



1Lattice

Freight forwarding Industry report

15th September 2025



DISCLAIMER

This material has been prepared by ILattice, which is the trade name of Lattice Technologies Private Limited (“ILattice”, “we” or “our”) with the intent to showcase our capability and disseminate learnings to potential partners/clients. The report has been prepared as a general summary of matters on the basis of our interpretation of the publicly available information, our experiences and the information provided to us, and should not be treated as a substitute for a specific business advice concerning individual matters, situations or concerns. Procedures we have performed do not constitute an audit of the Company’s historical financial statements nor do they constitute an examination of prospective financial statements. We have also not performed any procedures to ensure or evaluate the reliability or completeness of the information obtained from the Company. Accordingly, we express no opinion, warranty, representation or any other form of assurance on the historical or prospective financial statements, management representations, or other data of the Company included in or underlying the accompanying information. We have not carried out any financial, tax, environmental or accounting due diligence with respect to the Company.

TABLE OF CONTENTS

1. Macro-Economic Overview

- 1.1. India's GDP is estimated to reach US\$ 6.1T by CY29, growing at a CAGR of 9.4% from CY24 to CY29
- 1.2. India's economic growth drivers
 - 1.2.1. India's per capita income ~US\$ 2.7K in CY24 is expected to reach ~US\$ 4.1K in CY29
 - 1.2.2. India's population is projected to reach 1.5B by CY29, ~18% of the world's population
 - 1.2.3. India's Index of Industrial Production (IIP) grew by 4.0% in FY25, up from 3.6% in FY19, showcasing a 0.4% growth
- 1.3. India's merchandise exports are projected to grow at a CAGR of 13.4% during FY25-30, while merchandise imports are expected to expand at a CAGR of 12.8% over the same period

2. Overview Indian Logistics market

- 2.1. The Indian logistics industry is expected to grow steadily at a CAGR of 9.6%, reaching INR ~37T by FY30
- 2.2. Key drivers of growth for the logistics sector
- 2.3. Government initiatives to enhance the logistics industry in India
- 2.4. Government aims to bring down high logistics costs in India from ~13% to 7-8% of India's GDP, bringing India closer to its global counterparts
- 2.5. India ranks at 38th position in Logistics Performance Index in CY23, jumping 9 places since CY18
- 2.6. Transportation contributes bulk (84%) of the logistics market at US\$ 21-24T
- 2.7. India container throughput growth rate outpaced the world growth rate and offers significant opportunity to increase penetration levels relative to GDP
- 2.8. Container traffic growth was led by non-major ports which increased at ~8% CAGR over FY16-25

3. Indian Freight forwarding sector overview

- 3.1. Indian freight forwarding market is valued at US\$ 10.1B in FY24 and is expected to grow at a CAGR of 10.9% between FY24-29, expected to reach US\$ 17.0B by FY29
- 3.2. Breakdown of the freight forwarding industry by ocean, air, and customs
- 3.3. Growth drivers for freight forwarding industry in India
- 3.4. Freight forwarding value chain
- 3.5. Key trends in freight forwarding

4. Overview of value-added services in logistics

- 4.2. Value added services in logistics movement
- 4.3. Importance of value-added services in logistics

5. Company overview and financial benchmarking

- 5.2. Company overview
- 5.3. Financial Benchmarking for FY22, FY23, FY24
- 5.4. Key challenges and threats faced in Industry

GLOSSARY OF ABBREVIATIONS USED

| S.No. | Abbreviation used | Full form |
|-------|-------------------|-------------------------------------|
| 1 | 3PL | Third-Party Logistics |
| 2 | 4PL | Fourth-Party Logistics |
| 3 | AI | Artificial Intelligence |
| 4 | B | Billion |
| 5 | CAGR | Compound annual growth rate |
| 6 | CLAP | Comprehensive Logistics Action Plan |
| 7 | Cr | Crore |
| 8 | CY | Calendar Year |
| 9 | D2C | Direct-to-consumer |
| 10 | DFCs | Dedicated Freight Corridors |
| 11 | EV | Electric Vehicle |
| 12 | FDI | Foreign Direct Investment |
| 13 | FY | Financial Year |
| 14 | GB | Gigabyte |
| 15 | GDP | Gross Domestic Product |
| 16 | GIS | Geographic information system |
| 17 | GST | Goods & Services Tax |
| 18 | IIP | Index of Industrial Production |
| 19 | IMF | International Monetary Fund |
| 20 | INR | Indian Rupee |
| 21 | K | Thousand |
| 22 | ML | Machine Learning |
| 23 | MMT | Million metric tonnes |
| 24 | MSMEs | Micro, Small & Medium Enterprises |
| 25 | PLI | Production Linked Incentive |
| 26 | PMGSY | Pradhan Mantri Gram Sadak Yojana |
| 27 | T | Trillion |
| 28 | TEUs | Twenty-foot equivalent unit |
| 29 | UK | United Kingdom |
| 30 | US | United States |
| 31 | VAS | Value added services |
| 32 | YOY | Year-on-year |

EXCHANGE RATE TABLE

| Year (FY) | Rs. Equivalent of one US\$ | Euro equivalent of one US\$ | Year (CY) | Rs. Equivalent of one US\$ | Euro equivalent of one US\$ |
|-----------|----------------------------------|-----------------------------------|------------|----------------------------------|-----------------------------------|
| 2015-16 | 66.33 | 0.88 | 2016 | 67.95 | 0.95 |
| 2016-17 | 64.84 | 0.93 | 2017 | 63.93 | 0.83 |
| 2017-18 | 65.04 | 0.81 | 2018 | 68.36 | 0.88 |
| 2018-19 | 69.17 | 0.89 | 2019 | 69.89 | 0.89 |
| 2019-20 | 70.49 | 0.93 | 2020 | 74.18 | 0.83 |
| 2020-21 | 73.20 | 0.85 | 2021 | 74.50 | 0.83 |
| 2021-22 | 74.50 | 0.86 | 2022 | 76.10 | 0.91 |
| 2022-23 | 80.32 | 0.96 | 2023 | 82.31 | 0.93 |
| 2023-24 | 82.78 | 0.93 | 2024 | 83.67 | 0.92 |
| 2024-25 | 84.56 | 0.93 | 2025 (YTD) | 86.26 | 0.90 |

Source: X-rate Monthly average

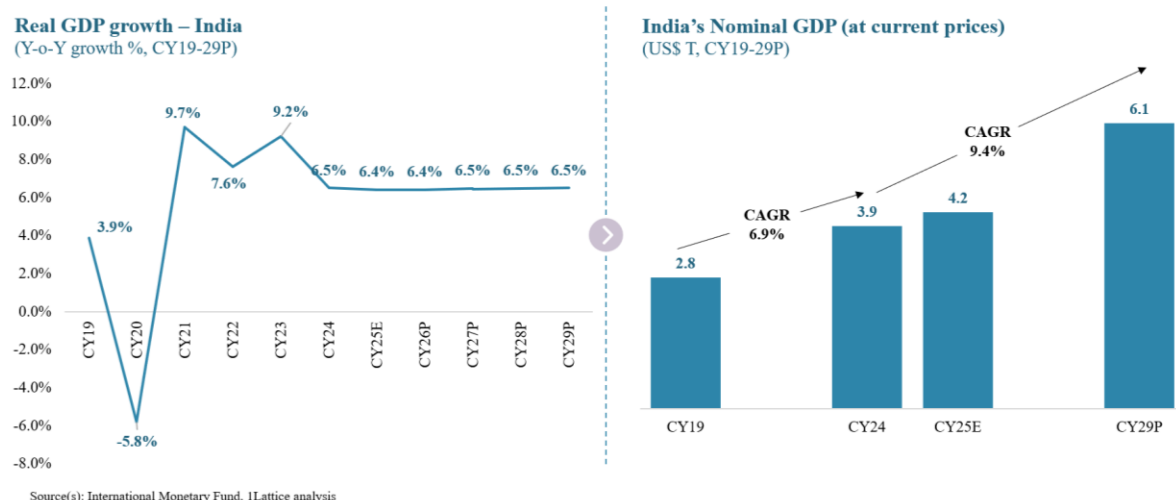
1Lattice

01

Macroeconomic Outlook

1.1 India's GDP is estimated to reach US\$ 6.1T by CY29, growing at a CAGR of 9.4% from CY24 to CY29

India is the world's fourth-largest economy, has emerged as the fastest-growing major economy and is on track to become the world's third-largest economy with a projected GDP of US\$ 6.1T by CY29. Over the next 10-15 years, India is expected to be among the top economies on the back of rising demand, robust growth in various sectors, and increased private consumption.

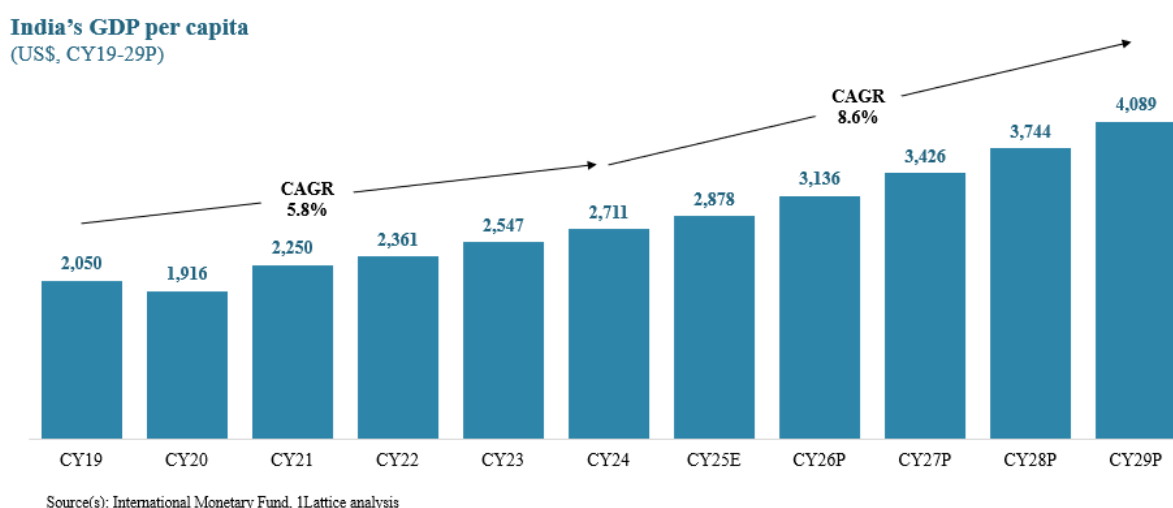


India's GDP (at current prices) grew from US\$ 2.8T to US\$ 3.9T between CY19 and CY24 on the back of robust reforms like GST, corporate tax revision, and revised FDI limits.

1.2 India's economic growth drivers

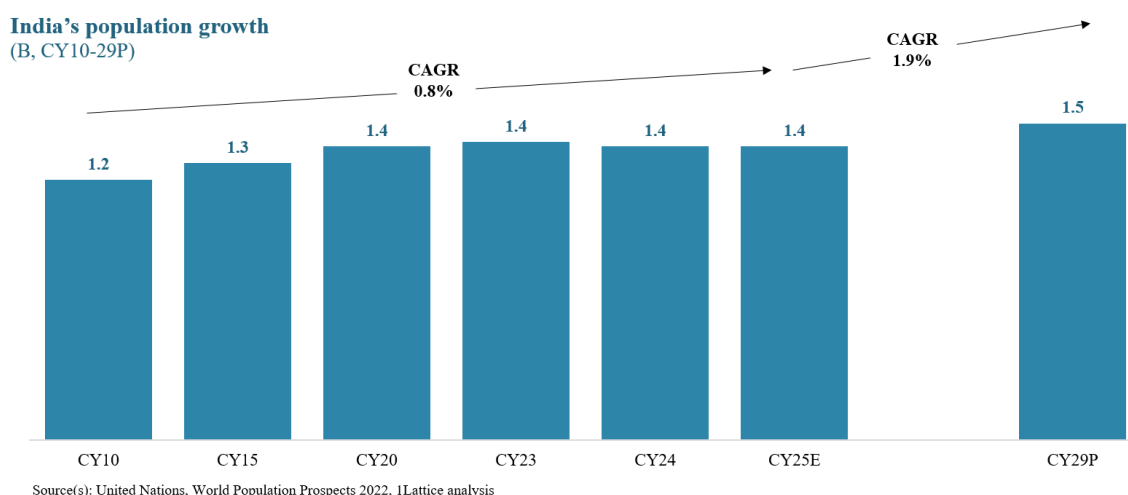
1.2.1 India's per capita income ~US\$ 2.7K in CY24 is expected to reach ~US\$ 4.1K in CY29

India's per capita income is expected to rise from US\$ 2.7K to ~US\$ 4.1K by CY29 growing at a CAGR of 8.6%. With increased demand, substantial per capita income growth, and a demographic advantage, India is positioned as a market with vast growth opportunities. Over CY24-29, India's GDP per capita growth is expected to be driven by strong manufacturing, higher agricultural output, and robust government spending, making it the fastest-growing major economy, followed by China (5.7%), the UK (4.5%), the USA (3.5%), and Germany (3.0%).



1.2.2 India's population is projected to reach 1.5B by CY29, ~18% of the world's population

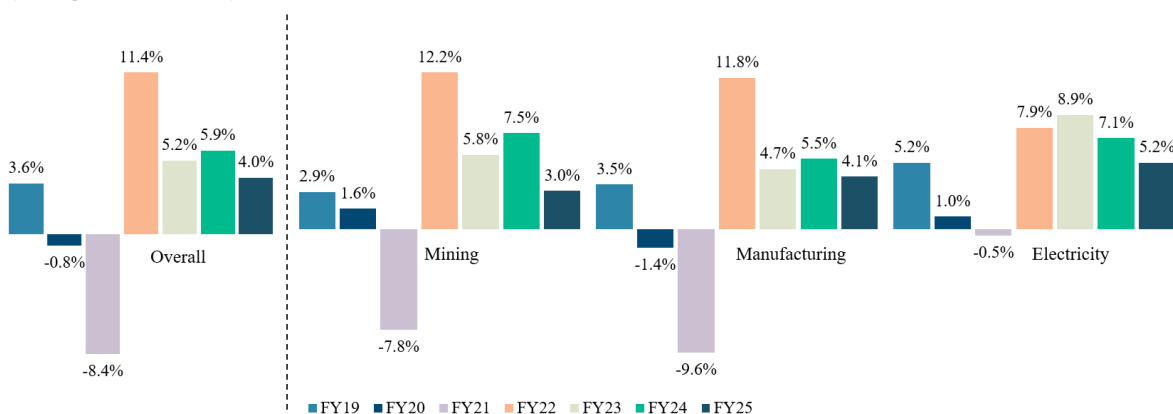
India's population from 1.2B people in CY10, grew at a CAGR of 0.8% till CY25 to reach 1.4B people; the Indian population is expected to grow at 1.9% CAGR from CY25 to reach 1.5B in CY29. India has surpassed China to become the most populous country in the world in CY23.



1.2.3 India's Index of Industrial Production (IIP) grew by 4.0% in FY25, up from 3.6% in FY19, showcasing a 0.4% growth

According to the Ministry of Statistics and Programme Implementation, India's Industrial Production (IIP) growth rate had a strong recovery in FY22 (11.4%), observed a 5.2% IIP growth in FY23 and a slight increase to 5.9% in FY24. Overall, the growth has increased from FY19 at 3.6% to 4.0% in FY25, and this growth is attributed to rising domestic demand, increased foreign direct investment (FDI), government initiatives like 'Make in India', and growth in capital goods and infrastructure/construction sectors. In FY25, mining grew by 3.0%, manufacturing by 4.1%, and electricity by 5.2%, showcasing sector-specific advancements.

