit with a slight moderation of 80-100 basis points. It is noteworthy that in the previous fiscal year, operating margin had improved by around 100 basis points despite lower revenue growth, due to the reduction in advertising and promotional expenses.

The FMCG players have displayed high stability attributed to huge cash flow generation, moderate need for capital spending along with capitalized balance sheets, and high liquid surplus. As consumer behavior and channel preferences change, Indian consumer packaged goods companies are adapting their strategies to remain competitive in the market. The number of internet users and smartphone owners is predicted to grow with the introduction of 5G telecom services by the end of 2023. As a result, online search results, ratings, reviews, and influencers will have a greater impact on customer.

The sector is facing several challenges with persistent inflation and shrinking demand, leading to a shift in customers' behavior. The pressure of reduced consumer spending has been exceptionally high for customers in rural India, and the rural markets have witnessed continuous negative consumption growth. There have been persistent efforts made by major players to gain the rural market share by introducing smaller packs of most of the products to overcome the demand-supply gap. There has also been a tremendous increase in D2C FMCG brands in India, and the number is expected to grow to 200,000 by 2025. The FMCG industry has benefited from significant investments and government support in recent years. Between April 2000 and March 2022, the sector attracted healthy FDI inflows of US\$20.11 billion. The Department of Consumer Affairs has been allocated Rs. 1,725 crore (US\$222.19 million), while the Department of Food and Public Distribution has been allocated Rs. 215,960 crore (US\$27.82 billion) in the Union Budget 2022-23. To help Indian food product brands expand in international markets, the government approved the Production Linked Incentive Scheme for Food Processing Industry (PLISFPI) with an outlay of Rs. 10,900 crore (US\$1.4 billion) in FY 2021-22.

The robustness of the supply chain has been enhanced by government incentives and FDI funds, capturing higher visibility for FMCG brands. The government PLI schemes have also given a boost to manufacturing capacity along with exports.





# HEALTHCARE & DELIVERY



## **Healthcare & Delivery**

In 2020, India's healthcare industry was valued at around 280 billion USD and was predicted to reach 372 billion USD by 2022, with an annual growth rate of 23 percent. It is the largest service sector in the country and provides quality healthcare to the population of approximately 1.38 billion people, including hospitals, medical devices, clinical trials, outsourcing, telemedicine, medical tourism, health insurance, and medical equipment.

The increase in Medi tourism is expected to further boost the Indian healthcare sector, with a projected size of 50 billion USD by 2025. India is a leading Medi-tourism destination, with an estimated share of 10 billion USD by 2023. Telemedicine has also transformed healthcare accessibility in India, particularly in remote and tribal areas, where high-level health facilities are scarce. Telehealth and telemedicine adoption is predicted to continue growing following the COVID-19 pandemic. Despite India accounting for nearly one-fifth of the world's population, its overall bed density is only 15, which is lower than the global median of 29 beds, as well as other developing countries such as Brazil, Malaysia, and Vietnam.

The healthcare industry in India is rapidly adopting technology, with a focus on artificial intelligence, big data analytics, and machine learning. This has resulted in process optimization, reduced healthcare costs, and better access to data. The use of robotics for process automation has also been adopted. India is now a hub for R&D activities for international players, largely due to its relatively low cost of clinical research.

The healthcare budget has been increasing year-over-year, with the budget for the Ministry of Health and Family Welfare (MoHFW) growing at an 11% compound annual growth rate (CAGR) between fiscal 2011 and fiscal 2022. Fiscal 2022 saw a significant rise in healthcare expenditure due to the expenses associated with tackling the Covid-19 pandemic. The utilization rate has been 100% or above in recent years, as it has been since fiscal 2016.

The Pradhan Mantri Garib Kalyan Yojana announced a dedicated life insurance cover of Rs 5 million for healthcare workers, aimed at providing support to their families in case of death due to COVID-19. The government's focus on healthcare presents a significant opportunity for private investment to create affordable healthcare facilities and services. Despite the potential for growth, the healthcare sector in India faces several challenges, including inadequate infrastructure and inequality in the quality of healthcare services based on affordability and financing.



# INFRASTRUCTURE & REALTY





## Infrastructure & Realty

The real estate market will increase from Rs. 12,000 crore (1.72 billion USD) in 2019 to Rs. 65,000 crore (9.30 billion USD) in 2040. In India, the real estate market is anticipated to grow to 1 trillion USD in size by 2030 from 200 billion USD in 2021 and to account for 13% of GDP by 2025. Significant growth is also being seen in retail, hospitality, and commercial real estate, which is essential infrastructure for India's expanding demands. In one year, the top 7 cities in India's real estate market saw land deals totaling more than 1,700 acres. 10.3 billion USD in foreign investments were made in the commercial real estate sector between 2017 and 21. Developers anticipate a sharp increase in demand for office space in SEZs starting in February 2022, following the replacement of the current SEZs statute.

India's realty and infrastructure sector has grown significantly over the past decade, driven by rapid urbanization, rising disposable incomes, and favorable government policies.

The residential real estate market is the largest sub-sector, accounting for around 85% of the entire real estate sector, with an estimated market size of 700 billion USD in 2021. The demand for commercial and retail real estate segments are also expanding rapidly, with a market size of 80 billion USD in 2021, driven by increased foreign investment and the growth of the e-commerce sector. The private investment stood at 3.3 Billion USD from January to September 2021.

The infrastructure sector, including transportation, energy, water, and waste management, is also a key focus for the Indian government, with a total investment of 1.4 trillion USD planned for the next five years. The government's focus on innovative city development has also created opportunities for private investors in the real estate and infrastructure sectors.

Despite the industry's growth potential, some challenges, including inadequate infrastructure, lengthy approval processes, and regulatory hurdles, continue to impede the sector's growth. However, with the government's continued focus on infrastructure development with a budget allocation of 130 Billion USD and favorable policies such as the National Infrastructure Pipeline (NIP) and PM GatiShakti, the realty and infrastructure industry is poised to increase significantly in the coming years.

Overall, the realty and infrastructure industry is critical to India's economic development, providing employment opportunities (around 54 million employed), driving innovation and technology adoption, and contributing to the country's overall growth.



**IT / ITES**



 **IT / ITES**

During the last decade, the world has witnessed a tremendous digital proliferation in every sector, from BFSI to manufacturing. India is successfully leveraging this opportunity with its capabilities, contributing to 7.7% of GDP and creating 5 million jobs while becoming a global IT services hub. The Indian IT-ITES (Information Technology-Information Technology Enabled Services) industry encompasses software development, IT consulting, Business Process Outsourcing (BPO), Knowledge Process Outsourcing (KPO), and other related services accounting for 26% of its exports, majorly to the US and the UK based firms. India IT firms are expected to generate a revenue of \$300-\$350 Billion as per NASSCOM and McKinsey. This growth is driven by factors such as faster adoption of IT services across the globe and industries, the proven capabilities of Indian IT firms, fostering of new-age digital applications, the growth of ESG-led business models, government policies, and the availability of a digitally versed workforce.

The government has promoted the IT industry by setting up technological parks, providing tax incentives, and export-oriented initiatives such as the STP scheme. The STPI scheme exported RS 5.02 lakh crore of units for the year 2020-21. Another scheme is the Next generation Incubation scheme (NGIS) has been approved with the aim of developing a vibrant software product ecosystem. Some other policies include the future PRIME skills and Champion Sector Services Scheme (CSSS). However, the industry faces challenges, and protecting margins is at the forefront of it. Key margin levers include increased capacity utilization, a higher share of offshore revenue, declining travel and facility costs, and operating leverage. The emergence of new competitors, especially from countries like China, Vietnam, and the Philippines, who offer lower-cost services, is a growing challenge for the Indian IT ITES industry.

Another challenge is the continuous reskilling of the workforce to cater to the dynamic technological environment and dependence on developed countries for their revenues. The Indian IT ITES sector is highly dependent on technology, which makes it vulnerable to cybersecurity threats. Cyber-attacks could damage the reputation of the Indian IT ITES industry, leading to a loss of business and investor confidence. The start-up culture is proliferating in India with an estimated around 26000 startups which moves up India to the 3rd spot in the world. The foreign inflows were around \$36 Billion in the last 3 years and 26 startups with over \$ 1 billion valuation. According to data, the growth of the startup ecosystem has largely concentrated in big (Tier 1) cities and states with strong economies, particularly in IT-enabled industries like e-commerce, transportation, and finance.

Indian companies are now re-focusing their outlook on developing niche capabilities in upcoming verticals such as AI/ML, cloud computing, and cyber security, which are expected to have higher demand and yield higher revenues.



# MANUFACTURING







## Manufacturing

India's manufacturing industry is a significant economic pillar, contributing 17% to the country's GDP and providing employment for over 27.3 million people. The Indian government aims to increase the manufacturing industry's contribution to GDP to 25% by 2025 through new laws and policies. India's manufacturing value chains, particularly in basic metals, textiles and apparel, renewable energy, chemical goods, pharmaceutical formulations, capital goods, and automotive components, have the potential to expand rapidly due to the country's abundance of low-cost labor, natural resources, and skilled professionals. This expansion could lead to India becoming a major player in global manufacturing, with the potential to export goods worth 1 trillion USD by 2030.

India's economic growth rate slowed down in the December quarter due to a decrease in pent-up demand and continued weakness in the manufacturing sector. The country's year-on-year growth rate was 4.4% in October-December, compared to 6.3% in July-September. This decline in growth rate can be attributed to various factors, including the fading of pandemic-induced base effects and revision to last year's growth rate, as suggested by economists. Despite these challenges, India's economy remains one of the largest in Asia, ranking third in the region.

To address this challenge, the central government has introduced several schemes such as Pradhan Mantri Kaushal Vikas Yojana for Technical Institutes (PMKVY-TI), Employability Enhancement Training Programme (EETP), National Employability Enhancement Mission (NEEM), AICTE-Startup Policy, Skill Assessment Matrix for Vocational Advancement of Youth (SAMVAY), Leadership Development Programs, and others. These initiatives aim to reduce the skills gap, but it will take time to yield results.

India is facing a significant challenge in the manufacturing industry due to limited investments being made upfront to establish manufacturing plants. There are multiple factors contributing to this, including political instability, economic fluctuations, uncertainty regarding project feasibility, and unpredictable growth patterns. Banks are also hesitant to provide loans to manufacturing setups. Compared to other countries that export, capital investments are high in India, and the costs of land and power are also above the global market average.

The Indian manufacturing industry is facing two significant challenges. Firstly, it is difficult to manufacture certain products in India due to the availability of cheaper alternatives from countries like China. Secondly, high import duties on raw materials increase the cost of production, making it challenging to compete with cheaper alternatives in both domestic and international markets. To address these issues, the Indian government has introduced initiatives like PMEGP and Mudra Loan. However, there is low awareness among businesses about these schemes, leading to few businesses benefiting from them. For India to achieve its aspirations of becoming a global superpower in a world where geopolitical tensions are high, it is essential for the country to attain self-reliance. A prosperous and self-sufficient domestic manufacturing industry would provide India with a strong foundation to realize its ambitions.



# MEDIA & GAMING



## Media & Gaming

Gaming and social media, as an industry, witnessed a high inflow of users accelerated by the global shutdowns, internet penetration and shift in consumer habits and preferences, making it susceptible to security and technology risks. India is the host of one of the largest gaming communities, with over 70% users in the below 34 years age group. Around 40% of the proceeds come from the advertisement mechanism across ever-evolving AI-enabled platforms for interaction and outcomes. By 2025, the industry is likely to surpass 182 million USD, with a CAGR of 18%. The adoption rate of digitized lifestyle, being 87%, is driving the enhanced market opportunities and risks for the internet of media and gaming. In 2022, employment landscape in India mapped an estimated of 40,000 people in gaming and 97,700 in media. This signifies the role of media and gaming industry in transforming the infrastructure and human capital by augmenting productivity.

From an economic point of view, the entertainment industry is undergoing a massive shift, with several sectors seeing substantial growth while others face significant challenges. The OTT video market grew by 22.8% in 2021 and is expected to continue to grow at a 7.6% CAGR through 2026, with revenue projected to reach USD 114.1 billion. The video game industry saw a growth rate of 32% between 2019 and 2021, and it is expected to rise at an 8.4% CAGR through 2026, creating a USD 321 billion industry. Meanwhile, traditional TV revenue is expected to shrink at a -0.8% CAGR from USD 231 billion in 2021 to 222.1 billion USD in 2026. Although, cinemas are slowly recovering from the COVID-19 pandemic, it is projected that it will take until 2023 for them to regain their 2019 revenue total of USD 45.2 billion. The market size and growth rate of each of these sectors highlight the increasing investments by private players in curating a tech-enabled immersive experience aligning with the changing consumer needs and preferences.

From an ecological point of view, the gaming and media industries have a significant environmental impact, especially in terms of energy consumption and e-waste production. A report by Greenpeace estimates that the global video game industry's energy consumption was approximately 75 billion kWh in 2020, which is equivalent to the energy consumption of around 5.6 million US households. Moreover, the production and disposal of gaming hardware, such as consoles and gaming PCs, also contribute to electronic waste. With the increasing concerns about climate change and environmental degradation, it is crucial for the gaming and media industries to continue adopting more sustainable practices to reduce their impact on the environment.

From a policy point of view, under the ambit of MeitY, the government recently drafted online gaming rules, and established social media governance guidelines to safeguard stakeholders' security interests and establish stable frameworks in place. The Government of India prohibited a number of Chinese mobile apps, including the widely used gaming application PUBG, citing security issues. Moreover, regulatory institutions such as the Telecom Regulatory Authority of India (TRAI) and the Ministry of Information and Broadcasting were established to supervise and regulate the media industry. The TRAI has introduced various policies to ensure that broadcasting services are transparent and consumer interests are safeguarded. From a macro perspective, the Indian administration is proactively engaged in regulating the gaming and media sector to ensure the protection of consumers and national security. The spirit of connectedness and collaboration among the community demands policy efforts from the government, private players and civil service organizations to manage risks and delivering sustainable growth.



# METALS & MINING





## Metals & Mining

In India, the mining, mineral, and metals sector is large and has a significant impact on the economy of the country. Many sectors, including those in construction, transportation, and electronics, rely on it for their raw materials, and it also offers employment to millions of people. The profitability of mining industries can be affected by changes in commodity prices, shifts in the demand for metals and minerals, and worldwide economic trends. The sector may also be impacted by economic reforms and policies, such as altered tax laws or import-export rules. To be competitive and viable over the long term, businesses in this sector must evaluate these risks and establish strategies to manage them successfully.

The Mining, Mineral, and Metal sector in India experienced a 31% reduction in fatalities in 2022, which is a positive development. However, safety risks such as accidents, natural disasters, and equipment failure can still result in production delays, higher expenses, and negative publicity. Environmental concerns such as pollution and land degradation can also lead to penalties from the government and damage the reputation of companies in the sector. Therefore, it is essential for these companies to prioritize investments in safety measures, adopt sustainable practices, and regularly assess and manage operational and physical risks to ensure their long-term sustainability and success.

The Mining, Mineral, and Metal industry in India may be significantly impacted by the usage of cutting-edge technology. In mining operations, automation, artificial intelligence, and data analytics may boost productivity, save costs, and boost safety. Digital technology may enhance resource utilization, cut waste, and improve supply chain management. The adoption of new technology can, however, present difficulties, including the requirement for new skills, large investment costs, and potential worker opposition. In order to be competitive and sustainable, businesses in this area must weigh the advantages and dangers of using new technology and devise plans to deal with unforeseen difficulties.

On the strength of increasing demand from end-use industries and new investments indicated by the mining businesses, the mining sector in India was poised for robust expansion in the financial year 2020–2021. Nonetheless, the spread of COVID-19 at the start of the fiscal year caused disruptions in a number of different industries.

The industry is vulnerable to events including floods, earthquakes, landslides, and cyclones, which can harm equipment and infrastructure, interrupt business operations, and delay output. These incidents may impact both workers and communities, harming a company's reputation and generating bad press for the industry.

In India's Mining, Mineral, and Metal industry, mergers and acquisitions can have positive effects including improved efficiency, access to new technologies, and greater market power. These may, however, also provide difficulties, such as those related to cultural integration, legal compliance, and financial risk. Companies need to carefully weigh the advantages and risks of such operations.



# NEW AGE & STARTUP





## New Age & Startup

India has the 3rd largest startup ecosystem in the world and is expected to witness a consistent annual growth of 12-15%. With a home to more than 50,000 startups, a large chunk of these businesses are in the e-commerce, fintech, SaaS, or edtech space. Total number of unicorns as of 31 December 2022 reached about 106. About 0.23 million employment was produced by new-age businesses in 2022, up from 0.19 million in 2021.

SaaS, e-commerce, and D2C have been the best performing sectors in terms of funding raised, number of M&A transactions, and attaining unicorn status during CY22. Bengaluru, NCR, and Mumbai account for nearly 82% of total Indian start-ups as of December 2022. 28% of the start-ups in the top three cities have raised in excess of USD 20 million. 246 M&A deals involving start-ups were executed in CY22. Of these, nearly 200 were domestic transactions and the rest were cross-border transactions.

The sector has grown tremendously with support available in terms of number of ideas, companies, incubators, accelerators, and VCs. There has been a 15X increase in the total funding of startups, a 9X increase in the number of investors and a 7X increase in the number of incubators in the period between 2015-2022. VC funds amounting to USD 590 billion in dry powder was available for start-ups – an indicator of strong investment cycles ahead. India's rapid GDP growth, demographic composition, increasing digital penetration, and a friendly regulatory environment bestows unlimited opportunities for new-age companies and startups.

India is in a unique position wherein both Government and private investors want Indian entrepreneurs and startups to succeed and make their presence felt across the world. In this endeavor, the Government of India and the Ministry of Micro, Small, and Medium Enterprises have launched several unique Government schemes and programs designed to empower startups such as I-MADE programme, Start-up Innovation Week, MUDRA Bank's scheme (Pradhan Mantri Mudra Yojana), Credit Linked Capital Subsidy for Technology Upgradation and Credit Linked Capital Subsidy for Technology Upgradation. A number of regulatory changes to enhance ease of doing business, ease of raising capital, and reducing compliance burden have also been undertaken.

Ever-elusive funding, revenue generation struggles, lack of access to supportive infrastructure, and tax structures are the top-most challenges faced by Indian startups. The year 2022 witnessed massive tech stocks collapsing, war, funding winter, skyrocketing inflation, rising interest rates, massive layoffs, and burgeoning fear of recession, thus giving major setbacks to the industry. There was a decline in the total funds raised in CY22 (USD 24 billion) of ~33% as compared to CY21 (USD 35 billion). However, the decline in the number of start-ups raising funds was lower, at nearly 8% (1,106 start-ups raised capital in CY21 versus 1,021 in CY22). Consequently, the average deal ticket size reduced from USD 32 million in CY21 to USD 23 million in CY22. As a result, the overall risk index has increased slightly when compared to 2021 – showing a higher risk exposure for the sector.



# PHARMACEUTICALS







## Pharmaceuticals

India's pharmaceutical industry has gained in repute since its role as the pharmacy of the world during the pandemic, reaching a staggering size of \$41.2 billion in 2020, and is expected to grow at a CAGR of 13% to reach the size of \$130 billion by 2030, with the additional value coming from with increasing geographic spread of Biosimilar products, adult vaccines and API/KSM import substitution. Presently 50% of India's Pharma industry depends on export revenue from countries like USA, Europe and Russia. The way forward for the industry would be to move up the value chain by manufacturing value additive products to reduce import for domestic demand, entering new export markets like China, Japan, and Latin America, focus on more equitable access with price competitiveness, ensure close collaboration between government, academia and industry for high risk-long term projects and strengthening laws governing Intellectual property rights.

Major risk factors for pharmaceuticals in India include costly input (APIs/KSMs), global localization & repatriation practices, logistics & storage constraints, quality concerns given India has undergone highest number of Food and Drug Administration (FDA) inspections since 2009, counterfeiting brands of generic drugs, cyber concerns, foreign exchange risk, reducing demand for prescriptive drugs, rising ESG compliance concerns and increasing supply chain disruptions.

The biggest challenge facing Indian Pharmaceutical Industry is capacity building for innovation and research for developing new products in India, while also adhering to the quality standards at an international level for bulk producing APIs & KSM. Until and unless, IPR laws are made favorable, global companies would not be comfortable setting up R&D centers for innovation. Marketing side concerns have also been raised about the sector where unethical practices of freebies and bribes are used to convince doctors for selling variants of a drug.