India's IIP growth – Sector-wise
(Y-o-Y growth %, FY19-25)

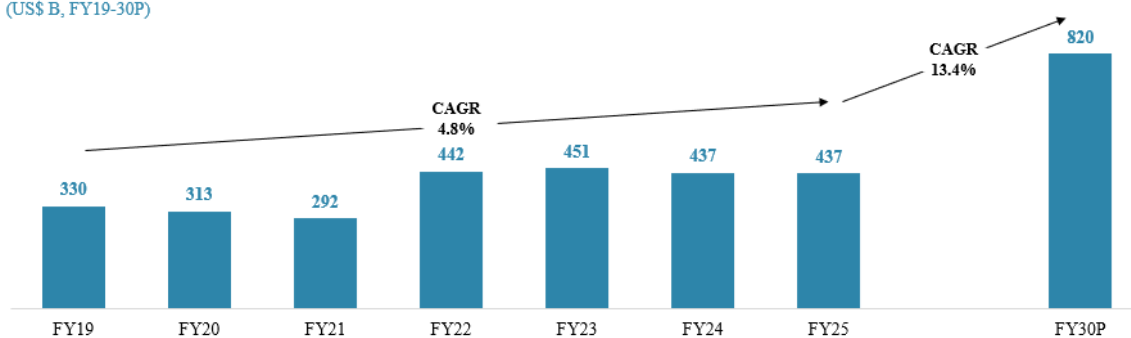


Source(s): Ministry of Statistics and Programme Implementation (MoSPI), ILLattice analysis

1.3 India's merchandise exports are projected to grow at a CAGR of 13.4% during FY25-30, while merchandise imports are expected to expand at a CAGR of 12.8% over the same period

Merchandise exports and imports is the trade of physical goods between countries. Merchandise exports are goods produced in one country and sold to another, while merchandise imports are goods brought into a country from abroad for sale or use. It drives demand for logistics services, multimodal transportation, infrastructure development, technological innovation, and job creation, boosting overall economic growth.

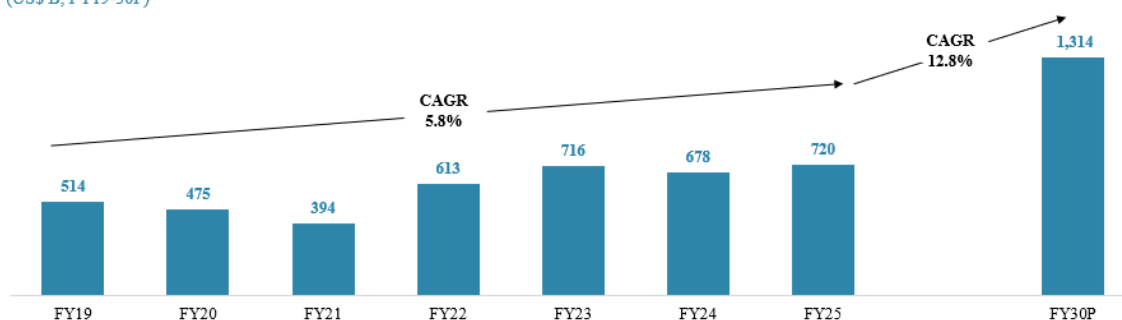
Value of Merchandise Exports (US\$ B, FY19-30P)



Source(s): RBI, ILattice analysis

Merchandise exports of the country are expected to grow at a CAGR of 13.4%, whereas merchandise imports are expected to rise at a CAGR of 12.8% in the upcoming years, translating exports reaching US\$ 820B and imports reaching US\$ 1,314B in FY30. The total export and import trade movement contributed 44.67% (Exports: 21.8% and imports: 23.9%) of the GDP in CY24. Factors like free-trade policies, rise in public spending, favorable taxation policies, growth in private investments, and reforms in the financial sector have increased the FDI flow facilitating trade-led growth in GDP.

Value of Merchandise Imports (US\$ B, FY19-30P)



Source(s): RBI, ILattice analysis

1Lattice



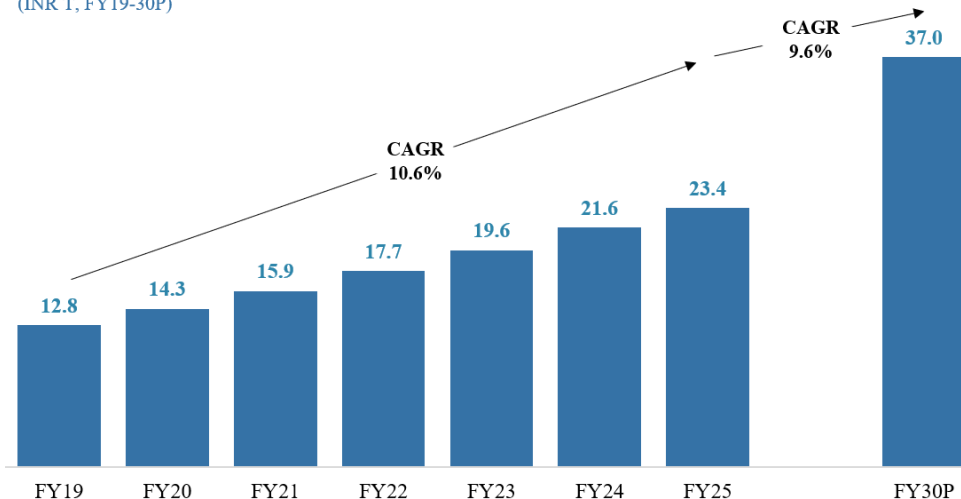
02

Overview of Indian Logistics market

2.1 The Indian logistics industry is expected to grow steadily at a CAGR of 9.6%, reaching INR ~37T by FY30

The logistics sector has been recognized as a core enabler for the development of India to reach the government's vision of achieving a US\$ 5T economy by CY25. As per the Economic Survey FY18, the logistics industry in India was pegged at INR 12.8T in FY19. The industry has grown at 10.6% CAGR to INR 23.4T (US\$ 276.7B) over FY19-25. The logistics industry is forecasted to reach ~INR ~37T (US\$ 437.6B) by FY30, growing at a CAGR of 9.6%.

Indian Logistics Market Size
(INR T, FY19-30P)



Source(s): Economic survey, IILattice analysis

2.2 Key drivers of growth for the logistics sector

The logistics industry is witnessing robust growth, driven by sustainable factors on both the supply and demand sides. This growth is fuelled by increased investments in transportation, warehousing, and supply chain management. The Indian logistics sector is on track to reach ~INR 37T by FY30, supported by several key enablers:

- India has attracted a cumulative FDI inflow of US\$ 748.8B during FY14-25, an increase of 143% over the preceding eleven years (2003-14).
- The Union Budget 2025-26 allocates ~US\$ 134B for infrastructure, comprising 3.1% of GDP. This highlights for government's push for infrastructure investment in transportation through government initiatives such as the National Logistics Plan, Dedicated Freight Corridors (DFCs), Gati Shakti, UDAN, and Jal Marg Vikas etc.
- India's merchandise exports grew from ~US\$ 422B in FY22 to US\$ 437.4B in FY25, driven by the 'Make in India' initiative, bolstering local ecosystems and supporting the country's goal of capturing a 5% share of global merchandise exports, thereby boosting the logistics sector
- Enhanced domestic manufacturing activity driven by the 'Make in India' initiative, which is expected to boost local ecosystems, benefiting industries like real estate and logistics
- Favourable regulatory policies, including faster clearances via e-way bills, GST, and the granting of infrastructure status, aimed at reducing inefficiencies in the logistics sector
- Improved focus on logistics skilling and the development of training infrastructure
- Rapid expansion of e-commerce and the growing participation of MSMEs in the digital commerce space
- Emergence of demand centres beyond Tier-I and Tier-II cities, driven by rising internet (~66% in FY25) and smartphone penetration

B2B logistics business growth drivers:

With strong macro-economic fundamentals along with increasing government expenditure in infrastructure, the logistics market has received total institutional investment of ~US\$ 6.0B over CY19-23.

- **Surging domestic manufacturing and consumption:** FDI inflows in India has increased by ~80% from US\$ 45.1B in FY15 to US\$ 81.0B in FY25. As a result of a large domestic market, skilled labour, low labour costs, PLI scheme, automatic FDI route and the 'China Plus One' strategy, manufacturing sector saw FDI equity inflow of US\$ 184.2B over FY14-25 compared to ~US\$ 98B over FY04-14, an increase

of ~88%. To further boost manufacturing and employment opportunities, the Union Budget 2025-26 announced a hike of ~108% in incentive allocation from INR 9,360.3Cr in FY25 to INR 19,482.5Cr in FY26 for the PLI schemes in 14 key sectors

- **Rise in MSMEs demand:** MSMEs contributed ~30% to GDP in FY25 as compared to ~27% in FY21 and ~46% to exports in FY25. Government initiatives such as ‘Aatmanirbhar Bharat’ and ‘Make in India’ are expected to boost MSME output and drive demand for logistics
- **Increasing adoption of integrated fulfillment services:** The growing demand for integrated end-to-end solutions is driving companies to outsource supply chain management, viewing supply chain efficiency and inventory management as strategic advantages. Businesses are increasingly partnering with logistics providers for comprehensive, long-term solutions that incorporate advanced technology to gain a competitive edge
- **Technology driven disruption:** The adoption of digitized supply chains has become essential for automating workflows, enhancing operational efficiency, optimizing capacity utilization, improving real-time visibility, reducing paperwork, and developing data-driven decision-making systems. Logistics companies are transforming the industry by integrating advanced proprietary technologies like AI, ML, and robotics into intelligent systems, enabling large-scale tech adoption and offering robust services at competitive prices
- **Asset-light approach for flexible operations:** Logistics players are able to cater to MSME as well as corporate clients as their hub-and-spoke network enables them to consolidate and break bulk as needed. Certain logistics players also adopt an asset-light approach which further supports adding / removing capacity easily and offer customized solutions across a diverse set of industries
- **Green and sustainable operations:** Companies are increasingly adopting greener solutions that not only promote sustainability but also optimize costs. Logistics providers are well-positioned to lead the shift to electric fleets and cleaner fuels, with many businesses launching pilot programs and setting electrification targets. Additionally, there is growing interest in smart warehousing with automated, energy-efficient systems

B2C logistics business growth drivers:

- **Growing disposable income and consumption:** India’s per capita income stood at ~US\$ 2.7K in CY24 and is expected to reach ~US\$ 4.0K by CY29. Rising household income and purchasing power have significantly contributed to the growth of the logistics and warehousing industry by driving increased consumption, which in turn necessitates efficient logistics and warehousing systems to meet the demand for consumer goods. Over the medium term, the average disposable income for Indian households is forecasted to grow by 9.5% CAGR
- **Rising internet and smartphone penetration:** Internet subscribers increased from ~251M in FY14 to 954.4M in FY25, reflecting a CAGR of ~13%. Higher internet adoption has also fueled the smartphone base, with 1.1B wireless subscribers in India by FY25. Tier-2 /3 cities and rural market propelling the growth of e-commerce market which is set to cross ~US\$ 325B by FY30. With the rise of Ecommerce, reverse logistics, centered around the movement of goods from customers back to sellers or manufacturers, has also propelled the growth of logistics industry
- **Growth of the digital economy:** The Indian logistics industry is being driven by the rapid expansion of online shopping, particularly with increasing penetration in Tier-2, Tier-3, and smaller cities. India’s digital economy, which represented ~3.5% of GDP in FY14, is projected to expand significantly, contributing ~20% of GDP by FY26. The rise of social commerce and direct-to-consumer (D2C) models is generating significant momentum in last-mile delivery logistics and warehousing.
- **Changing consumer preferences:** The rising demand for reduced delivery times, real-time order tracking, flexible delivery options, and time-definite or day-definite deliveries has made it essential for logistics providers to ensure reliable, high-quality service to achieve superior customer satisfaction, including responsive customer support for shipment-related inquiries.

2.3 Government initiatives to enhance the logistics industry in India

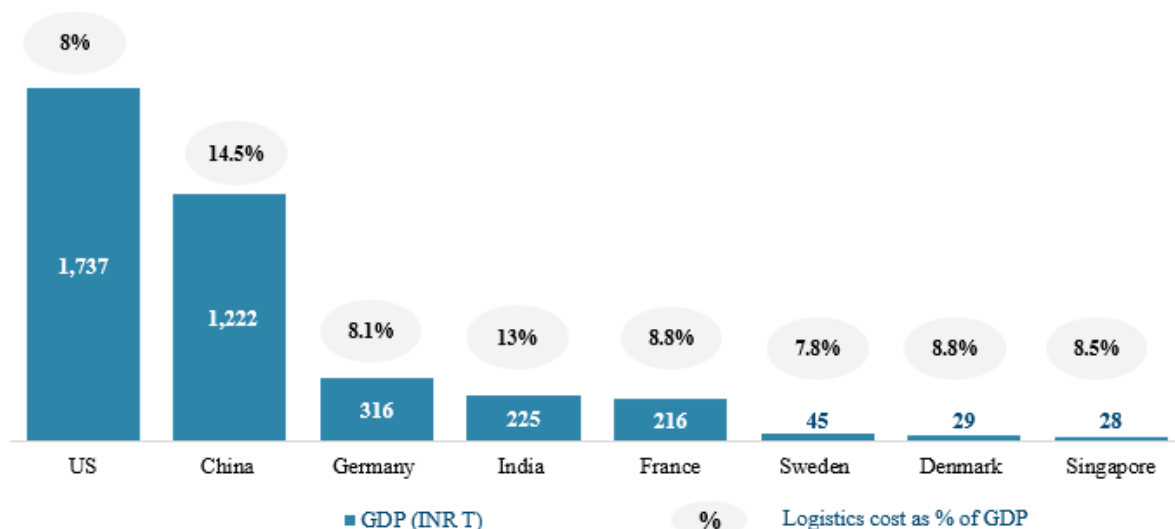
- **Make in India initiative:** The Make in India initiative, launched in 2014, aims to establish India as a global manufacturing hub by encouraging both domestic and foreign companies to set up production within the country. This has led to increased investment in infrastructure, technology, and skill development, boosting the manufacturing sector's efficiency and integrating it more effectively into global supply chains

- **PM Gati Shakti:** PM Gati Shakti aims to create a digitally integrated, multi-modal transportation network to improve the efficiency of logistics and reduce overall transportation costs. The project integrates infrastructure data into a GIS platform and collaborates with the National Logistics Policy to enhance multimodal planning, improve logistics efficiency, and expand railway capacity to meet rising freight demands. A significant milestone has been achieved with the assessment of 293 infrastructure projects, worth ~US\$ 162B, under the principles of PM Gati Shakti
- **Sagarmala Project:** The Sagarmala Project, launched in 2015, seeks to modernise India's port infrastructure, improve port connectivity, and drive port-led development, with 839 projects worth ~US\$ 69B planned for implementation by 2035, of which 272 projects valued at ~US\$ 17B have been completed while the others are at various stages of development.
- **Goods and Services Tax:** The introduction of GST in 2017 was a game-changer for the Indian supply chain. By replacing multiple state and central taxes with a single tax, GST simplified the tax structure, reducing logistics costs and time. This led to more efficient warehousing and transportation networks, as companies could consolidate warehouses and optimize supply chains without worrying about state-level taxes
- **National Logistics Policy:** The National Logistics Policy seeks to establish a unified logistics ecosystem through the Unified Logistics Integrated Platform (ULIP) by reducing costs, enhancing efficiency, and facilitating seamless goods movement across the country, focusing on standardizing processes, leveraging technology, and improving stakeholder coordination, with over 1,300 companies registered, 100 crore+ API transactions processed, and 350+ agreements signed, while also integrating GST data for end-to-end cargo tracking
- **Pradhan Mantri Gram Sadak Yojana (PMGSY):** Dedicated to improving rural connectivity, PMGSY has dramatically upgraded road infrastructure in rural areas. This has strengthened last-mile connectivity in supply chains, allowing businesses to access previously unreachable markets and integrate rural producers into the wider supply network. The Pradhan Mantri Gram Sadak Yojana-IV has been launched for FY25 to FY29, with a total outlay of ~US\$ 8B, aiming to construct 62,500 km of all-weather roads to connect unconnected habitations
- **Bharatmala Pariyojana:** Launched in 2017, Bharatmala Pariyojana aims to enhance road transportation efficiency nationwide by constructing new highways, upgrading existing roads, and improving connectivity to remote regions, with Phase-I planning 34,800 km of National Highway development, of which 26,425 km (76%) have been awarded for construction and 19,826 km has been completed as of February 2025
- **Components of CLAP:** Comprehensive Logistics Action Plan (CLAP) is a framework under the National Logistics Policy that includes key actions to support India's logistics sector. The initiative focuses on developing an integrated digital logistics system, enhancing EXIM logistics, and standardizing assets to improve interoperability and service quality. It also emphasizes logistics HR development and state-level engagement to create efficient, competitive logistics networks across India

2.4 Government aims to bring down high logistics costs in India from ~13% to 7-8% of India's GDP, bringing India closer to its global counterparts

Logistics cost has been high in India at about 13% of GDP against an average of 7-8% for developed economies in 2020. India's logistics sector faces significant challenges, with indirect logistics costs estimated to be four times higher than in developed countries. Contributing factors include an unbalanced modal mix, inefficient heavy truck mileage, inadequate road infrastructure, limited presence of organized players, fragmented networks, lack of technology adoption, and poor demand forecasting. The Indian government's initiative to reduce logistics costs will enable logistics costs to lower operational expenses by optimizing transportation through a more balanced modal mix. This will increase the demand for freight forwarding and encourage more companies to use professional logistics services. This shift towards professional logistic services will drive the overall logistics industry in an organized direction. The reduction in costs and enhanced infrastructure will attract more global clients, allowing freight forwarders to expand their operations beyond national borders and enter new markets.