Government has undertaken multitudinous measures to help the sector grow and build capacity of research & development in India, including Scheme for Strengthening of Pharmaceuticals Industry of Rs 500 crores by 2025 (growth of common facilities, help MSMEs meet international standards), Production Linked Incentive for APIs/ KSM, pharmaceuticals and medical devices of Rs 22,340 crore by 2028, Scheme for Promotion of Bulk drug parks and Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP). Alongside these initiatives, one major move by the government is the National Biopharma Mission, which aims at strengthening infrastructure & human capital, supporting tech transfer & MSMEs by promoting entrepreneurship and 100% FDI under the automatic route in specially planned out Bio-Technology Parks. For further improvements, the government can focus on increase in budgetary allocation, developing innovation-heavy products through strong industry-academia connect, rationalize GST, rework IPR policies and digitize record-keeping for medical records at a national level.



# TELECOM & COMMUNICATION





## Telecom & Communication

India is the world's 2nd largest telecommunications market with a subscriber base of 1.16 billion and is expected to become a digital economy of \$1Tn by 2025. The industry is divided into the following subsectors: Infrastructure, Equipment, Mobile Virtual Network Operators, White Space Spectrum, 5G, Telephone service providers, and Broadband. The sector is consolidated with key players, such as Reliance Jio Infocomm, Bharti Airtel, Vodafone Idea Limited, and Mahanagar Telephone Nigam Ltd. (MTNL) occupying the most market shares. These players focus on deploying the 5G network and increasing network capacity across the country to remain competitive in the market.

The telecom sector is the 3rd largest sector in terms of FDI inflows contributing 6.43% of total FDI inflow, directly to 2.2 Mn employment and indirectly to 1.8 Mn jobs. India has the second-highest number of internet subscribers globally. The total number of internet subscribers reached 836.86 million in April- June 2022. Broadband connections rose to 816 Mn in September 2022 from 61 Mn in March 2014, growing by 1238%.

Key growth drivers include affordable tariffs, wider availability, roll-out of Mobile Number Portability, expanding 4G and 5G coverage, a conducive regulatory environment, and government's support through initiatives such as PLI Schemes under Atmanirbhar Bharat Abhiyan, Bharatnet Project, Prime Minister Wi-Fi Access Network Interface (PM-WANI). To further expedite digital connectivity, the Government has approved the auction of IMT/5G spectrum for the deployment of 5G services within the country. This auction was successfully held by the end of July 2022 and grossed \$18.77 Bn. It is estimated that 5G technology will contribute approximately \$450 Bn to the Indian Economy in the period of 2023-2040.

Recent trends in the sector include the emergence of BWA technologies, Green telecom, Internet-of-things, Universal Service Obligation Fund, Commercial SMS traffic, Satellite-based Narrowband-IoT Networks, increased international participation, and investments. The future plans for this sector include targeting a combination of 100% broadband connectivity in the villages, 55% fiberisation of mobile towers, average broadband speeds of 25 Mbps, and 30 lakh km of optic fiber rollouts by December 2022. The Department of Telecommunications (DoT) has also formed a sixth-generation (6G) innovation group to drive the development of 6G technologies. Significant opportunities across segments in the industry include increasing mobile subscribers, growth in MVAS, untapped rural market, Telecom advertising market, rising internet penetration, and growing cashless transactions.

The main challenges for this industry are declining ARPU, hefty license taxes, poor financial strength, and lack of telecom infrastructure in rural areas. The high costs of spectrum acquisition and the demands of network upgradation have increased the industry debt burden. Technological disruption, tariff competition, and rising leverage are among the principal setbacks to the sector. Key risks facing the sector today are an increasingly competitive broadband market, limited spectrum availability, poor management of sustainability agenda, cybersecurity, and risk management. Not only this, the overall risk index has increased significantly when compared to 2021 – showing a higher risk exposure for the sector.



# TOURISM & HOSPITALITY



## **Tourism & Hospitality**

Before the COVID-19 pandemic, the tourism and hospitality industry in India was one of the fastest-growing industries in the country, contributing significantly to the country's economy.

According to the Ministry of Tourism, Foreign Tourist Arrivals (FTAs) in August 2022 were 498,243, with a growth rate of 437.3% compared to 92,728 in August 2021. The top ten source countries for foreign tourists to India in 2022 were Bangladesh (24.89%), USA (16.93%), UK (10.74%), Canada, Australia, Sri Lanka, Malaysia, China, Germany, and France. In addition to foreign tourists, the domestic tourism market in India is also significant, with millions of people traveling within the country for both leisure and business purposes.

However, the COVID-19 pandemic severely impacted the tourism and hospitality industry in India, with travel restrictions and lockdowns leading to a significant decline in the number of tourists visiting the country. The sector was hit hard, with many hotels and restaurants shutting down and millions of people losing their jobs.

In September 2021, the Ministry of Tourism announced plans to allow international tourists to enter India, and formal protocols are under issue. As the pandemic continues to evolve, the industry is slowly recovering with the introduction of vaccines and the easing of travel restrictions. However, the recovery has been slow, with many challenges still ahead, including changing consumer behavior and preferences, increased competition, and the need for new and innovative business models.

Emerging Segments in Tourism and Hospitality include: Eco-tourism , Pilgrimage Tourism , Heritage Tourism , Adventure Tourism , Medical Tourism , Luxury Tourism.

Despite these challenges, By 2028, Indian tourism and hospitality is expected to earn US\$50.9 billion as visitor exports compared with US\$28.9 billion in 2018.

Most domestic and foreign tourists visited for leisure holidays (58.21%). Recent notable trends in tourism include Cruises, Camping sites in hilly regions, Staycations and Workcations, and adventure outings.

In 2023, the domestic hospitality sector is expected to increase significantly due to India's G20 Presidency. According to estimates, 50 Indian cities will host more than 200 meetings with these nations' civil society and government representatives in 2023. The summit might host up to 30 state and government leaders from G20 countries and other invited countries.



# TRANSPORTATION & LOGISTICS



## **Transportation & Logistics**

The logistics sector in India is rapidly growing and contributes around 13% of GDP, which is higher than the growth rate of the overall economy. However, the industry faces significant challenges such as high logistics costs, inefficient inter-modal and multi-modal systems, poor road infrastructure, congestion, and insufficient depth at ports.

Road transportation is the predominant mode of freight cargo transportation in India, with nearly 60% of cargo moved by road and 32% by rail. This is because of the over-saturated rail networks and high rail tariffs, making the movement of goods through railways inefficient. Additionally, complicated tax regimes and poor warehousing conditions are major concerns for the industry. Multiple state and center taxes lead to considerable loss of time in transit on roads, while storage facilities are fragmented for low-margin products, resulting in a disincentive to create a large integrated warehousing space. Non-standardization in the industry further slows down progress and impedes efficiency.

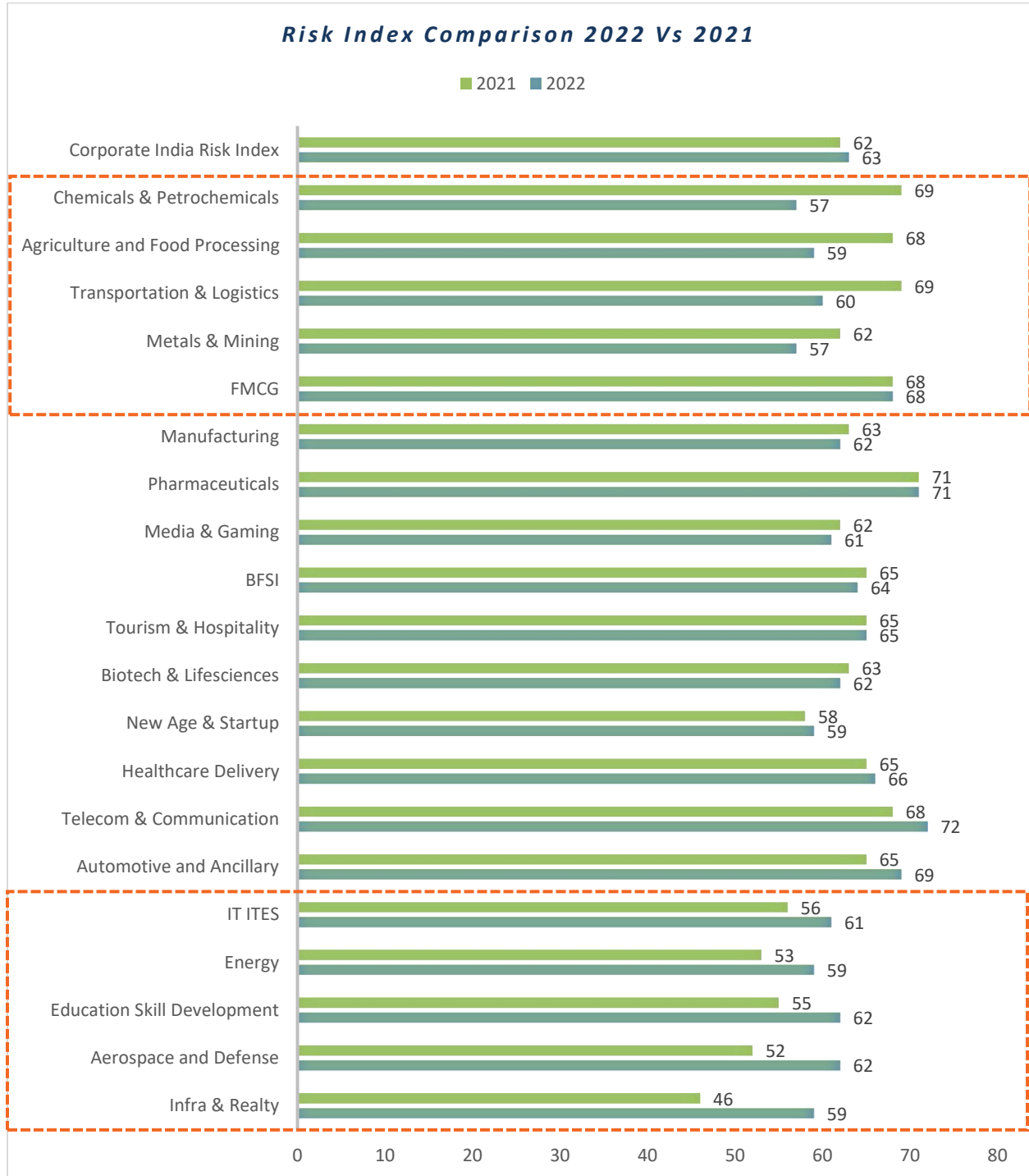
The logistics industry has been significantly impacted by the rapid growth of e-commerce. According to DHL's Ecommerce Guide (2021), the rise of MSMEs selling overseas and increasing demand for international products from consumers will drive the next wave of e-commerce growth. Online interfaces have become popular with millennials, who make up 73% of professional B2B purchasing decisions. This has led to a surge in demand for efficient and reliable delivery services, and cross-border digital marketplaces have experienced substantial economic growth. Companies must adapt to handle challenges like customs and duties regulations, language barriers, and diverse payment methods. Logistic companies with robust networks and digital infrastructure that offer end-to-end solutions for cross-border e-commerce will be best positioned to serve these new-age buyers.

The e-commerce market in India is projected to achieve a value of USD 350 billion by 2030, with D2C and other untapped categories growing at a rate of 50-60%. This growth can be attributed to enhanced internet connectivity, digital payments, and banking channels. To meet the rising demand for prompt and dependable last-mile delivery services, it is necessary to improve logistics services and abilities. The Open Network for Digital Commerce (ONDCs) is expected to transform India's retail and e-commerce industries by digitizing and optimizing the supply chain. The goal is to establish a more effective and transparent supply chain that matches demand with the closest supplier.

The business world is recognizing the significance of climate change and is taking steps to reduce their carbon footprint and become more sustainable by implementing low-carbon solutions, such as alternative energy and electric vehicles, in logistics. Customers are also becoming more environmentally aware and seeking sustainable options. To survive in an era of sustainability, logistics companies must adapt to the changes to come and be carbon neutral or even carbon negative.

Despite the challenges, the domestic logistics market is expected to maintain its CAGR of 8-10% in the coming years, presenting significant future scope for development and efficiency. The adoption of technological advancements like RFID, tracking, warehouse management systems, etc. can resolve the issues between domain requirement and IT. The warehousing industry needs to create a large integrated warehousing space to avoid fragmentation and increase efficiency. The Indian government needs to improve inter-modal and multi-modal traditional systems, road infrastructure, and port facilities to reduce logistics costs and improve efficiency.

# How India's Risk Handling is Evolving



**Figure 4: Corporate India Risk Index detailed Comparative Analysis 2021 Vs. 2022**



### Country Risk Index 2022 Vs 2021

India Risk Index (Optimal Risk Handling): The overall Risk Index for India slightly improved to 63 from 62 in 2021, this was driven by significant improvement in the risk index of sectors like Infra & Realty, Aerospace and Defense, Education and Skill Development, Energy and IT & ITES, the risk exposure of the stated sectors went down due to supportive government policies, vast scale COVID vaccination drive that minimized the occurrence of COVID related cases, improvement in operational risk management practices and better control over security management.

There was no significant change in the Risk Index of sectors like Healthcare Delivery, New Age & Startup, Biotech & Lifesciences, Tourism & Hospitality, BFSI, Media & Gaming, Pharmaceuticals, Manufacturing and FMCG, cutting edge initiative from business leaders over the supply-chain supported the business continuity and sustainability in sectors like Manufacturing and FMCG.

Significant drop in the risk index was observed in sectors like Metals & Mining, Transportation & Logistics, Agriculture & Food Processing and Chemicals & Petrochemicals the drop was registered primarily due to the Russia-Ukraine escalated tensions resulting in sky rocketed fuel price aggravated by global inflation and recession.

### Corporate India Risk Management 2022 Vs 2021

There was no significant improvement in the India Risk Management, however it slightly improved to 66 from 65 in 2021. Sectors like Tourism & Hospitality and Transportation & Logistics completely came out of the Covid-era disruption and to some extent efficiently contained the major disruption caused due to the fuel price hike, reduced terrorism related cases and improved roadways assisted the sectors. Metals & Mining and Chemical & Petrochemical sectors showed the maximum dip in the risk management as they were impacted significantly due to external macro-economic factors like geopolitical tensions, global rise in inflation and reduced industrial activities.

### Corporate India Risk Exposure 2022 Vs 2021

India Risk Exposure went up due to heighten geo-political tensions, global slowdown in GDP growth resulting in reduced industrial activities, all-time low rupee valuation and high CPI inflation. The Risk exposure for India went up to 64 vs 62 in 2021. New-Age Startups and Transportation and logistics showed the highest increase in the risk exposure, the major increase is accounted due to the slowed-industrial activities resulting in financial risks and geo-political tensions arising due to the Russia-Ukraine tensions.

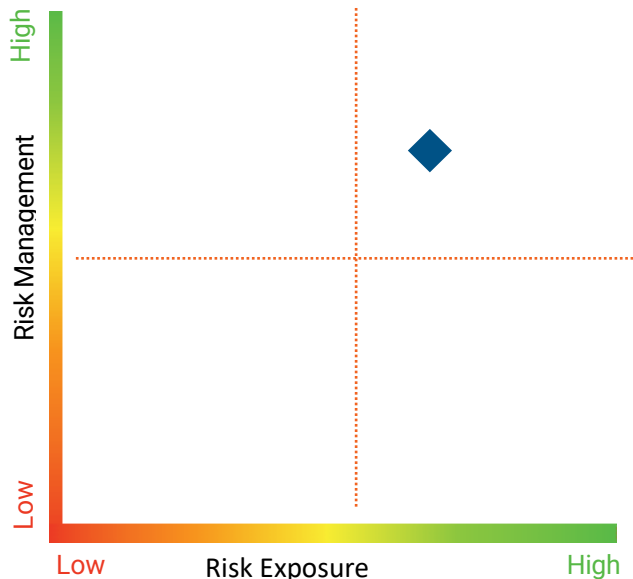
# Key Highlights



## Risk Dimension Analysis: Market and Economy

*Risk Exposure Score: 67*

*Risk Management Score: 68*



### Inflation

- The inflation stayed above the Reserve Bank of India target of 2-6% for a second consecutive month, after a slowdown in the last three months of 2022, due to the rupee depreciation and as companies are passing on some input price increases to clients.
- The Reserve Bank in its latest MPC meeting in August had decided to increase the benchmark lending rate by 50 basis points to 5.40 per cent to quell inflation.
- Retail inflation based on Consumer Price Index (CPI) eased to 6.71 per cent in July but remained above RBI's tolerance level for the seventh month in a row. The Reserve Bank had projected retail inflation to average 6.7 per cent in 2022-23.
- In the last three years, India's inflation targeting regime was confronted with two shocks in rapid succession– the pandemic (which was an unprecedented growth shock) and the Ukraine war (which has caused a global inflation shock).

### Taxation

- Indian taxation has seen monumental changes in the last few years, thanks to the massive digitization of businesses. Significantly, 2022 had a bunch of legal and GST portal changes, both on the direct and indirect tax front. The momentum is expected to continue the following year, 2023 as well.
- The figures of Direct Tax collections for the Financial Year 2022-23, as on 17.12.2022 show that net collections are at Rs. 11,35,754 crore, compared to Rs. 9,47,959 crore in the corresponding period of the preceding Financial Year i.e FY 2021-22, representing an increase of 19.81%.

- There has been a remarkable increase in the speed of processing of income tax returns filed during the current fiscal, with almost 96.5% of the duly verified ITRs having been processed till 17.12.2022.
- This has resulted in faster issue of refunds with almost a 109% increase in the number of refunds issued in the current financial year. Refunds amounting to Rs. 2,27,896 crore have been issued in the FY 2022-23 till 17.12.2022, as against refunds of Rs.1,35,191 crore issued during the corresponding period in the preceding Financial Year 2021-22, showing a growth of over 68.57%.
- The basic exemption limit has been hiked to Rs.3 lakh from Rs.2.5 currently under the new income tax regime. The amount of rebate under Section 87A has been enhanced under the new tax regime to taxable income of Rs 7 lakh.
- Thus, individuals opting for the new income tax regime in FY 2023-24 and having an income up to Rs.7 lakh will not pay any taxes. Further, the new income tax regime becomes the default tax regime. However, the individuals will have an option to continue with the old income tax.

### Regulatory Risks

- The regulatory environment of India is constantly evolving with the Indian government announcing more liberalized and business-friendly policies and laws.
- The investment environment in India is becoming more favourable for businesses – which is evident from increasing foreign direct investments in India across sectors and rising foreign exchange reserves.
- Additionally, government processes are becoming more and more digitalized – making it easier for businesses to meet the regulatory requirements and fulfil all legalities.
- With such a positive outlook of the Indian government, the regulatory framework has become easier to comply for businesses.

### Foreign Exchange Rates

- The Indian rupee depreciated to the 82.6 per USD mark in March, testing the record-low of 83 first hit in October 2022 as concerns regarding the instability of banks worldwide triggered sharp selling pressure for currencies deemed risky.
- This depreciation of 11% is one of the poorest performances of the Indian Rupee after 2013.
- The changing geopolitical scenario of the world and rising inflation led to significant volatility in the currency market, negatively impacting businesses with global operations.
- The rupee was also pressured by an unbalanced current account, significant capital outflows, and comparatively soft interest rate hikes by the RBI. Strong import demand led the Indian economy to post a record current account deficit per the latest data.
- In the meantime, bullish expectations for the Chinese economy led investors to reallocate funds into the country to take advantage of its economic reopening, spurring relentless foreign capital outflows from Indian markets.
- Overall, Indian businesses had to face very high foreign exchange risks during FY22, forcing them to enter into hedging contracts to offset the risk of foreign exchange rate volatility.

### Geopolitical Risks

- India being one of the major developing countries and a leading global superpower, the impact of geopolitical tensions across the globe is multifold.
- The biggest risk to India's growth outlook is an escalation of geopolitical tensions, especially if these tensions spread to the Asian region.
- From disruption of supply chain due to Russia's invasion of Ukraine to reoccurrence of Covid in China. Such global factors have triggered different economic indicators such as rise in inflation, rise in foreign exchange rates and significantly impacting the geo-political risk index across the globe.
- Due to the above factors, the year 2022 saw record breaking inflation rates across the globe – significantly impacting the raw material prices and other key costs, especially in the first three quarters of 2022. However, things got better towards the end of the year with lower oil prices, reduction in shipping rates and boost in domestic demand.