Logistical expenditure as a % of GDP (CY20, INR T)



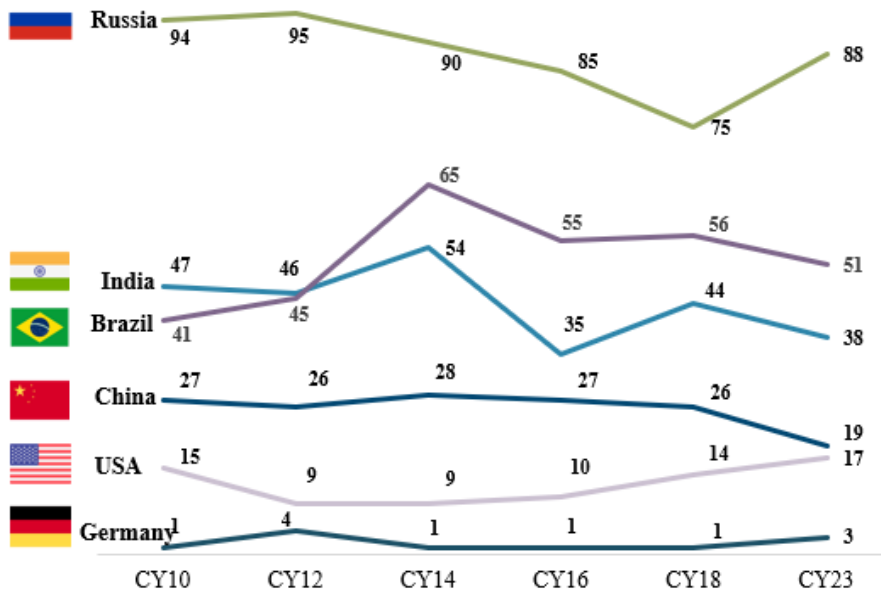
Source(s): IMF, 1Lattice analysis

The Indian logistics sector has a significant potential to reduce inefficiencies, which could result in savings of up to INR 10T. Transportation inefficiencies account for ~2% of the total logistics expenditure in India, that can be reduced by an improved modal share, trucking efficiency, and reduce fuel costs. The PM Gati Shakti National Master Plan aims to create logistical synergies between the States and the Centre to reduce logistics costs to 7-8% of GDP. The DFC projects and other government initiatives will strengthen India's rail infrastructure, leading to a reduction in the cost of transportation. Focusing on technology, sustainability, infrastructure development, and workforce training will be vital to maintaining the growth momentum of Indian logistics industry and ensuring that its supply chain remains competitive on the global stage.

2.5 India ranks at 38th position in Logistics Performance Index in CY23, jumping 9 places since CY18

Placed at 38th rank in CY23 in the Logistics Performance Index report released by World Bank, India jumped 9 places since CY18. The index ranks countries by taking the weightage average on six parameters - customs performance, infrastructure quality, ease of arranging shipments, logistics services quality, consignments tracking and tracing and timeliness of shipments as well as practical data measuring logistics efficiency. India has performed the best in the South Asia region and the sixth-best among lower-middle-income group countries.

Logistics Performance Index (LPI) rankings

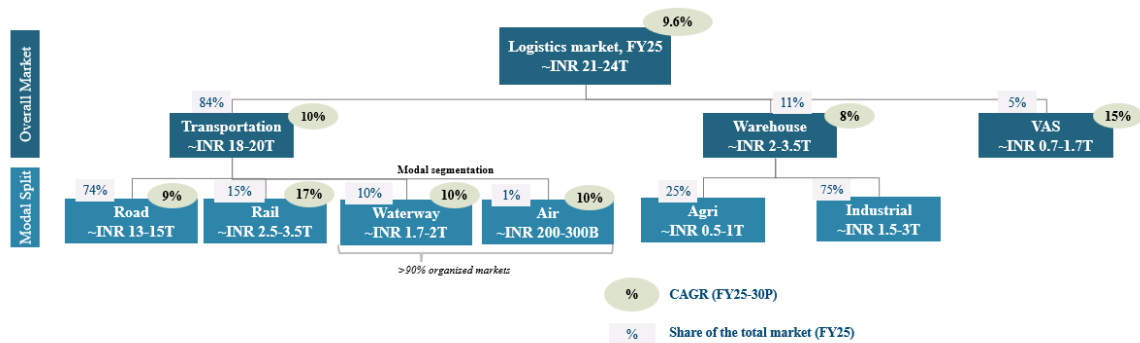


Source(s): World Bank, 1Lattice analysis

Note(s): Income thresholds in GNI per capita in current USD: High income - >12,695, lower-middle income - 1,046 to 4,095

2.6 Transportation contributes bulk (84%) of the logistics market at US\$ 21-24T

The logistics sector is largely dominated by transportation, which holds an ~84% market share and out of the contribution made by the transportation sector, road transportation has the highest share in terms of value. Warehousing contributes the remaining 16% (which includes warehousing including Inland Container Depots and Container Freight Stations) along with value-added services such as freight forwarding, customs clearance, packaging, labelling and quality control among others. The warehousing sector across the top 8 cities³ is likely to grow by ~14% over the next three years from 51.3M sq ft in FY23 to 76.2M sq ft by FY26, with e-commerce and the 3PL sector being the most prominent drivers.

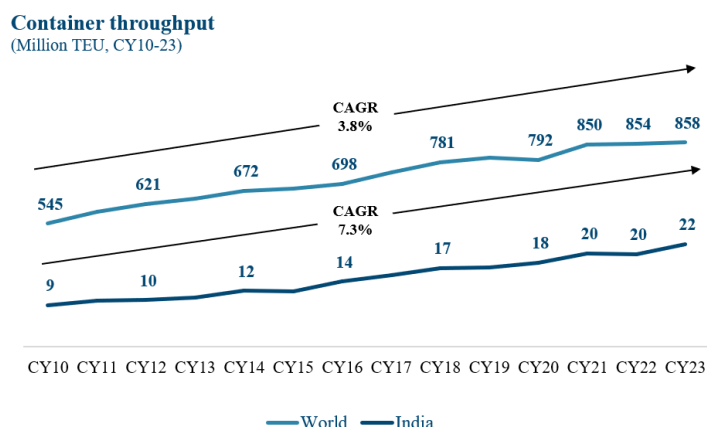


Note(s): Does not factor EXIM cargo movement, VAS - Value added services
Source(s): 1Lattice analysis

The Indian supply chain services market (VAS) comprising 3PL and 4PL segments is estimated to be at INR 0.7-1.7T in FY25 and is expected to grow at a faster CAGR of 15% between FY25-30 to reach INR 1.4-3.4T when compared to the overall logistics market CAGR of 9.6% between FY25-30. The supply chain service market penetration is ~5% of the total logistics market in FY24 and is projected to become ~6% by FY29 driven by increasing demand for integrated logistics services and supply chain solutions.

2.7 India container throughput growth rate outpaced the world growth rate and offers significant opportunity to increase penetration levels relative to GDP

In CY23, ~858 million TEUs of containers were handled in ports worldwide. World container port throughput grew at 3.8% CAGR from CY10-23. India outpaced the world growth in container throughput growing at 7.3% CAGR in CY10-23.

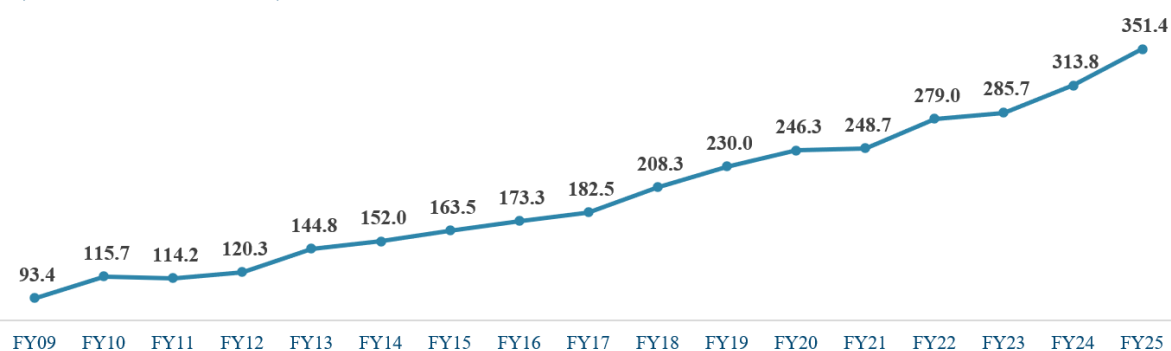


When compared to the average global container throughput per US\$ 1B of GDP, India lags at ~6,123 TEU/US\$ 1B GDP while the world throughput stood at ~8,794 TEU / US\$ 1B GDP. India is still ahead of countries like USA, UK and Russia.

2.8 Container traffic growth was led by major ports which increased at ~8% CAGR over FY16-25

Containerization in India increased at a fast pace in the last decade driven by facilities such as easy container identification with unique codes, lower packaging, and transportation cost due to break bulk handling, own warehouse services and lack of pilferage and losses of cargo. Direct port delivery scheme is expected to expedite the clearance of goods directly from the Port thus reducing the transaction time and cost.

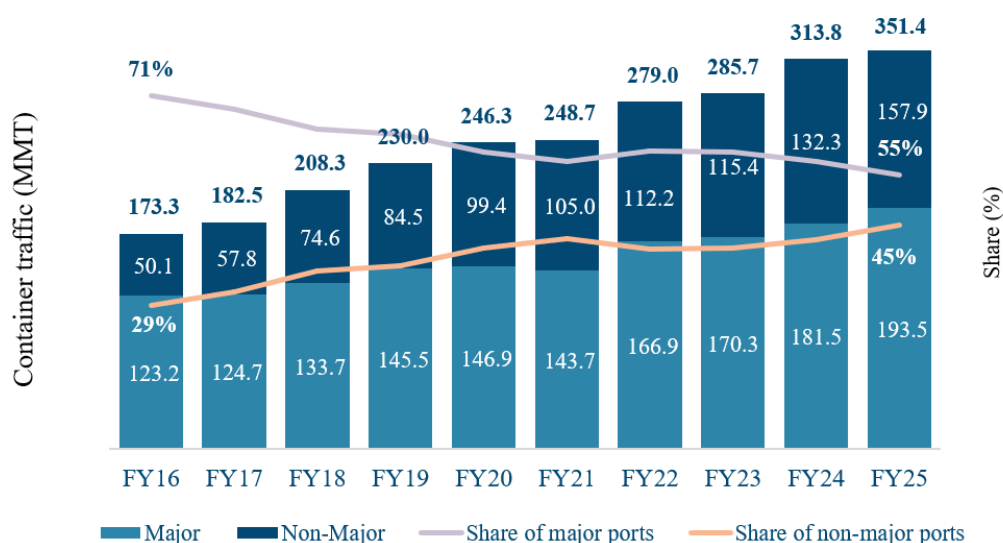
Container traffic volume trend
(Million Metric Tonnes, FY09-24)



Source(s): BPS 2021, Ministry of Ports, Shipping & Waterways, ILLattice analysis

Container traffic increased at a CAGR of 7.3% from FY19-25 led by major ports, growing to 351.4 MMT in FY25. It grew at a YOY rate of 1% to 279 MMT in FY22 owing to the slowdown in trade caused by COVID-19.

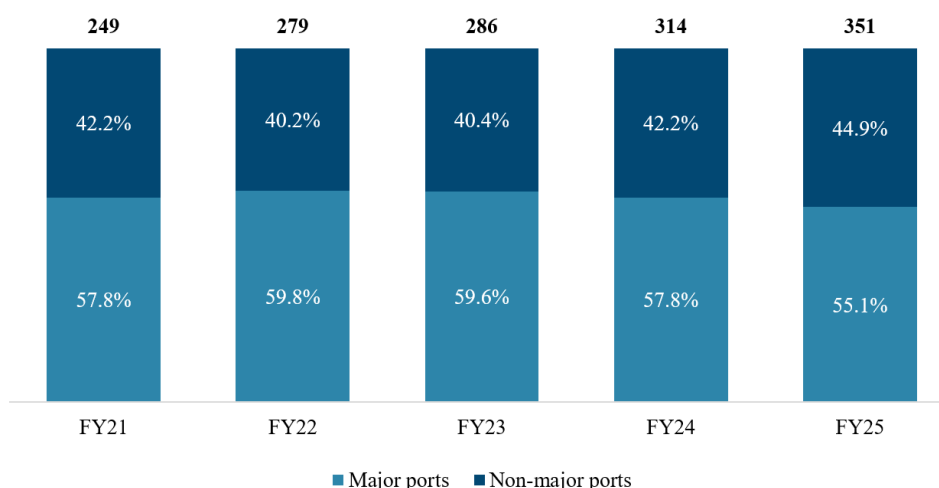
Share of Major and Non-Major ports in container traffic (M Metric Tonnes, %, FY16-25)



Source(s): BPS 2021, Ministry of Ports, Shipping & Waterways, I Lattice analysis

Major ports have continuously lost a significant share of container traffic to non-major ports in last few years, declining from 71.08% in FY16 to 55.1% in FY25. Rapid expansion of private terminal operators in the non-major ports diverted significant portion of cargo. The market share of non-major ports collectively rose to 44.9% in FY25 from 28.92% in FY16.