### Competitive Risk

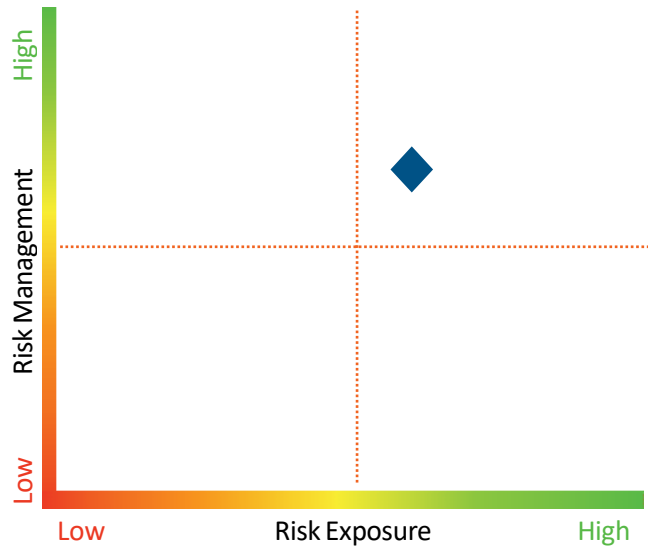
- India's business environment is close to the median in our assessment of 185 economies, with significant change over the past few years.
- The competitive landscape of India is increasingly becoming diverse and dynamic, with a large number of companies launching innovative products and meeting changing demands of consumers
- The Heritage Foundation's 'Index of Economic Freedom' survey 2021 assigns India rank 123 out of 184 economies (unchanged from the 2016 survey), reflecting good scores with regards to the tax burden, government spending and business freedom, though weaknesses remain in particular with regards to fiscal health, investment freedom, financial freedom and labor freedom.
- Meanwhile, the World Bank Institute's annual 'Worldwide Governance Indicators' survey indicates that the regulatory quality and measures to combat corruption have improved since 2016 (from low scores).
- With rising competition, Indian businesses are forced to constantly evolve and beat competition by offering unique solutions to problems faced by consumers.
- On the regulatory front, the Indian government has set up Competition Commission of India to regulate anti-competitive practices of businesses and ensure fairness in the market.



## Risk Dimension Analysis: Technology

**Risk Exposure Score: 65**

**Risk Management Score: 67**



### Disruptive Technology

- Technology continues to change our lives in subtle ways. Disruptive technologies dramatically change the way consumers, businesses and industries operate. Technology advancements such as AI, robotics, nano materials, biotech, bioinformatics, quantum computing and the Internet of Things (IoT) are transforming the world.
- Disruptive technologies provide opportunities for startup companies to gain a significant foothold in existing industries.

- New advances in technology are still disrupting our lives in many cases for the best. Note that some of them are already in place, but they are still evolving and changing at a rapid pace, meaning the impact of these advances will only amplify. A disruptive technology has the potential to replace the existing systems or habits through its attributes that are measurable and superior.
- Disruptive technologies are not necessarily new or ground-breaking. Rather, it is technology that has the potential to disrupt an existing market or industry.
- The future of work will be hybrid, and we believe that there is a huge opportunity to make the workplace inclusive and diverse while being productive and efficient. The Anywhere Workspace builds trust to empower today's distributed workforce. Making "work from anywhere" work for everyone requires more than just implementing a flexible work policy. Without the right technology platform in place, "work from anywhere" won't work for everyone.

### Intellectual property

- Innovation is fundamental to charting a country's economic growth and development. Complemented by effective intellectual property and patent-protection laws, it can enable innovators and researchers in countries like ours to climb up the global ladder as well.
- In India, the narrative around Intellectual Property Rights (IPR) is quite complex. While there's a major impetus on innovation and promotion of art and culture, 'protection' of these inventions, especially in the creative industry is rather a weak point.
- India has improved its IP score by 13%, but it still ranks 43 out of the 55 countries as per the International IP Index, 2022.

- There has been a big surge in pirated content during the pandemic. The rate of music piracy in India specifically remains higher than the global average (30%) at 68%, according to a report by the Indian Music Industry (IMI).
- Other reports have suggested that the Indian demand for pirated content may be double or triple the global average. Not only does it affect India's position on the global IP rankings, but also endangers the work of creators and the many innovations which are birthed here, annually.

### **Data compromise**

- India accounted for 20 percent of all records exposed because of data breaches in 2022, a new report has revealed.
- The report by Tenable, a cybersecurity company based in Maryland, US, found that India suffered from the second-most tech exposure breaches in 2022.
- Tenable's security response team analyzed over 1,300 data breaches which occurred between November 2021 and October 2022. The analysis is published in the Tenable 2022 Threat Landscape Report.
- Despite only 143 breaches, the Asia Pacific and Japan region accounted for 68 percent of the total of the 2.29 billion records exposed globally. India, on its own, accounted for around 450 million exposed records last year. In comparison, all North America, Europe, the Middle East, and Africa only accounted for around 690 million exposed records.
- In India, most of the record breaches were a result of ransomware attacks and unsecured databases. The analysis found that 33 percent of all breaches were caused by ransomware attacks while a concerning 17 percent were because of unsecured databases.
- The most targeted sectors in India were the healthcare and retail sectors, accounting for 11 percent of all breaches each.

### **Counterfeiting**

- Counterfeiting in both online and physical markets has also become a grave concern in India. In the 2020 Review of Notorious Markets for Counterfeiting and Piracy published by the Office of the United States Trade Representative, an Indian website was cited in the list of the most notorious online platforms for sales of counterfeit products.
- Several famous markets in Mumbai, Kolkata and New Delhi were also included in the list of physical markets that were notorious for sales of counterfeit goods. For example, Heera Panna Market in Mumbai was reported to be a hub for high-quality counterfeit watches, footwear, apparel, accessories, and cosmetics.
- The review also reports that conducting enforcement actions at those locations is expensive and challenging, as is ensuring the effectiveness of raids.

### **R&D/ Innovation failure**

- To promote innovation, policymakers have made attempts lately to increase India's expenditure on R&D. It is now significantly below 2 per cent of GDP, which is the benchmark value that most innovating countries spend on R&D.

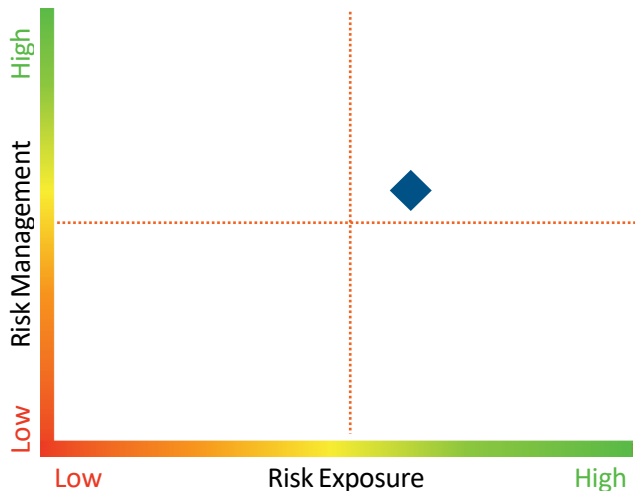
- While India ranked only 46th in the latest Global Innovation report, it has climbed two spots over the previous year’s standing. And, the performance is labelled ‘above expectations’ against the yardstick of the level of development. However, Asian countries like Malaysia, Vietnam, Thailand, and even some of the East European countries like Bulgaria, Estonia, Slovenia and Hungary, scored above India. Thus the notion that Indian entrepreneurs lack innovation culture continues to hold true.
- While India seems to score low in innovation in multiple areas of technology, there are two sectors that stand apart. These are technologies related to atomic energy and space science.



## Risk Dimension Analysis: Operational and Physical

**Risk Exposure Score: 67**

**Risk Management Score: 68**



### Accidents/ Fire Safety

- Fire hazards in India have been a common cause of accidents in both residential and commercial sectors. The damages caused by fire accidents have long-standing consequences not only in personal assets but their loved ones and their own lives at times. As a country, India has been witnessed to fire hazards of various magnitudes.
- Most of these fire incidents are caused due to lack of Safety equipment and training to arrest the Fire in time. In 2021, India sadly recorded 1.6 million fire accidents, with 27,027 innocent lives lost.

- Indian commercial and residential spaces are subjected to several fire hazards and incidents due to a lack of awareness, building layout, and the right instruments.
- Though it remains one of the most preventable mishaps Fire results in the loss of life and property. While the decline in fire-related fatalities and injuries is promising, the significantly higher proportion of deaths relative to injuries is concerning.
- This could indicate the severity & nature of the fire accidents resulting in higher mortality.

### Strikes/Closure/Unrest

- Labor unrest is best avoided. There has been a big decline in strikes and lockouts over the past six to seven years, and that has resulted in better productivity. Given how India’s business environment isn’t an easy one—India ranks 63 on the ease of doing business rankings—it’s critical that management-labor relations remain cordial.

- The reality is that automation is allowing more companies to reduce manpower—several have rolled out VRS schemes in the past year—while the collapse of the economy has seen thousands of small units shuttered.

### **Supply Chain Risk**

- Even as there seems to be no end to the onslaught of the global supply chain crisis and pandemic shortages, companies around the world are pivoting to newer ways of mitigating risk in the post-pandemic world and using new technologies to make this transition to operating an uncertainty-filled world.
- With the outbreak of COVID-19, global supply chains were swiftly and effectively dismantled as one country after another went into lockdown. The crisis accentuated the reliance of businesses around the world on a few markets for fulfilling their manufacturing and sourcing requirements.
- Supply chain leaders are now reassessing many long-held assumptions around global production networks in light of new realities and trying to forecast what the future may bring. This means working with current supply chains to improve efficiency and security of supplies while also finding new suppliers and routes that allow diversification in times of crisis.

### **Environmental Risk**

- India has finished at the bottom of the Environment Performance Index-2022 released by the World Bank. This means India is among those countries in the world that have the worst environmental health. Out of 180 countries that have been ranked, India is in the bottom five with a score of 18.9. Even Bangladesh, Myanmar, Pakistan, and Vietnam have ranked better than India.
- The country has also scored poorly on various measures such as control of corruption, rule of law, and government effectiveness.
- The deterioration is huge as in the EPI-2020, India was ranked 168th out of 180 countries. The score of 27.6. Denmark was ranked first in the sustainability and environmental health categories this time.
- The low scores of India and other countries in the EPI suggest that they need to step up their efforts on various sustainability measures such as climate change and air and water quality.
- Some of the other countries that have been identified as laggards include Afghanistan and Nepal. Their low scores can be attributed to weak governance.

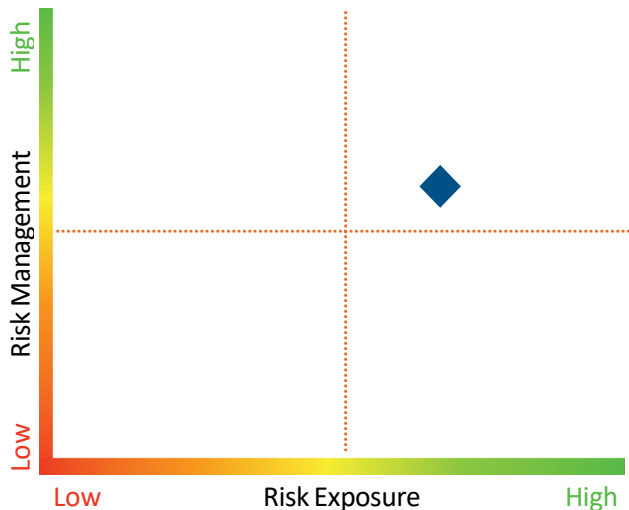




## Risk Dimension Analysis: Crime and Security

**Risk Exposure Score: 63**

**Risk Management Score: 65**



### Cyber-crimes

- As of February 2022, India had 78% ransomware attacks, the highest type of cybercrime in India.
- The average cost in 2022 of a data breach was around 2.32 million U.S. dollars.
- Centre stated that over 95,400 UPI- related frauds were reported in 2022-23.
- From January 2021 to November 30, 2022, the National Cyber Crime Reporting Portal received 884,863 complaints regarding online financial fraud.

- A significant cyber-attack disabled, a major government hospital in November 2022.
- India and the United States rank among the top ten spam-sending countries worldwide.
- According to Norton, India experienced over 18 million cyber-attacks and threats in the first three months of 2022, with an average of roughly 200,000 threats every day.

### Counterfeiting

- Counterfeit goods impact not only the consumer's well-being but also a country's economic status. According to a study issued by the Federation of Indian Chambers of Commerce and Industry (FICCI) in September 2022, illegal trade in five important industries cost the Indian government Rs 58,521 crore in taxes, resulting in the loss of 1.6 million jobs.
- According to the RBI annual report, Rs 500 fake currency notes increased 102% in FY22.
- According to ASPA Global's "Status of Counterfeiting in India - 2021" research, the top five industries most affected by counterfeiting are money, FMCG, alcohol, pharmaceutical, and cigarette.

### Threat to Women's Security:

- According to data research by Complykaro.com, the frequency of such complaints increased by 27 per cent in FY22 compared to the previous year as individuals began working from offices.
- The sexual harassment complaints pending resolution as a proportion of total complaints at the end of FY22 declined by 2% from the previous year.

**Terrorism:**

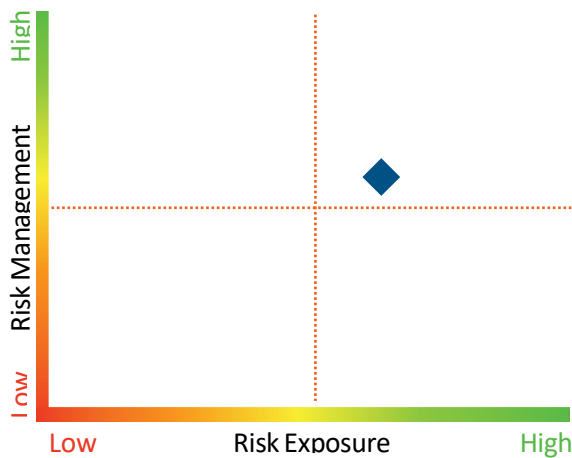
- By hosting a special meeting of the United Nations Security Council's Counter-Terrorism Committee (CTC) on October 28 and 29, 2022, only a week after hosting Interpol's annual conference, India has demonstrated that it is at the forefront of the global battle against terrorism. With new-age technology, the enemy uses drones, the internet, cyberspace, and social media to carry out operations. This creates challenges and risks for India and continues to remain so.



## Risk Dimension Analysis: Natural Hazard and Event

**Risk Exposure Score: 62**

**Risk Management Score: 64**



**Natural Hazards:**

- "India has faced close to a disaster every day this year - from heat and cold waves, cyclones and lightning to torrential rains, floods, and landslides," according to the study, 'Extreme Weather Report 2022.'

**Pandemic and other global epidemic diseases**

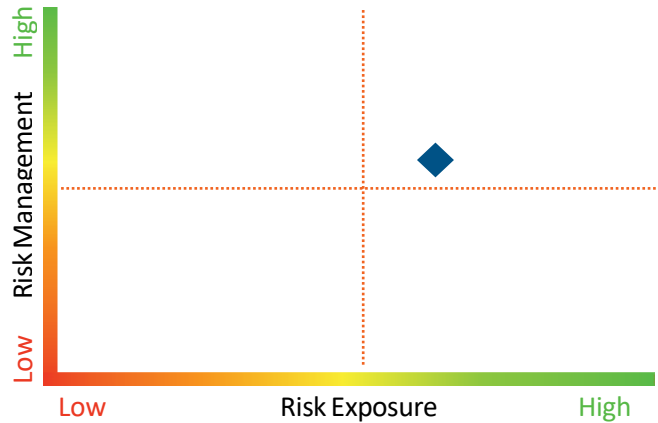
- COVID-19 immunizations aided in reducing the intensity of the third pandemic wave while causing little interruptions to movement and economic activities.
- Businesses have devised plans to maintain business continuity throughout this prolonged period of COVID-related interruption.
- The government's production-linked incentive programme will boost the industrial sector in fiscal years 2022 and 2023.



## Risk Dimension Analysis: Strategic Risk

**Risk Exposure Score: 63**

**Risk Management Score: 64**



**Increased number of recalls and quality audits:**

- According to data from the peak industry group Association of Indian Automobile Manufacturers, over 1.3 million autos were voluntarily recalled in India during FY2022. In the previous fiscal year, 1.3 million recalled two-wheelers and passenger cars were taken off the road in India.

### Resource scarcity / Misutilization / Overall Utilization:

- While the Central and State Governments have taken various aggressive initiatives to make it simpler for solar developers to obtain land for their projects, land aggregation remains the single most significant hurdle in constructing large-scale projects, causing the sector to lag.
- Due to the Russia-Ukraine war, oil prices increased, so the cost of commodities increased. Some businesses faced difficulties due to this issue.

### Delay in execution of projects:

- The infrastructure sector mainly needs to work on the execution of projects.
- According to the Infrastructure and Project Monitoring Division of the Ministry of Statistics and Programme Implementation, 721 projects have been delayed as of June 27, 2022. As of May 2022, 15.7% of projects had been postponed for 1-12 months, 16.8% had been delayed for 13-24 months, 48.5% had been delayed for 25-60 months, and 19% had been delayed for more than 60 months. The number of stalled projects in the pipeline increased dramatically from 647 at the end of April 2022 to 721 at the end of May 2022. At the end of May 2022, the overall percentage of cost overrun compared to initial forecasts is 22.9%.
- The projects were mainly delayed owing to delays in land acquisition, acquiring forest/environmental clearances, a lack of infrastructural assistance, a delay in project funding tie-up, and law and order difficulties.



# 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 held responsible 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 and record 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 breach or 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. Our Group 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 /facilitating 2nd 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 a qualified doctor
  - v. **Diagnostics & pharmacy services** – Book a lab test or home delivery of medicines.



# Bibliography

[Financial Services Sector in India | Fintech Industry in India \(investindia.gov.in\) Necessary skilling trends for BFSI professionals in India | The Financial Express Key InsurTech Trends in 2022, BFSI News, ET BFSI \(indiatimes.com\)](#)

[Economic Survey 2022-23: Good macros and getting better \(indiainfoline.com\)](#)

[Banks face challenges in deposit accretion while maintaining margins, says India Ratings | Mint \(livemint.com\)](#)

[The biggest security threats for the BFSI sector in 2023 - Express Computer <https://www.ibef.org>](#)

<https://economictimes.indiatimes.com/industry/services/hotels/-restaurants/hospitality-industry-set-for-buoyant-2023/articleshow/96336085.cms?>

<https://economictimes.indiatimes.com/industry/services/hotels/-restaurants/hospitality-industry-set-for-buoyant-2023/articleshow/96336085.cms?from=mdr>

<https://www.ibef.org/industry/information-technology-india>

<https://timesofindia.indiatimes.com/business/india-business/indian-it-sector-to-touch-245-bn-in-fy23-nasscom/articleshow/98344616.cms>

<https://www.bqprime.com/business/economic-survey-2022-23-india-it-industry-estimated-to-grow-at-10-in-fy23> <https://www.statista.com/study/23666/it-industry-in-india-statista-dossier/>

<https://www.businesstoday.in/magazine/technology/story/indias-it-sector-from-ai-to-cloud-evolving-tech-is-pushing-the-sector-forward-369009-2023-02-05>

<https://www.investindia.gov.in/sector/it-bpm> <https://www.ibef.org/industry/Fmcg-presentation#:~:text=In%20FY%202021%2D22%2C%20the,products%20in%20the%20international%20markets.&text=In%20October%202022>

<https://www.kanvic.com/grey-matter/7-trends-shaping-fmcg-industry-in-india>

<https://www.kanvic.com/grey-matter/7-trends-shaping-fmcg-industry-in-india>

[https://www.business-standard.com/article/economy-policy/fmcg-sector-slows-down-in-dec-quarter-as-price-growth-tapers-nielsen-123020200661\\_1.html#:~:text=In%202022%2C%20the%20sector%20grew,by%20manufacturers%20via%20grammage%20reduction](https://www.business-standard.com/article/economy-policy/fmcg-sector-slows-down-in-dec-quarter-as-price-growth-tapers-nielsen-123020200661_1.html#:~:text=In%202022%2C%20the%20sector%20grew,by%20manufacturers%20via%20grammage%20reduction)

<https://timesofindia.indiatimes.com/blogs/voices/the-state-of-indian-fmcg-sector-and-future-prospects-for-fy23/>

<https://www.crisil.com/en/home/our-businesses/ratings/Newsletters/2021/august/other-sectors/fmcg-revenue-growth-seen-doubling-to-10-12percent-this-fiscal.html>

[corporate.cyrilamarchandblogs.com/2021/04/indian-aerospace-defence-sector-recent-changesand-their-impact-part-1/](https://corporate.cyrilamarchandblogs.com/2021/04/indian-aerospace-defence-sector-recent-changesand-their-impact-part-1/)