Share of container traffic (M Metric Tonnes, FY19-25)





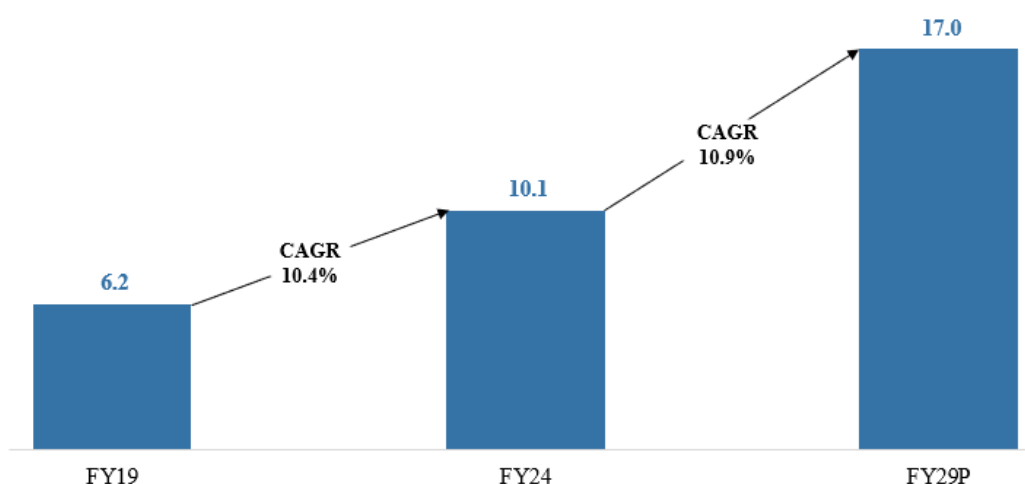
03

Indian Freight forwarding sector overview

3.1 Indian freight forwarding market is valued at US\$ 10.1B in FY24 and is expected to grow at a CAGR of 10.9% between FY24-29, expected to reach US\$ 17.0B by FY29

The freight forwarding industry in India plays a crucial role in enabling international trade, serving as a vital intermediary between businesses and transporters to streamline the shipping of goods. As a significant contributor to India's GDP, the logistics sector has seen freight forwarders strengthen their position, particularly with the surge in global e-commerce demand. Over the past decade, global B2B e-commerce sales have experienced consistent year-on-year growth. Global B2B e-commerce market was valued at ~US\$ 13T in CY19 and is expected to reach ~US\$ 36T by CY26, growing at a CAGR of 15%. The majority of B2B e-commerce sales value is driven by sectors like advanced manufacturing, energy, healthcare, and professional business services.

Freight forwarding market size - India
(US\$ B, FY19-29P)



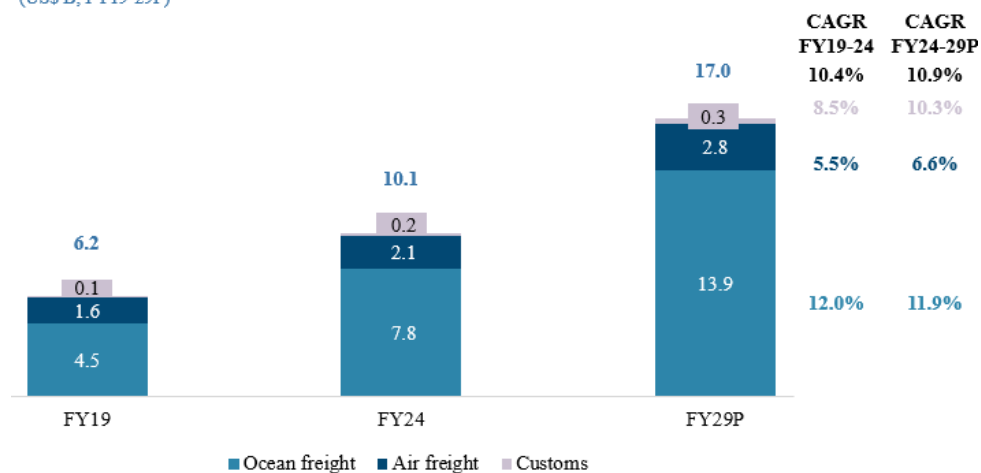
Source(s): Ministry of ports, shipping and waterways, Directorate general of civil aviation, ILLattice analysis
Note(s): FY24 is the latest available data, FY25 volume (in TEU '000s) has not been public

The Indian freight forwarding market has experienced steady growth, rising from US\$ 6.2B in FY19 to US\$ 10.1B in FY24, and is expected to reach US\$ 17.0B by FY29, growing at a CAGR of 10.9% over FY24-29. With India's growing and diversifying economy, the demand for efficient and reliable freight forwarding services has significantly increased. This demand is primarily fueled by the expansion of India's merchandise trade which was valued at ~US\$ 788B in FY20 reached ~US\$ 1,158B in FY25. The rise of e-commerce and the expanding manufacturing sector have also been instrumental in driving the demand for better freight forwarding services. The Indian e-commerce market is valued at ~US\$ 145B in FY25 and is expected to grow at a CAGR of 18% to reach ~US\$ 345B in FY30. Before the pandemic, India's manufacturing sector contributed 16-17% to the nation's GDP. The Indian government now aims to raise this share to ~25% by FY25. Infrastructural development, advancements in technology, and favorable government initiatives and policies are further driving freight forwarding services demand. Key projects like the National Logistics Policy, investments in port and road connectivity, and incentives such as the Production Linked Incentive (PLI) scheme are enhancing logistics efficiency and cost-effectiveness.

3.2 Breakdown of the freight forwarding industry by ocean, air, and customs

India's freight forwarding industry is experiencing robust growth across ocean, air, and customs segments, driven by increasing demand for efficient logistics solutions. Ocean freight continues to dominate the sector, with air freight and customs playing supportive yet significant roles.

India freight forwarding industry - By Ocean, Air and Customs (US\$ B, FY19-29P)



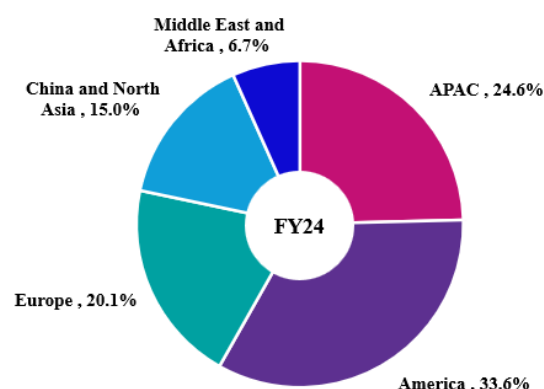
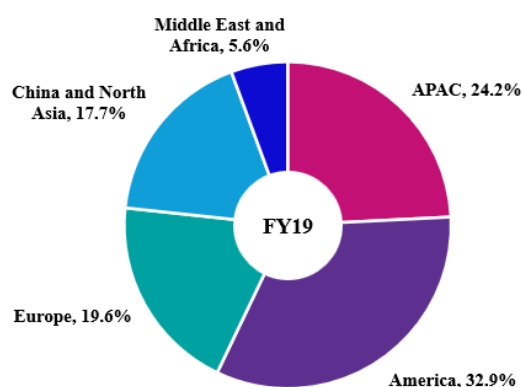
Source(s): Ministry of ports, shipping and waterways, Directorate general of civil aviation, ILLattice analysis

Indian ocean freight market has expanded from US\$ 4.5B in FY19 to US\$ 7.8B in FY24 and is projected to reach US\$ 13.9B by FY29, with a robust CAGR of 11.9% over FY24-29. Similarly, the Indian air freight market has grown from US\$ 1.6B in FY19 to US\$ 2.1B in FY24 and is expected to reach US\$ 2.8B by FY29, growing at a CAGR of 6.6% during the same period. The customs market, though smaller in scale, has also shown significant growth, increasing from US\$ 0.1B in FY19 to US\$ 0.2B in FY24 and is projected to reach US\$ 0.3B by FY29, growing at a CAGR of 10.3% over FY24-29.

India's trade relationships are pivotal to its economic growth and global integration. The country maintains robust export and import partnerships, with key markets spanning various regions worldwide. In FY25, USA (25%), UAE (-11%), Netherlands (-21%), China (16%) and Singapore (0.1%) were the top export markets for India whereas, China (2%), Russia (-21%), UAE (-12%), USA (-10%) and Saudi Arab (5%) were the top import markets for India. The Indian government in 2021 launched Maritime India Vision 2030 which aims to enhance the country's maritime sector by developing world-class ports, improving logistics efficiency, promoting sustainable practices, increasing global competitiveness in shipbuilding, and strengthening cooperation with neighbouring nations to support economic growth and establish India as a leading player in the global maritime landscape. The Amrit Kaal Vision 2047 by the Ministry of Ports, Shipping & Waterways builds on the Maritime India Vision 2030, aiming to establish world-class ports, boost inland and coastal shipping, and promote a sustainable maritime sector to support India's 'Blue Economy'. India has improved its position in the International Shipment category, climbing from 44th place in 2014 to 22nd in 2023. The "Turn Around Time" at Indian ports has improved to 0.9 days, surpassing that of the USA (1.5 days), Australia (1.7 days), and Singapore (1.0 days).

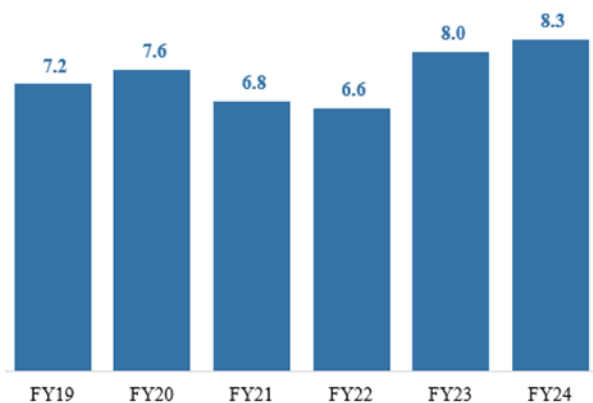
India's ocean freight market is significantly influenced by region-wise trade distribution. In FY19, the Americas led India's ocean trade by value, contributing ~32.9% of the total, followed by APAC at ~24.2% and Europe at ~19.6%. China and North Asia accounted for ~17.7%, while the Middle East and Africa contributed ~5.6%. By FY24, the pattern remained similar, with the Americas increasing to ~33.6%, APAC steady at ~24.6%, and Europe rising to ~20.1%. However, China and North Asia declined to ~15%, while the Middle East and Africa grew to ~6.7%.

India's region-wise ocean trade by value (%, FY19-24)



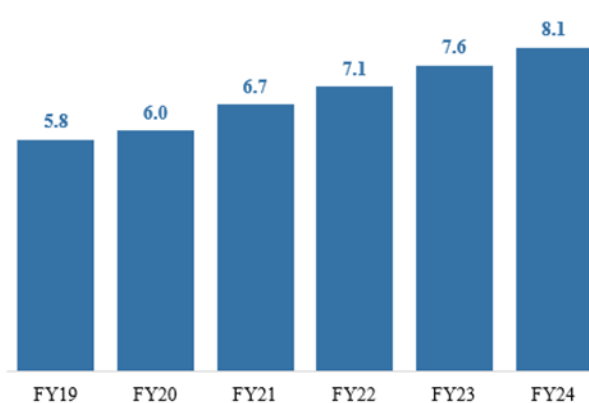
Source(s): Ministry of ports, shipping and waterways, Department of Commerce, ILattice analysis

India's ocean import (TEUs in millions, FY19-24)



Source(s): Ministry of ports, shipping and waterways, ILattice analysis

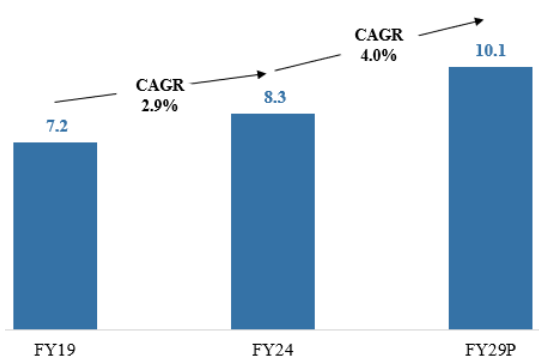
India's ocean export (TEUs in millions, FY19-24)



Source(s): Ministry of ports, shipping and waterways, ILattice analysis

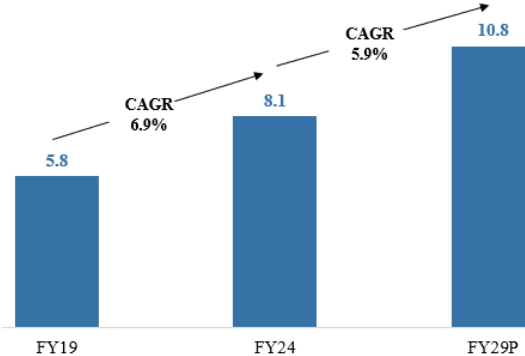
Indian ocean import has been fluctuating, peaking at 7.6M TEUs in FY20, followed by a decline during FY21 and FY22, due to COVID-19 pandemic which led to global disruptions. However, a recovery is evident with imports reaching 8.0M TEUs in FY23, and an estimated increase to 8.3M TEUs in FY24. On the export side, there has been consistent growth, with volumes rising from 5.8M TEUs in FY19 to 7.6M TEUs in FY23, reflecting a CAGR of ~7% over FY19-23. Projections for FY24 estimate export volumes to reach 8.1M TEUs, maintaining a similar growth trajectory with a ~7% CAGR over FY19-24 in India's ocean trade. Ocean freight forwarding market is largely fragmented both in India and Global, globally top 50 players attribute ~35% of freight volume (in TEUs) in CY23 which is similar case for India as well.

India's ocean import
(TEUs in millions, FY19-29P)



Source(s): Ministry of ports, shipping and waterways, ILLattice analysis

India's ocean export
(TEUs in millions, FY19-29P)

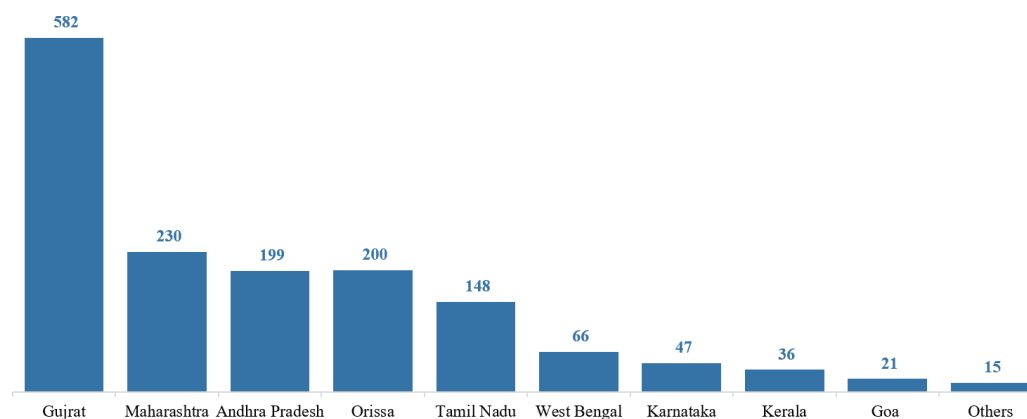


Source(s): Ministry of ports, shipping and waterways, ILLattice analysis

Indian ocean imports were valued at ~7.2M TEUs in FY19 and increased to ~8.3M TEUs in FY24, reflecting a CAGR of ~2.9%. This growth is expected to continue, with imports projected to reach ~10.1M TEUs by FY29, growing at a CAGR of ~4.0% from FY24-29. Indian ocean exports were valued at ~5.8M TEUs in FY19 and increased to ~8.1M TEUs in FY24, reflecting a CAGR of ~6.9%. This growth is expected to continue, with imports projected to reach ~10.8M TEUs by FY29, growing at a CAGR of ~5.9% from FY24-29.