[kpmg.com/in/en/home/industries/aerospace-and-defence.html](https://kpmg.com/in/en/home/industries/aerospace-and-defence.html) [researchandmarkets.com/reports/5446810/aerospace-and-defense-in-india-market-summary](https://researchandmarkets.com/reports/5446810/aerospace-and-defense-in-india-market-summary) [fortuneindia.com/investing/defence-aerospace-industry-expects-sops-from-budget-2023/110817](https://fortuneindia.com/investing/defence-aerospace-industry-expects-sops-from-budget-2023/110817)

[forbesindia.com/article/take-one-big-story-of-the-day/why-indias-defence-sector-is-booming/ 81639/1](https://forbesindia.com/article/take-one-big-story-of-the-day/why-indias-defence-sector-is-booming/)

[https://assets.ey.com/content/dam/ey-sites/ey-com/en\\_in/topics/health/2021/ey-ficci-indian-pharma-report-2021.pdf?download](https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/health/2021/ey-ficci-indian-pharma-report-2021.pdf?download)

[https://sunpharma.com/wp-content/uploads/2022/08/Sun-Pharma\\_AR\\_2021-22.pdf](https://sunpharma.com/wp-content/uploads/2022/08/Sun-Pharma_AR_2021-22.pdf) <https://www.drugpatentwatch.com/blog/indian-pharma-some-challenges-and-acceptances/>

<https://www.crisil.com/mnt/winshare/Ratings/SectorMethodology/MethodologyDocs/criteria/Rating%20Criteria%20for%20the%20Pharmaceutical%20Industry.pdf>

<https://pharmaceuticals.gov.in/schemes>

<https://ilearncana.com/details/Prospects-And-Challenges-Of-Pharmaceutical-Sector-In-India/2900>

<https://www.startupindia.gov.in/content/sih/en/international/go-to-market-guide/indian-startup-ecosystem.html>

<https://timesofindia.indiatimes.com/business/india-business/govt-recognises-50000-startups-across-india/articleshow/83222389.cms>

<https://www.smallcase.com/blog/investing-in-the-future-the-breed-of-new-age-businesses/> <https://www.inventiva.co.in/trends/indian-gdp-is-expected-to/>

<https://www.investindia.gov.in/indian-unicorn-landscape>

[Start-up Perspectives: India start-up deals tracker CY22 \(pwc.in\)](https://pwc.in) <https://pib.gov.in/PressReleasePage.aspx?PRID=1881495>

<https://www.statista.com/topics/4839/startups-in-india/>

[List of Top 5 Government Schemes for Startups and MSMEs in India \(msmex.in\)](#)

Startup India: The Way Ahead

National Start-Up Day: Key Takeaways And Challenges Indian Entrepreneurs Face (outlookindia.com) <https://www.forbesindia.com/blog/enterprise/does-indias-telecom-sector-still-need-restrictive-policies/> <https://www.investindia.gov.in/sector/telecom>

<https://www.investindia.gov.in/sector/telecom> [https://www.ibef.org/download/1673938014\\_Telecommunications-November-2022.pdf](https://www.ibef.org/download/1673938014_Telecommunications-November-2022.pdf)  
<https://www.fortuneindia.com/macro/5g-to-contribute-450-bn-to-indias-economy-by-2040-report/111747>

<https://www.gsma.com/r/wp-content/uploads/2020/09/GSMA-State-of-Mobile-Internet-Connectivity-Report-2020.pdf>  
<https://www.ibef.org/industry/telecommunications>

<https://www.telecomepc.in/Home/content/Telecom-Sector/Telecom-Sector-in-India>

India Telecom Market Analysis - Industry Report - Trends, Size & Share (mordorintelligence.com) [market-study-on-the-telecom-sector-in-india1652267616.pdf](https://www.mordorintelligence.com/industry-reports/india-telecom-market-analysis) (cci.gov.in)

<https://economictimes.indiatimes.com/small-biz/sme-sector/national-logistics-policy-indias-new-policy-framework-to-be-globally-competitive/articleshow/94292753.cms?from=mdr>

<https://www.ibef.org/blogs/india-s-growing-logistics-sector>

<https://kpmg.com/in/en/home/insights/2020/08/catalysing-the-national-infrastructure-pipeline-project-india/transportation-and-logistics.html>

<https://www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/indias-postpandemic-logistics-sector-the-need-for-technological-change>

<https://www.ibef.org/industry/indian-power-industry-analysis-presentation> [https://www.ibef.org/download/1673948297\\_Power-Nov2022.pdf](https://www.ibef.org/download/1673948297_Power-Nov2022.pdf)

[https://iea.blob.core.windows.net/assets/c578edac-2b69-4a5b-b8a9-0d007a9a8106/Technology\\_Innovation\\_to\\_Accelerate\\_Energy\\_Transitions.pdf](https://iea.blob.core.windows.net/assets/c578edac-2b69-4a5b-b8a9-0d007a9a8106/Technology_Innovation_to_Accelerate_Energy_Transitions.pdf)

<https://www.businesstoday.in/magazine/industry/story/despite-challenges-indias-plans-for-energy-sector-are-ambitious-it-needs-proper-execution-369010-2023-02-05>

<https://www.pwc.com/gx/en/issues/crisis-solutions/covid-19/energy-utilities-resources-coronavirus.html>

<https://www2.deloitte.com/us/en/insights/industry/power-and-utilities/supply-chain-resilience-electric-power-sector.html>

[https://iea.blob.core.windows.net/assets/470f50fe-0815-4a8e-924d-ab4eac32465a/India\\_study\\_FINAL\\_WEB.pdf](https://iea.blob.core.windows.net/assets/470f50fe-0815-4a8e-924d-ab4eac32465a/India_study_FINAL_WEB.pdf) <https://www.statista.com/topics/5601/chemical-industry-in-india/#topicOverview>

<https://www.crisilratings.com/en/home/newsroom/press-releases/2022/03/india-to-double-specialty-chemicals-market-share-in-5-years.html>

<https://tradingeconomics.com/india/interest-rate#:~:text=India%20Hikes%20Rates%20by%2025%20bps%20to%206.5%25%20as%20Expected&text=in%20food%20prices,->

[,The%20annual%20inflation%20rate%20slowed%20to%20a%201%20year%20low,hike%20in%20December%20last%20year. https://fineotex.com/blog-union-budget-2022-23-promising-steady-growth-in-the-chemical-industry/](https://fineotex.com/blog-union-budget-2022-23-promising-steady-growth-in-the-chemical-industry/)

<https://www.investindia.gov.in/sector/chemicals#:~:text=The%20quantum%20of%20production%20of,recording%20an%20increase%20of%205.73%25>

<https://www.statista.com/topics/5601/chemical-industry-in-india/#topicOverview> <https://www.ibef.org/industry/chemical-industry-india>

<https://www.crisilratings.com/en/home/newsroom/press-releases/2022/03/india-to-double-specialty-chemicals-market-share-in-5-years.html>

<https://www.livemint.com/companies/news/chemicals-sector-outlook-brightens-as-risks-recede/amp-11670516689236.html>

<https://www.investindia.gov.in/sector/chemicals#:~:text=Indian%20chemical%20industry%20employs%20more,corresponding%20period%20of%20previous%20year>

<https://tradingeconomics.com/india/interest-rate#:~:text=India%20Hikes%20Rates%20by%2025%20bps%20to%206.5%25%20as%20Expected&text=in%20food%20prices,->

[,The%20annual%20inflation%20rate%20slowed%20to%20a%201%20year%20low,hike%20in%20December%20last%20year https://fineotex.com/blog-union-budget-2022-23-promising-steady-growth-in-the-chemical-industry/](https://fineotex.com/blog-union-budget-2022-23-promising-steady-growth-in-the-chemical-industry/)

<https://www.investindia.gov.in/sector/chemicals#:~:text=The%20quantum%20of%20production%20of,recording%20an%20increase%20of%205.73%25>

[https://m.economictimes.com/small-biz/sme-sector/chemical-industry-expects-to-reach-a-market-size-of-383-billion-by-2030/amp\\_articleshow/96055207.cms](https://m.economictimes.com/small-biz/sme-sector/chemical-industry-expects-to-reach-a-market-size-of-383-billion-by-2030/amp_articleshow/96055207.cms)



<https://www.ibef.org/industry/chemical-industry-india>

<https://medcraveonline.com/IRATJ/the-role-of-the-automobile-industry-in-the-economy-of-developed-countries.html> <https://www.cogoport.com/en-IN/blogs/the-automobile-industry-a-growth-engine-for-indias-economy/>

<https://www.cars24.com/blog/effects-of-union-budget-2022-indian-automobile-sector/#:~:text=MSP%20Payments%20to%20Boost%20Vehicle,vehicles%20in%20the%20rural%20markets.>

<https://www.moneycontrol.com/news/business/economic-survey-2023-auto-sector-to-play-a-critical-role-in-indias-shift-to-green-energy-9971981.html>

<https://medcraveonline.com/IRATJ/the-role-of-the-automobile-industry-in-the-economy-of-developed-countries.html> <https://www.cogoport.com/en-IN/blogs/the-automobile-industry-a-growth-engine-for-indias-economy/>

<https://www.cars24.com/blog/effects-of-union-budget-2022-indian-automobile-sector/#:~:text=MSP%20Payments%20to%20Boost%20Vehicle,vehicles%20in%20the%20rural%20markets.>

<https://www.moneycontrol.com/news/business/economic-survey-2023-auto-sector-to-play-a-critical-role-in-indias-shift-to-green-energy-9971981.html>

<https://www.investindia.gov.in/sector/education>

<https://www.adb.org/sites/default/files/institutional-document/31318/guidance-note-education-sector-risk-assessment.pdf> file:///C:/Users/gpw/Downloads/us-top-risks-higher%20education-up-digital.pdf <https://kpmg.com/in/en/blogs/home/posts/2022/01/education-skill-nep-digital-mantra.html>

<https://env.media/new-generation-gaming/> <https://www.statista.com/statistics/1064010/number-of-online-gamers-india/>

<https://www.thehindubusinessline.com/data-stories/data-focus/india-proves-to-be-a-nation-of-gamers-as-numbers-spike/article65482841.ece>

<https://bfsi.economictimes.indiatimes.com/budget/union-budget-2023/india-has-highest-fintech-adoption-rate-gains-3rd-place-in-payments-highlights-economic-survey/97495949#:~:text=With%20the%20highest%20FinTech%20adoption,the%20economic%20survey%20pointed%20out.>