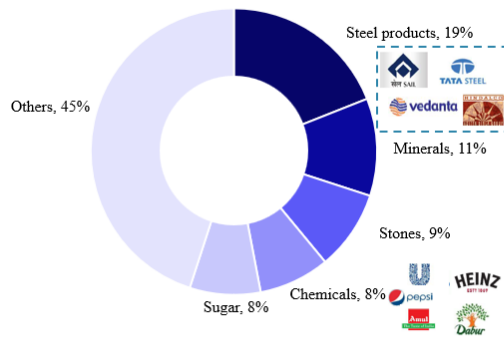
The state-wise distribution of cargo traffic at Indian ports underscores the importance of regional maritime hubs in driving the country's trade. As of FY24, Gujarat stands out as the dominant state, handling ~582 million metric tonnes (MMT) of cargo, far exceeding other states. Maharashtra ranks second, managing ~230 MMT, followed by Andhra Pradesh and Orissa, which are at ~199 MMT and 200 MMT. Tamil Nadu also plays a significant role, with ~148 MMT of cargo traffic. West Bengal and Karnataka see comparatively lower volumes, handling ~66 MMT and ~47 MMT, respectively. Kerala and Goa manage even smaller shares, with ~36 MMT and ~21 MMT. Others which include regions such as Puducherry, Andaman and Nicobar Islands, and Lakshadweep Islands, accounts for 15 MMT.

State-wise cargo traffic at Indian Ports
(MMT, FY24)



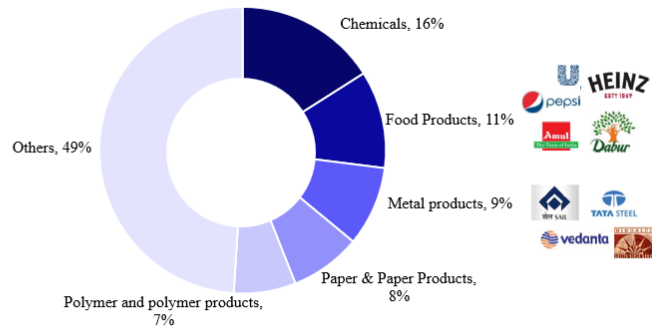
Note(s): Others include Puducherry, Andaman and Nicobar Islands, and Lakshadweep Islands
Source(s): Ministry of ports, shipping and waterways, ILLattice analysis

Major container commodities exported from India
(%, CY21)



Note(s): Others include commodities like pig iron, iron casting, glass fibre, liquor, maize starch, etc.
Source(s): 1Lattice analysis

Major container commodities imported by India
(%, CY21)

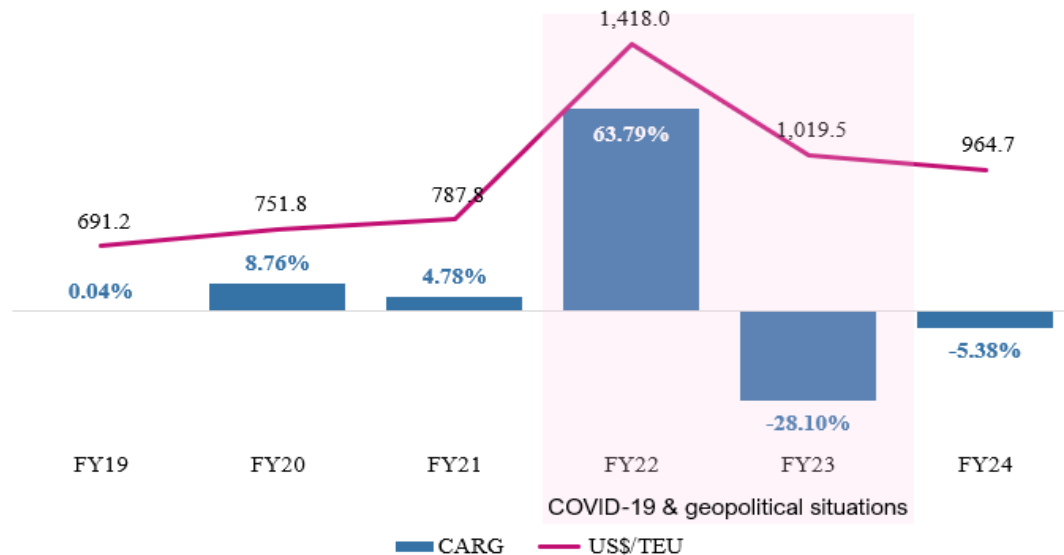


Note(s): Others include commodities like scrap, photographic materials, fertilizer, household items, etc.
Source(s): 1Lattice analysis

In terms of export volume, steel products followed by various mineral products such as pig iron, iron casting, silicon manganese etc. are the major product group being exported from India in containers. In CY21, 27.3 MMT of steel products were exported from India with 37.5% of it exported to China, Vietnam, Nepal, UAE and Italy. This product had a share of 25% in CY10. Mineral's share has increased to 13% of India's total exports in containers in CY21 while it had <5% share in CY10. A total of 15.2 MMT of minerals were exported from India in CY20 with ~57.9% being exported to China, Korea Republic, Japan, Bangladesh and Indonesia.

On the import side, chemical segment is the largest group of commodities being imported in India. In CY21, the country imported 22.4 MMT of chemicals with 50.4% being imported from China, USA, Saudi Arabia, Singapore and Malaysia. Food products ranked second in the list of imports in India with a total import of 14.6 MMT and 79.1% imported from Indonesia, Argentina, Malaysia, Ukraine and Russian Federation. Rising income levels in the country have given rise to increased demand for imported food products with its share rising from 10% in CY10 to 11% in CY21.

Aggregate ocean freight rates
(FY19-24)



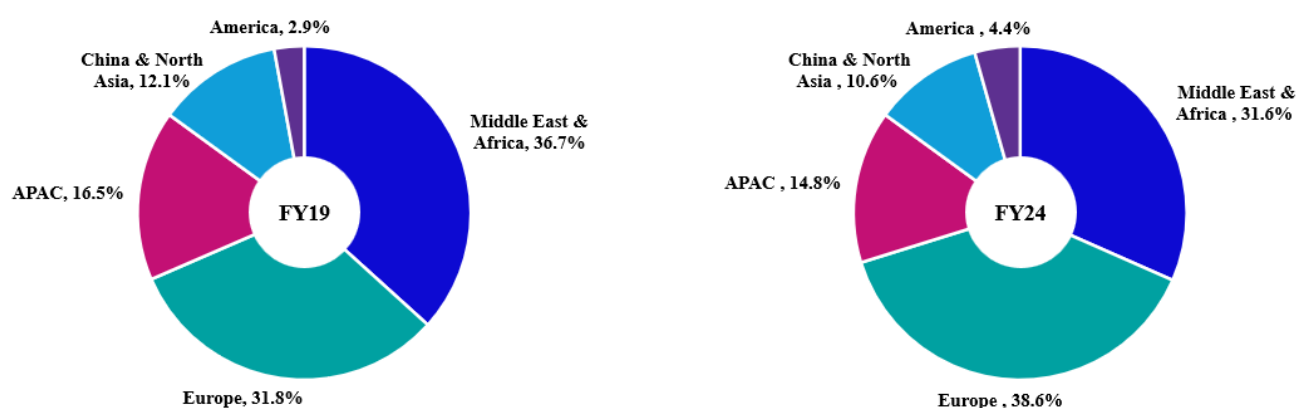
Source(s): 1Lattice estimate, 1Lattice analysis

Aggregate ocean freight rate jumped in FY22 from FY21, to ~US\$ 1,418 per TEU and slightly declined to ~US\$ 1,020 per TEU in FY23. The sharp rise in aggregate ocean freight rates can be attributed to disruptions caused by the COVID-19 pandemic, which led to a contraction of the global economy and a decline in port handling in CY20. However, with the easing of lockdowns in 2021, demand for consumer goods surged as spending shifted away from leisure and experiences, driving a strong economic rebound. This surge outpaced shipping capacity growth, resulting

in historically high freight rates. Additionally, the prolonged Russia-Ukraine war started in February 2022 caused bunker prices to rise, further impacting rates. For India-based routes, significant variations were observed between export and import rates. Export rates to the USA, Europe, and China almost tripled between CY20 and the initial months of CY22. In contrast, import rates from the USA and Europe increased marginally, while those from China rose four to five times compared to CY20.

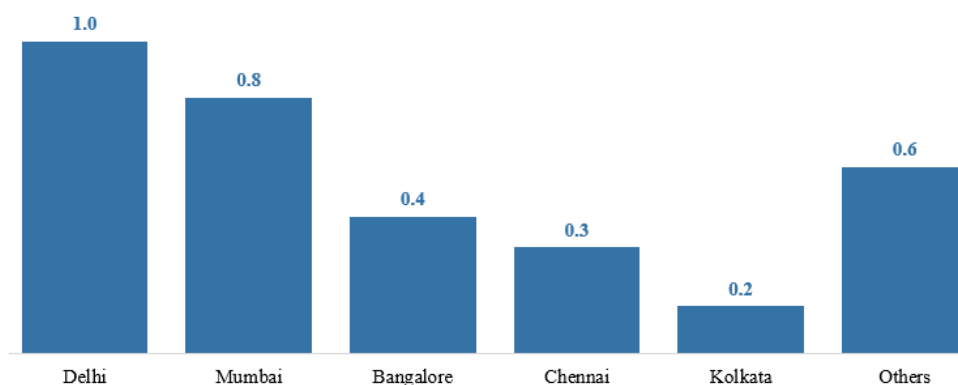
The regional distribution of India's air freight market significantly influences its trade dynamics. In FY19, the Middle East and Africa dominated Indian air trade, accounting for ~36.7% of the total trade by value. Europe followed at ~31.8%, with APAC contributing ~16.5%. China and North Asia held ~12.1%, while the Americas accounted for a modest ~2.9%. By FY24, Europe emerged as the leader with ~38.6% of the trade value. The Middle East and Africa, along with APAC, saw declines to ~31.6% and ~14.8%, respectively. China and North Asia also decreased to ~10.6%, whereas the Americas grew to ~4.4%.

India's region-wise air trade by value
(%, FY19-24)



Source(s): Directorate general of civil aviation, Department of Commerce, ILattice analysis

City-wise total air cargo traffic at Indian airports
(MMT, FY24)

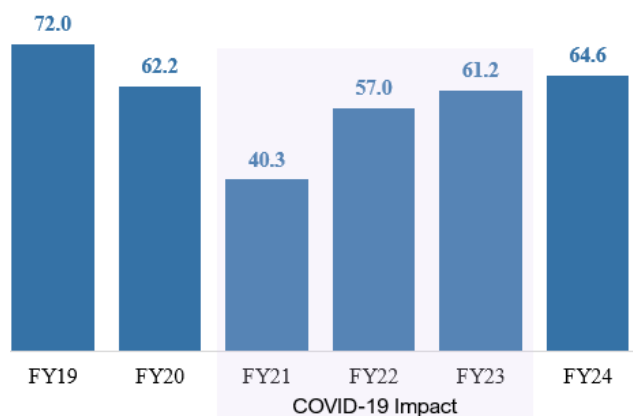


Source(s): Airports Authority of India, ILattice analysis

In FY25, Delhi stands out as the leading city, achieving a significant air cargo traffic of ~2.4million metric tons (MMT). Mumbai follows closely as the second-largest hub, handling ~2.2 MMT of air cargo. Bangalore and

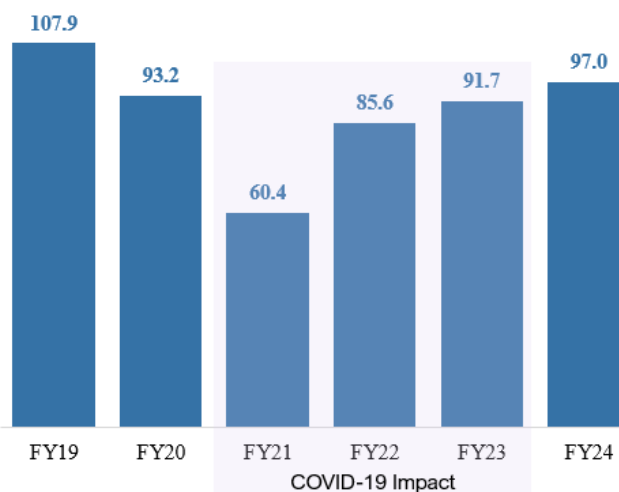
Chennai show comparatively lower volumes, with air cargo traffic of ~1.1 MMT and ~0.9 MMT, respectively. Kolkata is managing at ~0.2 MMT. Furthermore, other cities collectively contribute ~0.9 MMT, highlighting that a substantial share of air cargo traffic is distributed across various locations beyond the primary hubs.

India's air import
(Tonnes in '000s, FY19-24)



Source(s): Directorate general of civil aviation, ILLattice analysis

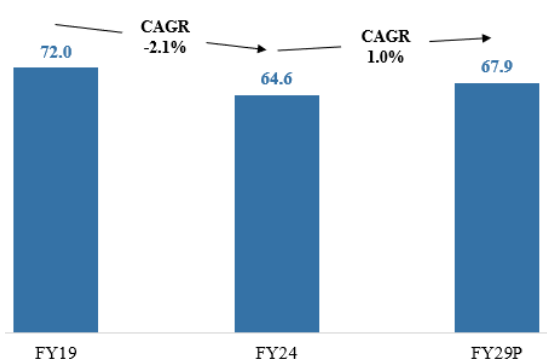
India's air export
(Tonnes in '000s, FY19-24)



Source(s): Directorate general of civil aviation, ILLattice analysis

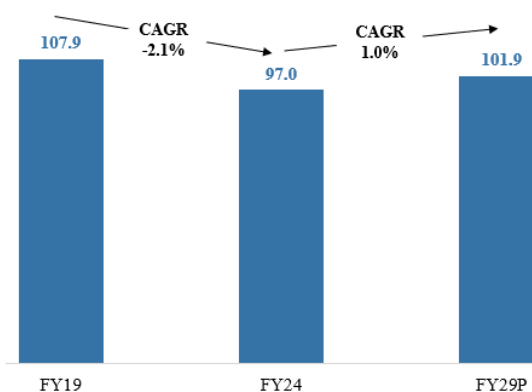
Indian air imports show a decreasing and then an increasing trend. It fell to 40.3 thousand tonnes in FY21 largely due to the impact of the COVID-19 pandemic. However, since FY22, air imports have shown steady recovery, reaching 57.0 thousand tonnes in FY23 and further increasing to 64.6 thousand tonnes in FY24. Indian air exports followed a similar trajectory, with a pandemic-induced decline followed by gradual growth, reaching 97.0 thousand tonnes in FY24.

India's air import
(Tonnes in '000s, FY19-29P)



Source(s): Directorate general of civil aviation, ILLattice analysis

India's air export
(Tonnes in '000s, FY19-29P)



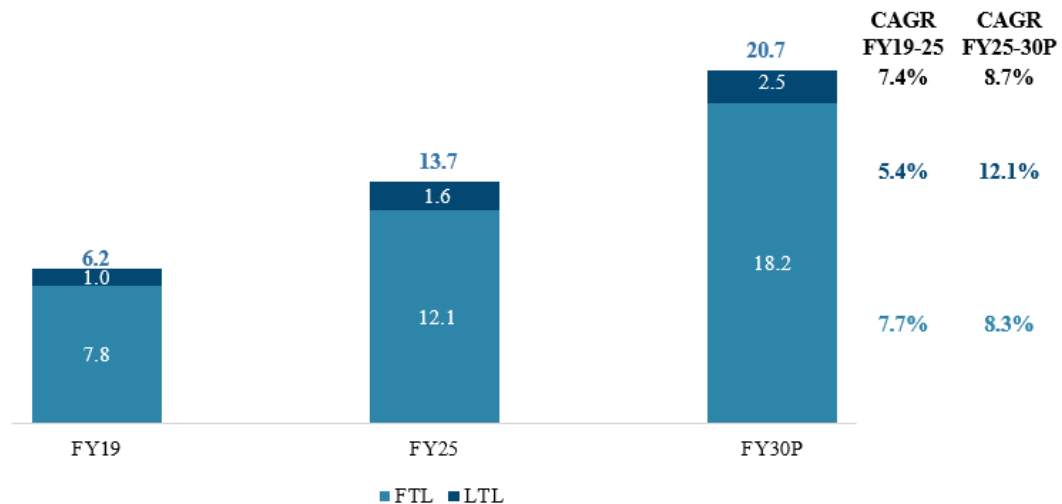
Source(s): Directorate general of civil aviation, ILLattice analysis

Indian air imports were valued at ~72.0 thousand tonnes in FY19 and declined to ~64.6 thousand tonnes in FY24. Air imports are expected to experience minimal growth, reaching ~67.9 thousand tonnes by FY29, with a CAGR of ~1.0% from FY24-29. Indian air exports follow a similar trend to air imports. They were valued at ~107.9 thousand tonnes in FY19 and decreased to ~97.0 thousand tonnes in FY24. Air exports are expected to see modest growth, reaching ~101.9 thousand tonnes by FY29, growing at a CAGR of ~1.0% from FY24-29.

Indian road freight market is primarily divided into three segments: Full truck load (FTL), less than truck load (LTL) and express parcel. Glottis mainly deals with FTL and LTL.

- **Full truck load (FTL):** FTL involves reserving an entire truck or trailer for a shipper's exclusive use, with goods transported directly from the point of origin to the destination without any intermediate stops for other shipments
- **Less than truck load (LTL):** LTL shipping is used for smaller shipments that don't require the full capacity of a truck. Typically, shipments ranging between 70 and 7,000 kg are ideal for LTL, as they share truck space with other shipments, optimizing cost-efficiency
- **Express parcel:** This includes lightweight parcels, often under 40-70 kg, such as e-commerce deliveries, speed post and document courier, with standard delivery timelines typically within three days

India's road transportation market by FTL & LTL (INR T, FY19-30P)



Source(s): 1. Lattice analysis

India's road transportation market comprising full truck load (FTL) and less than truck load (LTL) segments, was valued at ~INR 8.8T in FY19 and grew to ~INR 13.7T in FY24, reflecting a CAGR of ~7.4%. It is projected to expand at a CAGR of ~8.7% over FY24-29, reaching ~INR 20.7T by FY30.

The FTL segment, valued at ~INR 7.8T in FY19, grew to ~INR 12.1T in FY25 at a CAGR of ~7.7%. It is expected to grow further at a CAGR of ~8.3%, reaching ~INR 18.2T by FY30.

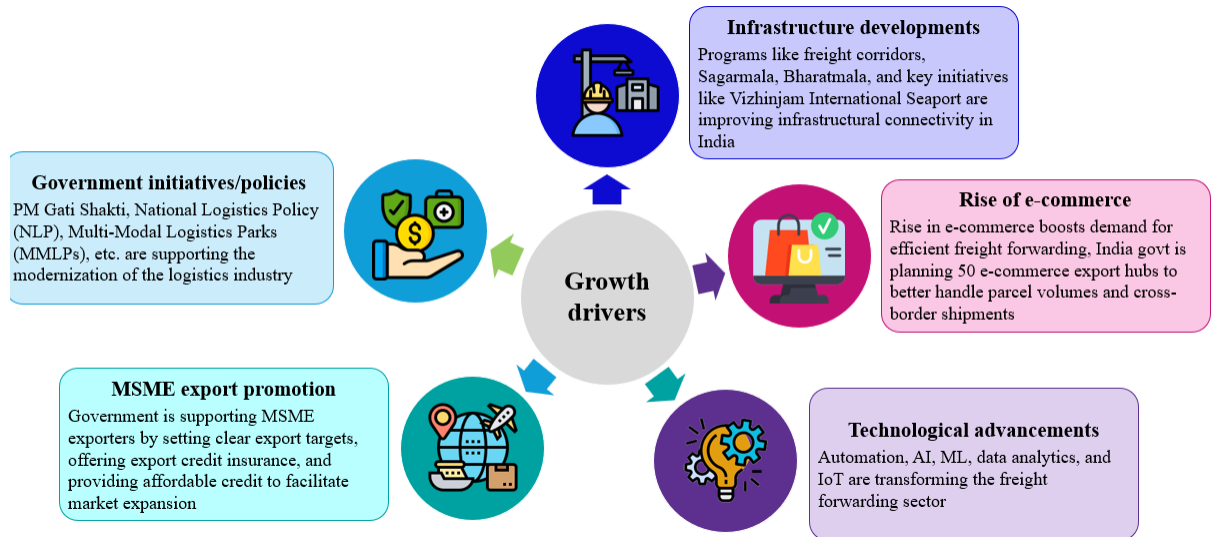
Meanwhile, the LTL segment, valued at ~INR 1.0T in FY19, reached ~INR 1.6T in FY25, reflecting a CAGR of ~5.4%. It is forecasted to grow significantly at a CAGR of ~12.1% over FY25-30, reaching ~INR 2.5T by FY30.

3.3 Growth drivers for freight forwarding industry in India

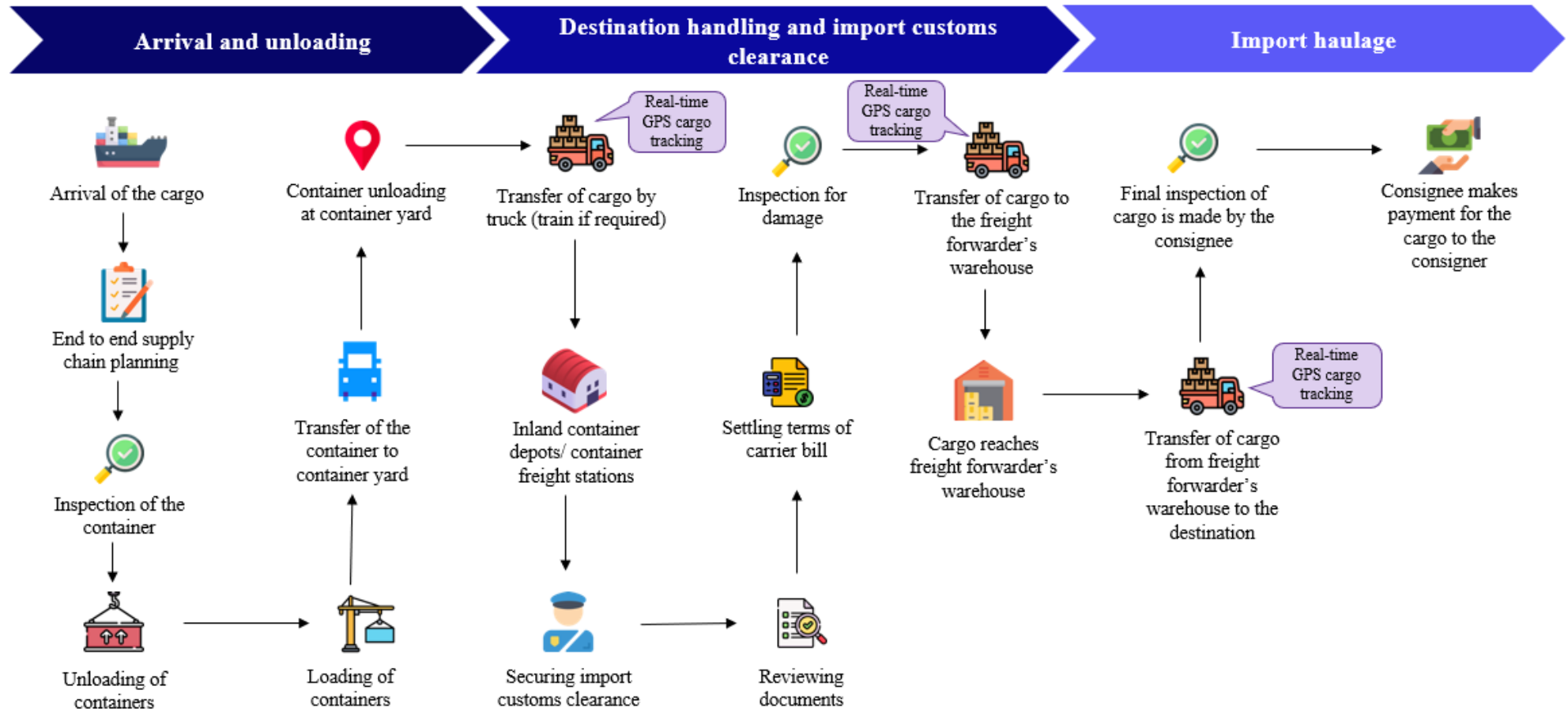
The Indian freight forwarding industry is experiencing significant growth, which is driven by infrastructural improvements like Dedicated freight corridors. Sagarmala and Bharatmala, like Vizhinjam International Seaport which is India's first truly deep-water International Container Transshipment (ICT) terminal, the rise of e-commerce, technological advancements, export promotion for MSMEs, and supportive government policies such as PM Gati Shakti and the National Logistics Policy (NLP).

- **Infrastructural improvements:** The Ministry of Railways has successfully completed the 1,337 km Eastern Dedicated Freight Corridor (EDFC) from Ludhiana to Son Nagar. Meanwhile, the 1,506 km Western Dedicated Freight Corridor (WDFC), stretching from Jawaharlal Nehru Port Terminal (JNPT) to Dadri, has 1,220 km finished and operational. Complementary initiatives such as Sagarmala and Bharatmala are also driving significant advancements in national infrastructure
- **Rise of e-commerce:** The e-commerce market is valued at ~US\$ 95.8B in FY25 and is expected to grow at a CAGR of 19.6% to reach ~US\$ 234.4B in FY30. To further support this growth, the government plans to establish 50 e-commerce export hubs to better manage parcel volumes and facilitate cross-border shipments.

- **Export promotion for MSMEs:** Ministry of MSME has set up 60 Export Facilitation Centers (EFCs) across the country to provide mentoring and support to micro and small enterprises (MSEs), further bolstering India's export capabilities
- **Government initiatives:** PM Gati Shakti initiative has assessed 208 major infrastructure projects worth ~US\$ 185 billion across various ministries. The National Logistics Policy seeks to create a unified logistics ecosystem through the Unified Logistics Integrated Platform (ULIP), aiming to reduce costs and enhance efficiency while integrating GST data for end-to-end cargo tracking



3.4 Freight forwarding value chain



Source(s): 1Lattice analysis

Freight forwarding is a multi-phase process involving export haulage, export documentation, origin handling, import documentation, destination handling, and import haulage. It comprises the following steps:

- A freight forwarder is selected to coordinate cargo pickup and transport to the port
- For less than truckload (LTL) shipments, the cargo is consolidated with other loads and routed through hubs or relay points
- At the port, the cargo is loaded into full container load (FCL) or less than container load (LCL) containers
- Key documents such as the bill of lading, certificate of origin, and insurance, are processed alongside customs clearance
- Throughout the journey, the cargo is tracked in real-time and inspected for damage
- Upon arrival at the destination, the cargo is unloaded, import customs clearance is secured, and then the cargo is transferred to its final warehouse or consignee

Major other stakeholders in ocean freight

- **Ports:** India's port sector is experiencing robust growth, fueled by the rapid expansion of international trade. The country operates a vast maritime network that includes 12 major ports and over 200+ minor and intermediate ports. Among these, Mundra, Kandla, Paradip, Visakhapatnam, and Jawaharlal Nehru Port are the key ports
- **Dry ports & CFS/ICD:** Dry ports are well-connected to seaports through reliable waterways, rail, or road networks, making it easier to handle containerized cargo. They play a key role in export and inland transportation by managing cargo receipt, dispatch, customs clearance, and documentation. ICD & CFS are expected to evolve because of rising containerization levels and the ability to provide value-added services
- **Road and Rail connectivity:** To ensure smooth cargo movement, it's essential to coordinate port evacuation and arrivals effectively. Expanding port capacity and improving infrastructure are crucial to managing growing cargo volumes. Better road and rail connectivity will further support this increased movement
- **Warehouses & cold storage:** Warehouses provide storage for exporters during procurement and for importers after goods are delivered. In FY24, India's warehousing and value-added services market was valued at INR 2–5T. About 25% of this comes from agricultural warehousing, while 75% is from industrial warehousing. The cold storage sector in India is mostly unorganized, with facilities often set up without a structured plan





Advantages of owned container

Owned containers are owned by freight forwarding companies, instead of renting them from the shipping line. When a shipping line owns the container, it controls most of the transportation process, which limits the freight forwarder's flexibility. Owned containers provide greater independence and save costs for freight forwarders

- **Cost efficient:** Help freight forwarders to avoid extra fees like detention and demurrage charges, making shipping cheaper
- **More flexibility:** Give freight forwarders the freedom to choose shipping lines and manage their containers without strict deadlines
- **Better control:** Let the freight forwarders control the shipping process and avoid delays caused by port congestion or fixed carrier schedules
- **Versatility:** Can be used for various purposes, including transporting goods over long distances and providing on-site storage

3.5 Key trends in freight forwarding

The freight forwarding industry is evolving with trends like green logistics, digital platforms enhancing visibility and automation, AI revolutionizing efficiency, and custom freight forwarding services. These developments aim to improve sustainability and responsiveness.

| Key trends | | |
|-----------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Green logistics and sustainability | <ul style="list-style-type: none"> Adoption of electric vehicles, green cold chains, and cargo drones minimizes waste, reduces environmental impact, and boosts competitiveness |
|  | Digital freight platforms | <ul style="list-style-type: none"> Enhancing logistics with real-time visibility, automation, and collaboration, making them crucial for agile and transparent supply chain management |
|  | AI/ML and automation | <ul style="list-style-type: none"> Revolutionizing efficiency and decision-making by using predictive analytics and autonomous vehicles, which enhance responsiveness and unlock new possibilities |
|  | Custom freight forwarding services | <ul style="list-style-type: none"> Rising demand for custom freight solutions is enabling businesses to flexibly tailor logistics services to meet their specific sectoral requirements |