<https://www.statista.com/statistics/806168/india-number-of-employees-in-the-gaming-industry/> <https://www.statista.com/statistics/806159/india-number-of-employees-in-the-print-media-industry/>

<https://www.india-briefing.com/news/everything-you-need-to-know-about-draft-rules-for-online-gaming-in-india-26830.html/#:~:text=India%20has%20published%20draft%20rules,to%20legally%20function%20in%20India.>

[https://www.meitv.gov.in/writereaddata/files/Approved%20Social%20Media%20Framework%20and%20Guidelines%20\\_2\\_.pdf](https://www.meitv.gov.in/writereaddata/files/Approved%20Social%20Media%20Framework%20and%20Guidelines%20_2_.pdf)

<https://www.pwc.com/gx/en/industries/tmt/media/outlook/outlook-perspectives.html> <https://www.greenpeace.to/greenpeace/wp-content/uploads/2011/05/playing-dirty.pdf> <https://www.nabard.org/auth/writereaddata/tender/1211203145Impact%20Assessment%20of%20COVID.pdf>

<https://www.ibef.org/industry/agriculture-india>

<https://www.indiabudget.gov.in/economicsurvey/>

<https://indianexpress.com/article/business/economy/agriculture-sector-has-done-well-needs-re-orientation-economic-survey-8415738/>

<https://economictimes.indiatimes.com/industry/indl-goods/svs/metals-mining/fatalities-see-a-reduction-of-31-in-2022-hit-record-low-coal-india/articleshow/98118655.cms?from=mdr>

<https://www.ibef.org/industry/Fmcg-presentation#:~:text=In%20FY%202021%20D22%2C%20the,products%20in%20the%20international%20markets.&text=In%20October%202022>

<https://www.kanvic.com/grey-matter/7-trends-shaping-fmcg-industry-in-india>

[https://www.business-standard.com/article/economy-policy/fmcg-sector-slows-down-in-dec-quarter-as-price-growth-tapers-nielseniq-123020200661\\_1.html#:~:text=In%202022%2C%20the%20sector%20grew,by%20manufacturers%20via%20grammage%20reduction.](https://www.business-standard.com/article/economy-policy/fmcg-sector-slows-down-in-dec-quarter-as-price-growth-tapers-nielseniq-123020200661_1.html#:~:text=In%202022%2C%20the%20sector%20grew,by%20manufacturers%20via%20grammage%20reduction.)

<https://timesofindia.indiatimes.com/blogs/voices/the-state-of-indian-fmcg-sector-and-future-prospects-for-fy23/>

<https://www.crisil.com/en/home/our-businesses/ratings/Newsletters/2021/august/other-sectors/fmcg-revenue-growth-seen-doubling-to-10-12percent-this-fiscal.html>

<http://bwhealthcareworld.businessworld.in/article/Indian-Healthcare-Outlook-For-2023-/26-12-2022-459404/#:~:text=During%20the%20year%202022%20Indian,it%20India's%20largest%20service%20sector.>

<https://www.ibef.org/industry/healthcare-india> <https://www.statista.com/statistics/701556/healthcare-sector-size-india/>

<https://d3b6u46udi9ohd.cloudfront.net/wp-content/uploads/2021/07/17113123/CRISIL-Report-January-8-2022.pdf> <https://www.ibef.org/industry/information-technology-india>

<https://timesofindia.indiatimes.com/business/india-business/indian-it-sector-to-touch-245-bn-in-fy23-nasscom/articleshow/98344616.cms>  
<https://www.bqprime.com/business/economic-survey-2022-23-india-it-industry-estimated-to-grow-at-10-in-fy23> <https://www.statista.com/study/23666/it-industry-in-india-statista-dossier/>

<https://www.businesstoday.in/magazine/technology/story/indias-it-sector-from-ai-to-cloud-evolving-tech-is-pushing-the-sector-forward-369009-2023-02-05>

<https://www.investindia.gov.in/sector/it-bpm> <https://www.ibef.org/industry/infrastructure-sector-india> <https://www.ibef.org/industry/real-estate-india>

<https://www.livemint.com/news/india/indian-real-estate-performance-through-fy23-and-outlook-for-the-future-11672240034261.html>  
<https://timesproperty.com/news/post/best-crm-for-real-estate-agents-blid4015?offset=1>

<https://www.assotech.in/Press/real-estate-sector-india.pdf>

<https://www.financialexpress.com/money/how-is-indian-real-estate-industry-placed-currently-to-start-its-next-growth-journey/2628744/>  
<https://www.statista.com/markets/460/real-estate/>

<https://www.reuters.com/world/india/indias-growth-slowed-44-oct-dec-data-2023-02-28/>

<https://economictimes.indiatimes.com/small-biz/sme-sector/the-next-25-years-indias-golden-opportunity-to-become-a-manufacturing-powerhouse/articleshow/98263284.cms>

<https://ekaminvento.com/revalued/blog/post/challenges-of-the-indian-manufacturing-sector.html> Financial Services Sector in India | Fintech Industry in India (investindia.gov.in)

Necessary skilling trends for BFSI professionals in India | The Financial Express Key InsurTech Trends in 2022, BFSI News, ET BFSI (indiatimes.com)

Economic Survey 2022-23: Good macros and getting better (indiainfoline.com)

Banks face challenges in deposit accretion while maintaining margins, says India Ratings | Mint (livemint.com) The biggest security threats for the BFSI sector in 2023 - Express Computer

India's BFSI Sector Had Most Cyber Attacks In Asia (indiatimes.com)

India Insurance Industry: Finance ministry mulls changes in laws to boost insurance penetration in India, BFSI News, ET BFSI (indiatimes.com) The Future of the BFSI Industry: List of Important Factors & Domains in 2023 | upGrad blog

Inflation in India 2027 | Statista <https://www.ibef.org>

<https://economictimes.indiatimes.com/industry/services/hotels/-/restaurants/hospitality-industry-set-for-buoyant-2023/articleshow/96336085.cms?>

<https://economictimes.indiatimes.com/industry/services/hotels/-/restaurants/hospitality-industry-set-for-buoyant-2023/articleshow/96336085.cms?from=mdr>

<https://economictimes.indiatimes.com/industry/healthcare/biotech/pharmaceuticals/indias-pharma-market-grows-8-in-22-led-by-price-hikes/articleshow/96804464.cms>

<https://economictimes.indiatimes.com/industry/healthcare/biotech/indias-bio-economy-grew-8-times-under-pm-modi-since-2014-jitendra-singh/articleshow/95964305.cms>

<https://www.aiocdawacs.com/>

<https://www.sharevault.com/blog/collaboration/biggest-challenges-for-the-pharmaceutical-industry-in-2022> <https://www.mckinsey.com/industries/life-sciences/our-insights/pharmas-first-to-market-advantage> <https://www.expresspharma.in/the-state-of-indian-pharma-industry-and-expectations-from-budget/>

Ransomware attacks worldwide by country 2022 | Statista

Global average cost of a data breach by country 2022 | Statista

[cybercrimes in India: More than 3,500 people arrested in over 14,000 cybercrime complaints in 2021 - The Economic Times \(indiatimes.com\)](#)

[\[Burning Issue\] Cyber security threats to India - Civildaily](#)

[Intellectual Property And Combating Counterfeiting And Piracy In Digital Environment - Trademark - India \(mondaq.com\)](#)

[Rs 500 fake currency notes surge 102% in FY22, says RBI annual report | Business Standard News \(business-standard.com\)](#)

[The geography of counterfeiting in India \(europa.eu\)](#)

[Rise In Sexual Harassment Cases In India's Top Companies Shows Dichotomy - Forbes India](#)

[India and the multilateral challenge to countering terrorism - Modern Diplomacy](#)

[India will continue to face terrorism, internal security challenges; security forces united: Army Chief – ThePrint – PTIFeed](#)

[Yearender 2022: Major natural disasters that struck India in 2022 \(mid-day.com\)](#)

[How is India Managing COVID-19 in 2022? Policies and Best Practices \(india-briefing.com\)](#)

[Indian Economy to Grow 7.5% in FY2022, 8% in FY2023 | Asian Development Bank \(adb.org\)](#)

[Over 1.3 million vehicles recalled by manufacturers in India during FY2022 \(nationalheraldindia.com\)](#)

[Challenges in land acquisition for solar projects – pv magazine India \(pv-magazine-india.com\)](#)

[Project delays in India's major project pipeline continues to rise in May 2022 - World Construction Network](#)

[51 per cent govt projects face delay, cost escalates by 22 per cent- The New Indian Express](#)

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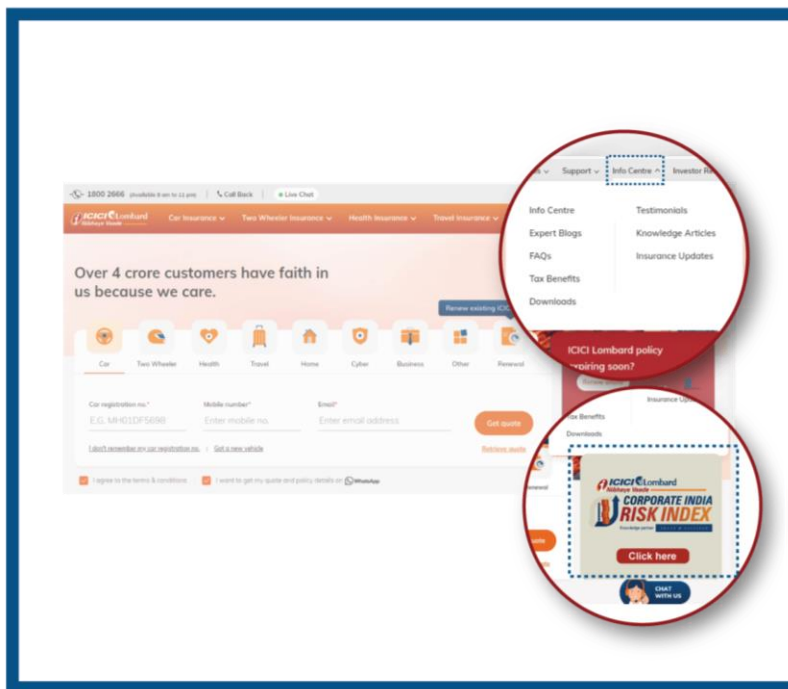




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