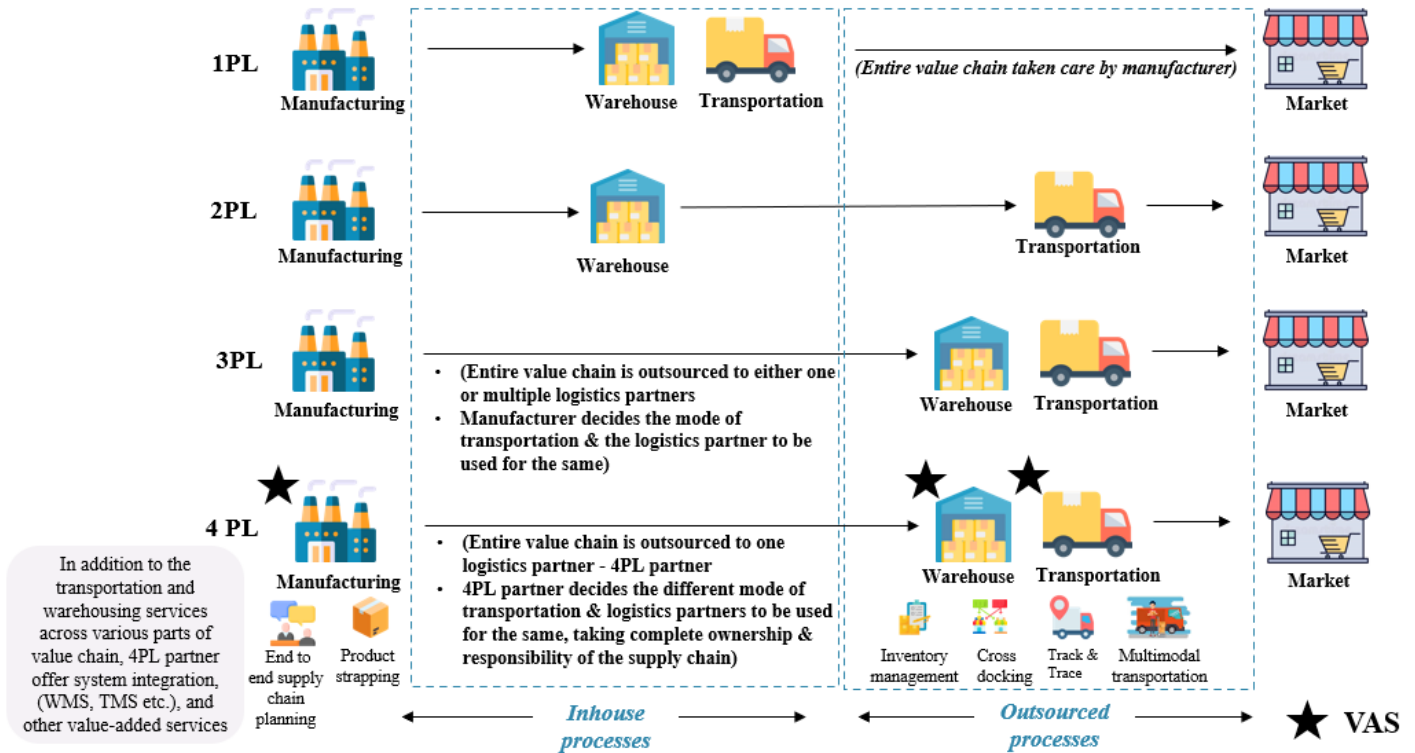
1Lattice

04

Other logistics sector overview

4.1 Value-added services in logistics movement

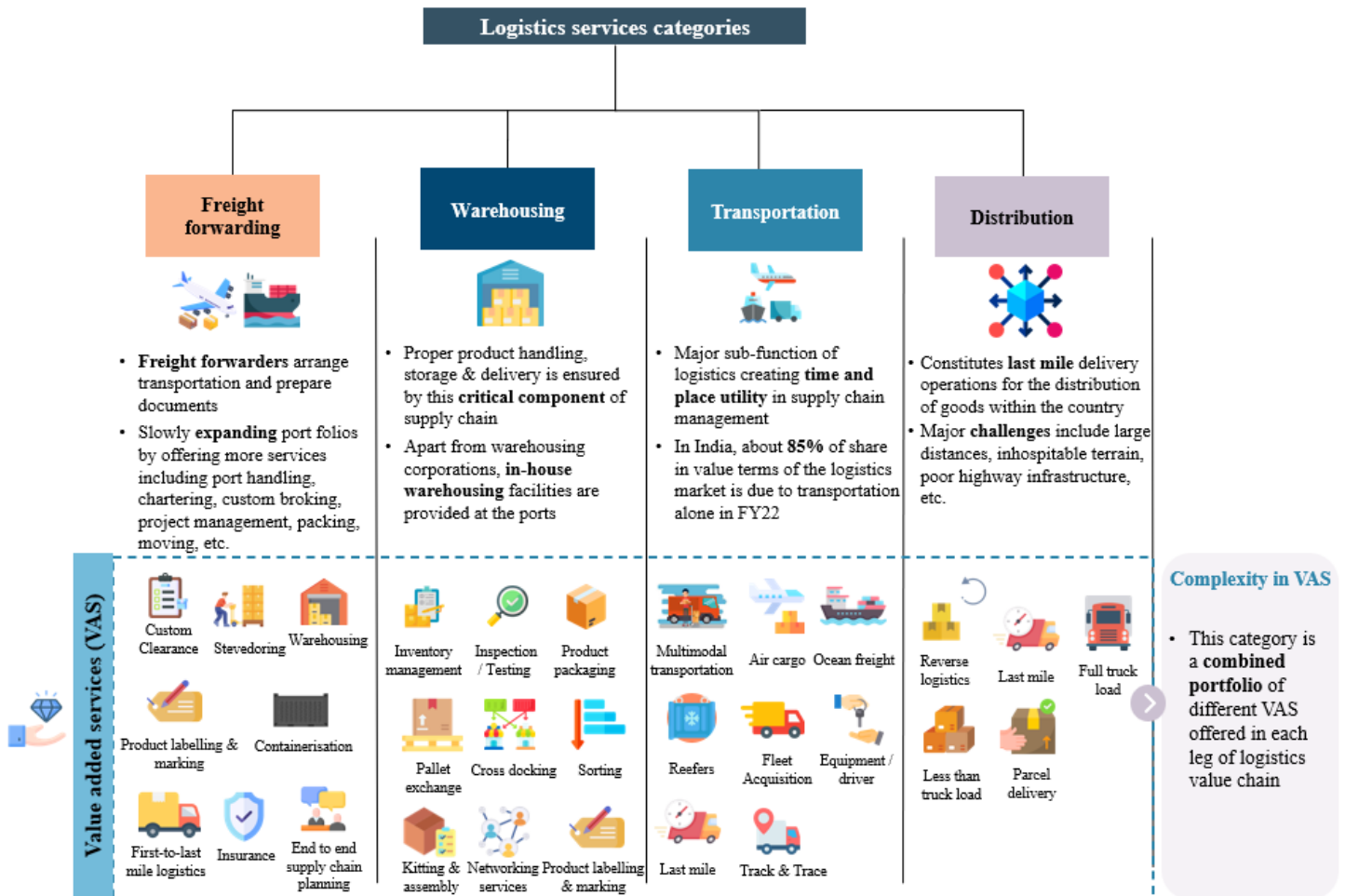
Value-added services are those that enhance a basic service by providing additional features, forms, or functions. In recent decades, rising competition within the logistics industry has led to an increased emphasis on offering value-added services to customers. These services assist in optimizing production costs, improving time management, reducing supply chain complexities, and enhancing quality control and traceability. Additionally, the need to meet customer demands has become a significant motivator for the provision of value-added services.



Source(s): 1Lattice analysis

Every transport company can move products from A to B, but it is difficult to stand out in a market full of competition. Carriers, therefore, now provide an increasing number of services; not only do they organize transport, but they also plan, pack, weigh, and label the products. These value-added services are provided in each leg of a complex logistics supply chain.

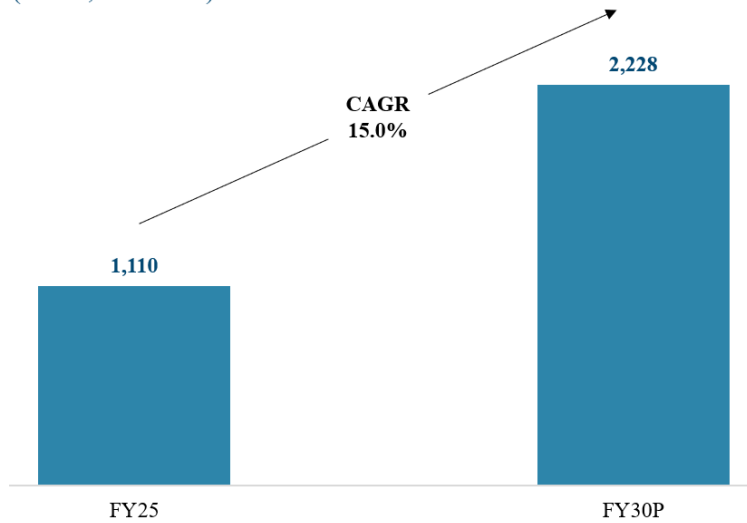
4PL players not only take complete ownership / responsibility of the supply chain but also plan the same and includes all services by 3PL players. In addition to the transportation and storage services across various parts of the value chain, 4PL partners offer full suite of services with end-to-end coverage and entire supply chain systems integration. Thus, 4PL is much more strategic in nature as it ensures business & cost optimization, service fulfillment, and customer satisfaction by enabling them to focus on their core business.



Each segment of logistics offers a diverse range of value-added services to its customers, which can complicate the value chain. However, these complexities can be minimized through effective planning and implementation. Currently, value-added services are crucial to the existence of multimodal logistics. Without the ability to manage this complexity, transportation would be limited to a single mode.

The Indian value-added services market in the logistics space presented a large addressable opportunity size of INR 1,110B in FY25 and is expected to grow to INR 2,228B by FY30 at a CAGR of ~15%.

Value added service market in logistics space
(INR B, FY25-30P)

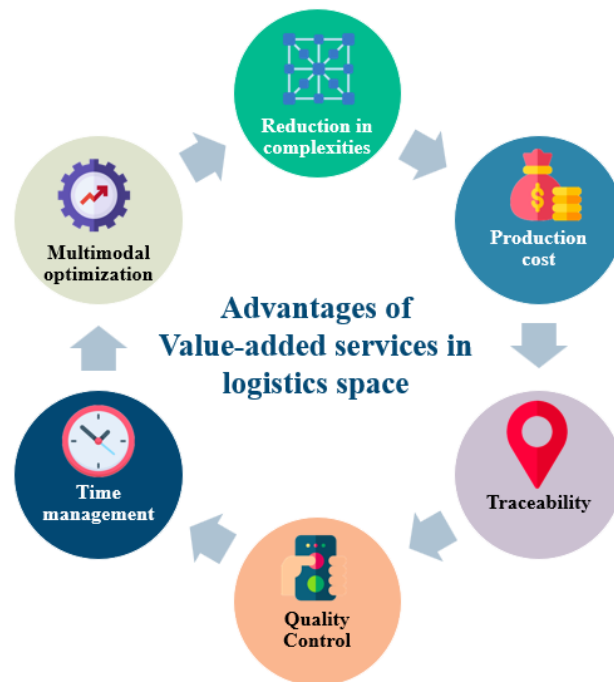


4.2 Importance of value-added services (VAS) in logistics

VAS play a crucial role in every step of freight forwarding and supply chain, making it efficient in the following ways:

- Insurance provides **financial protection** against risks such as damage, loss, or theft of goods stored in the warehouse and helps businesses **mitigate the losses** caused by such risks
- Containerization optimizes space and ensures the safe, efficient transportation of goods, adding value by **reducing handling time and minimizing damage**
- Customs clearance as a value-added service **streamlines** international shipping, reduces delays, improves compliance, cost optimization, access to expert knowledge, faster market entry, enhanced customer satisfaction, and the ability to manage complex regulations across different countries; essentially allowing businesses to **focus on their core operations** while leaving the customs complexities to the logistics provider
- Proper planning and execution of value-added services (VAS) **reduces the complexities within the value chain**, improve operational efficiency, reduce service layer complications, optimize costs, enhance access to specialized expertise, improve customer satisfaction, and allow businesses to **focus on their core activities** while the logistics provider manages the intricate service layers
- Bonded warehouse allows for a shorter stay of goods in ports. It enhances **distribution efficiency** by **streamlining** customs procedures, reducing waiting times, and facilitating partial shipments, while enabling direct export without VAT or customs duties, optimizing delivery times and fostering business growth and expansion
- They serve as the **backbone** of the **multimodal** logistics industry by enabling the **optimization of cost-effective** transportation modes, while also streamlining the supply chain to reduce production costs through improved manufacturing efficiency, appropriate shipment sizes, packaging, and optimal inventory levels

- Value-added services (VAS) leverage technological innovations to enable shipment **traceability**, streamline operations, prevent internal confusion, ensure **effective time management** by optimizing inventory and transport, and enhance **quality control** through packaging, labelling, and dunnage, ultimately improving overall supply chain efficiency



A wide range of value-added services are provided by warehousing service providers too. These services enhance the value of products and improve the efficiency of the supply chain. Some common value-added services include procurement and vendor management, API and EDI integration, quality checks, kitting and assembly, labeling, serialization, RF security tags, and order processing.

1Lattice



05

Company overview and financial benchmarking

5.1 Competitive benchmarking:

With over 2 decades of experience, Glottis is one of the leading freight forwarding player operating in the renewable energy sector import and export in India. Glottis' offerings include ocean freight forwarding, air freight forwarding, road transportation; along with other ancillary services, including warehousing, storage, cargo handling, third-party logistics ("3PL") services and custom clearance, among others. Its freight operations include import and export, through various modes, such as air, water and road. It has diversified its presence across industry verticals such as renewable energy industry, engineering products, home appliances, granite and minerals, timber and other industries including agro, automobile chemicals, textiles, machineries etc. Glottis provides value added services which include consultancy on freight management, coordination with shipping liners, connecting its customers with clearing house agents to ensure seamless custom clearance, assisting in port operations, ranging from container inspection, container stuffing and container loading through our clearing house agents and ensuring timely delivery through our international freight forwarding agents.

Its comprehensive ocean freight forwarding services utilize shipping lines for sea transport, third-party providers for inland transportation, and a network of intermediaries for end-to-end solutions encompassing custom clearance, stuffing, container loading and unloading, and other related services. Its export shipment services include cargo pick up, cargo space booking and management, document preparation and destination customs clearance and delivery.

It has a considerable client base and growing logistics, and freight needs has led to Glottis' expansion into new markets like Europe, African, Central & South America, Canada, Mediterranean, Middle East and Australia and, presently, is handling 110K+ ocean freight TEUs per year. At present, it operates in over 120 countries across the globe. Further, it has created a wide-spread presence across India by setting up 8 branch offices in New Delhi, Gujarat, Kolkata, Mumbai, Tuticorin, Coimbatore, Bengaluru and Cochin to cover major transportation hubs.

Glottis' inland transportation segment complements its ocean freight forwarding with door-to-door delivery services. It offers standard road transport, specialized transport for heavy or fragile cargo, last-mile delivery, urban delivery with smaller vehicles, and rural/remote delivery services using various vehicle types to ensure comprehensive coverage. Its warehousing segment offers general storage solutions, cross-docking for efficient transfers, and comprehensive 3PL services including warehouse management, multi-user small parts storage, last-mile delivery, and bulk material handling. It also provides other value-added services like packaging and labelling, reverse logistics, customs brokerage, and supply chain consulting.

Glottis follows a 'asset-right' business model that enables it to reduce our capital expenditure requirements, mitigate the effects of operational risks relating to direct fuel cost, maintenance cost and depreciation. It provides valuable services to customers by taking a proactive approach to new technology and upgrading functions frequently. Its entire warehouse is operated with logistics engineering team, enabling to maintain global standards of warehousing and provide additional value-added services to customer. Glottis received the title of 'Freight Forwarder of the Year' in the Cargo and Logistics Awards, four years in a row (FY21-24). Glottis was the top supporter of SAFMARINE for 4 consecutive years (FY13 to FY16) and 3rd top supporter of MAERSK for 2 consecutive years (FY15 & FY16).

Glottis Limited is a member of freight forwarding networks such as, WCA Inter Global which is among the world's largest general cargo network with ~5,179 member offices across ~170 countries, established to foster trade and partnerships to and from emerging global economies. FIATA International Federation of Freight Forwarders Association a member-based organization representing freight forwarders in 150+ countries with ~111 members, serving as a reference source on international policies and regulations governing the freight forwarding and logistics industry. The International Air Transport Association is a trade association for global airlines, representing ~350 airlines which includes the world's leading passenger and cargo airlines, across 120+ countries, covering over 80% of global air traffic and Federation of Freight Forwarders' Associations in India is a national body in freight forwarding and logistics, with representation in international associations like FIATA and the International Federation of Freight Brokers Associations (IFCBA), comprising ~30 member associations across India representing ~6,500 customs brokers. As a member of International Air Transport Association, it authorised to become authorized cargo agents for international airlines. It also achieves quickest delivery by employing the best third-party logistics. It has affiliations with numerous national, regional and neighbourhood carriers and transporters which provide the quickest delivery in the industry. Glottis' warehousing services provides standardized operations, speedy onboarding, secure storage, and customizable solutions, along with comprehensive fulfilment services, multi-client storage efficiency, and widespread warehouse locations across

India. It offers various types of warehousing and storage services, including public, contract, specialist, and high-security options, as well as key operational aspects like inventory tracking, management, and auditing.

The logistics industry in India is highly competitive, dominated by a large number of unorganized players. Many segments within the logistics industry are highly commoditized and have low barriers to entry or exit, leading to a market with a very high degree of fragmentation. Glottis competes with a variety of local, regional and global logistics service providers of varying sizes, operations and financial resources.

Key industry goods in which Glottis operates have seen tailwinds over the past few years

India's industrial growth is gaining momentum across renewable energy, timber, glass, home appliances, and agriculture, driven by government initiatives and rising demand. Sustainable practices, local manufacturing incentives, and smart technologies are shaping these sectors, positioning India for a more resilient future.

Renewable energy (Solar): The Indian solar energy sector has experienced a robust growth in imports, with a CAGR of 23.5% over FY19-24. The installed solar capacity is expected to grow at a strong CAGR of 23.8% from FY25-30. The solar capacity addition contributed to about 48% of the total renewable capacity added in the period. The increase in installed capacity is also the result of favourable market conditions and strategic policy interventions and technological innovations. Government initiatives such as the PM-KUSUM scheme, which aims to add 30.8 GW of solar power by March 2026 with a focus on the agricultural sector, and the Pradhan Mantri Suryodaya Yojana, which plans to provide rooftop solar installations to 10 million households, and the development of 50 solar parks across 12 states. Government initiatives, along with the establishment of solar cities and parks, are significantly advancing the adoption of solar energy and contributing to sustainable development. India has set a target to reduce the carbon intensity of the nation's economy by less than 45% by the end of the decade, achieve 50 percent cumulative electric power installed by CY30 from renewables, and achieve net-zero carbon emissions by 2070. This is further expected to drive the growth of the solar energy segment in India.







India had an installed cumulative capacity of 106.65 GW as of March 2025. Glottis has been instrumental in ocean haulage / freight movement of 21.09GW (cumulative) as on March 2025, indicating 19.77% of the total installed solar capacity. Glottis has supported in shipment of ~7.29GW solar panels in FY25 which attributes to ~31% of the installed solar capacity in FY24 (23.83GW solar capacity installed in FY25). India aims to create Solar power capacity of 280 GW by 2030.

Timber: The sector is projected to grow at 7.7% CAGR over FY25-29. To facilitate the growth of the Indian timber market, the government has implemented several key initiatives. The national transit pass system aims to streamline the movement of timber, bamboo, and other minor forest produce, reducing delays and improving trade efficiency. Additionally, the Indian forest & wood certification scheme promotes sustainable management of forests and agroforestry practices, ensuring responsible harvesting and long-term viability.

Glass: The Indian glass sector import grew at a CAGR of 12.4% over FY20-25. The sector is projected to grow at 6.0% CAGR over FY24-29. The Centre for the Development of Glass Industry has significantly shaped the Indian glass industry by providing technological and developmental support to small-scale enterprises. This has enhanced production processes, improved product quality, and driven industry growth and innovation.

Home appliances: The Indian home appliances sector experienced a 7.0% CAGR in imports over FY19-24. The sector is projected to grow at 5.5% CAGR over FY24-29. The Production Linked Incentive (PLI) scheme is a key government initiative designed to support local manufacturing across crucial industries and promote economic independence.

Agriculture: The Indian agricultural sector export grew at a CAGR of 8.7% over FY20-25. The sector is projected to grow at ~9% CAGR over FY25-29. Government initiatives are supporting the Indian agriculture sector by providing low-interest loans for infrastructure through the agriculture infrastructure fund, enhancing irrigation with the Pradhan Mantri Krishi Sinchayee Yojana, and offering income support to farmers via the PM-KISAN scheme. These efforts collectively improve infrastructure, water management, and financial stability, driving growth and sustainability in agriculture.

| | |  |  |  |  |
|---------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Operational metrics |  # countries served | 120+ | 120+ | 180 | 7+ |
| |  Ocean TEUs handled | 110K+/year | 68.9K/year | NA | 154K+/year |
| |  Air volume handled | 800+ tons/year | 377.6 tons/year | NA | NA |
| |  Warehouse size | 80K sq ft | NA | NA | 1,600K sq ft |
| Services |  Ocean freight | ✓ | ✓ | ✓ | ✓ |
| |  Air freight | ✓ | ✓ | ✗ | ✗ |
| |  Custom clearance | ✓ | ✓ | ✗ | ✓ |
| Verticals handled |  Renewable energy | ✓ | ✗ | NA | ✓ |
| |  Engineering goods | ✓ | ✓ | NA | ✓ |
| |  Minerals | ✓ | ✗ | NA | ✗ |
| |  General cargo | ✓ | ✓ | NA | ✓ |
| |  Agro | ✓ | ✓ | NA | ✓ |

No or limited presence
✗
Presence
✓

| | Stages | Value added services | Description | Glottis offerings |
|----------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Export value chain | Packaging and pre-shipment | Transportation by road | <ul style="list-style-type: none">• Goods transported from the customers location to the port | <ul style="list-style-type: none">• Door to door service provided to the customer from the place of origin to destination |
| | | End to end supply chain planning | <ul style="list-style-type: none">• Planning of the entire supply chain i.e. transportation mode, logistics partner, CHA etc. | <ul style="list-style-type: none">• 100% customized to the client specification |
| | | Containerisation | <ul style="list-style-type: none">• Product packed into boxes are sealed and stuffed into containers and then transported via mode of ocean, air, road, etc. through CHA | <ul style="list-style-type: none">• Customised based on the size of the cargo and product specification |
| | Export haulage and documentation | Transportation by ocean / air / road | <ul style="list-style-type: none">• Uses multimodal transportation among the combination of ocean, air, road, etc.• Encompasses both first mile and last mile delivery operations | <ul style="list-style-type: none">• Arranged for through intermediaries |
| | | Loading document check | <ul style="list-style-type: none">• Shipping agent performs all paperwork, custom checks, port dues, etc. | |
| | Departure from port | Stevedoring | <ul style="list-style-type: none">• Securely tying up goods by lashing and pelleting• Containers are lashed after being loaded on the ship by stevedores | <ul style="list-style-type: none">• Arranged for through intermediaries |
| Container fumigation | | <ul style="list-style-type: none">• Fumigation of containers is done depending on the type of product / exporting countries | <ul style="list-style-type: none">• As per product requirement | |
| Import value chain | Packaging and pre-shipment | End to end supply chain planning | <ul style="list-style-type: none">• Planning of the entire supply chain i.e. transportation mode, logistics partner, CHA etc. | <ul style="list-style-type: none">• 100% customized to the client specification |
| | | Container Inspection | <ul style="list-style-type: none">• Intermediaries checks container structural ability, exterior, damage signs, etc. | <ul style="list-style-type: none">• Inspection and custom clearances at all ports are done by our CHA partners |
| | | Cargo unloading at container yard | <ul style="list-style-type: none">• Unloading through intermediaries• Done by importer’s representative | <ul style="list-style-type: none">• Arranged for through intermediaries for all types of cargo |
| | Stevedoring | <ul style="list-style-type: none">• Done before transporting good to container yards• Stevedores unlash or untie the containers | <ul style="list-style-type: none">• Arranged for through intermediaries | |
| | Inland haulage and custom clearance | Custom House Agent of Importer | <ul style="list-style-type: none">• Done by custom house agents after containers are stacked properly in container yards | <ul style="list-style-type: none">• Complete documentation done by the in-house team of company to ensure error free paperwork |
| | | Cargo unloading at ICD/CFSs | <ul style="list-style-type: none">• After the approval from custom house, destuffing of containers takes place through intermediaries | <ul style="list-style-type: none">• As required both at customs and client side for end use |
| | Transportation | Transportation by road | <ul style="list-style-type: none">• Door to door service provided to the customer from the place of origin to destination | |

5.2 Financial benchmarking

| Parameters | Company | FY23 | FY24 | FY25 |
|---------------------------------|-------------------------------|----------|----------|----------|
| Revenue from operations (INR M) | Glottis Limited | 4,782.73 | 4,971.77 | 9,411.73 |
| | Tiger Logistics India Limited | 4,333.48 | 2,402.59 | 5,363.05 |
| | Allcargo Terminals Limited | 7,057.09 | 7,329.81 | 7,578.14 |

| | | | | |
|-----------------------------|----------------------------------------|-------------|-------------|-------------|
| | Transport Corporation of India Limited | 37,825.73 | 40,242.64 | 44,918.00 |
| | Allcargo Logistics | 1,80,507.70 | 1,29,686.80 | 1,60,215.30 |
| | | | | |
| EBITDA (INR M) | Glottis Limited | 334.70 | 403.58 | 784.50 |
| | Tiger Logistics India Limited | 259.23 | 150.23 | 309.15 |
| | Allcargo Terminals Limited | 1,434.35 | 1,173.36 | 1,284.78 |
| | Transport Corporation of India Limited | 4,683.70 | 4,864.10 | 5,507.00 |
| | Allcargo Logistics | 11,469.00 | 5,814.50 | 5,974.30 |
| | | | | |
| EBITDA (%) | Glottis Limited | 7.00% | 8.12% | 8.34% |
| | Tiger Logistics India Limited | 5.98% | 6.25% | 5.76% |
| | Allcargo Terminals Limited | 20.32% | 16.01% | 16.95% |
| | Transport Corporation of India Limited | 12.38% | 12.09% | 12.26% |
| | Allcargo Logistics | 6.35% | 4.48% | 3.73% |
| | | | | |
| PAT (INR M) | Glottis Limited | 224.37 | 309.58 | 561.44 |
| | Tiger Logistics India Limited | 232.12 | 129.64 | 270.08 |
| | Allcargo Terminals Limited | 587.94 | 446.98 | 302.34 |
| | Transport Corporation of India Limited | 3,205.89 | 3,545.00 | 4,161.00 |
| | Allcargo Logistics | 6,532.10 | 1,400.00 | 491.80 |
| | | | | |
| PAT (%) | Glottis Limited | 4.69% | 6.23% | 5.97% |
| | Tiger Logistics India Limited | 5.36% | 5.40% | 5.04% |
| | Allcargo Terminals Limited | 8.33% | 6.10% | 3.99% |
| | Transport Corporation of India Limited | 8.48% | 8.81% | 9.26% |
| | Allcargo Logistics | 3.62% | 1.08% | 0.31% |
| | | | | |
| ROE (%) | Glottis Limited | 194.82% | 73.10% | 56.98% |
| | Tiger Logistics India Limited | 23.78% | 11.70% | 19.53% |
| | Allcargo Terminals Limited | 26.98% | 17.87% | 10.88% |
| | Transport Corporation of India Limited | 18.84% | 17.69% | 19.31% |
| | Allcargo Logistics | 23.21% | 5.34% | 1.86% |
| | | | | |
| ROCE (%) | Glottis Limited | 290.62% | 98.01% | 77.82% |
| | Tiger Logistics India Limited | 55.59% | 17.66% | 24.82% |
| | Allcargo Terminals Limited | 39.03% | 23.70% | 19.48% |
| | Transport Corporation of India Limited | 21.96% | 17.39% | 19.46% |
| | Allcargo Logistics | 39.31% | 5.99% | 5.40% |
| | | | | |
| Net Debt/ Equity | Glottis Limited | 2.66 | 0.19 | 0.22 |
| | Tiger Logistics India Limited | 0.00 | 0.10 | 0.25 |
| | Allcargo Terminals Limited | 0.15 | 0.15 | 0.41 |
| | Transport Corporation of India Limited | 0.04 | 0.08 | 0.07 |
| | Allcargo Logistics | 0.25 | 0.37 | 0.44 |

Note(s):

*The ratios are not comparable as the company has been formed from conversion of Partnership Firm

EBITDA = Profit Before Tax + Finance Cost + Depreciation and Amortization – Other Income

EBITDA Margin = EBITDA / Revenue from operations

PAT Margin = PAT / Revenue from operations

ROE = PAT / Shareholder's Equity

ROCE = EBIT / Capital Employed; EBIT = EBITDA – Depreciation and Amortization + Other Income; Capital Employed = Shareholder's Equity + Long Term Debt

Net Debt/ Equity = Total borrowings/ Shareholder's Equity

5.3 Key challenges and threats faced by freight industry:

Glottis operates in a dynamic and evolving industry landscape, facing multiple threats and challenges

- **Supply chain disruption:** Global supply chain disruptions like natural disasters, geopolitical events, pandemics, or manufacturing shutdowns, led to delays and cancellations in shipments, as well as driving up freight rates. In recent years, the blockage of the Panama Canal, Black Sea and Red Sea, impacted merchandise trade routes, owing to climate change-induced drought in the canal led to contraction of in global merchandise trade. Apart from this, the ongoing war between Russia and Ukraine and the Israel-Hamas War, have also caused the contraction. China-Taiwan and US-China tensions could also possibly disrupt the supply chain
- **Port congestion:** Congestion at major ports across the world has become a critical issue, as ships arriving are unable to load or unload due to ports operating at full capacity. This forces vessels into long queues, resulting in significant delays and financial losses. In recent times, ships in Shanghai have had to wait as long as five days to berth, marking the highest logjams since the Covid-19 pandemic
- **Import and export fluctuations:** India's merchandise imports fluctuated between FY19-FY25, falling from US\$ 514B in FY19 to US\$ 394B in FY21, rebounding to US\$ 613B in FY22 and peaking at US\$ 716B in FY23, before easing to US\$ 678B in FY24 and recovering to US\$ 720B in FY25. However, a recovery is evident with imports reaching 8.3M TEUs in FY24. With significant co-relation of freight forwarding with import and exports, such fluctuations have a direct impact on the shipping volumes, pricings, containers utilization thus directly impacting operational efficiencies. In addition, recent shifts in global tariff policies, particularly by the U.S., have further added uncertainty to trade flows, impacting export volumes and contributing to freight rate volatility. Tariff influences demand on key trade routes but also create indirect cost pressures for both importers and exporters, making freight planning and pricing increasingly challenging.
- **Freight Costs:** These are highly volatile depending on demand fluctuations, geopolitical issues, and fuel prices. The rate can surge during any global disruptions or geopolitical situations. Aggregate ocean freight rate jumped to ~US\$ 1,418 per TEU in FY22 and slightly declined to ~US\$ 1,020 per TEU in FY23, which stood at ~US\$ 788 in FY21. This sudden increase in the aggregate ocean freight rates is due to the disruption caused by COVID-19 pandemic and the geopolitical situations caused due to prolonged Russia Ukraine war.
- **Environmental, Social, and Governance (ESG) Concerns:** Increasing pressure to meet ESG standards can lead to higher operational costs and reputational risks if the company fails to comply with these expectations
- **Technology Risks:** Rapid technological change requires costly upgrades, while reliance on digital systems increases vulnerability to cyber threats

The team at 1Lattice
appreciates your time and support



Enabling better decisions.

Agile

Accurate

Comprehensive

#LetsTalkSolutions