

The Lattice logo, featuring a stylized 'L' icon followed by the word 'Lattice' in a white sans-serif font, is positioned in the top-left corner of the cover. The background of the cover is a collage of four images: a warehouse interior with workers and pallets, an airplane in flight, a semi-truck with a container, and a large cargo ship at a port. A diagonal purple and blue graphic element separates the top-left from the rest of the collage.

**Lattice**

# Freight forwarding Industry report

21<sup>st</sup> September 2024



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# 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

<b>Year (FY)</b>	<b>Rs. Equivalent of one US\$</b>	<b>Euro equivalent of one US\$</b>	<b>Year (CY)</b>	<b>Rs. Equivalent of one US\$</b>	<b>Euro equivalent of one US\$</b>
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	82.59	0.93	2024 (YTD)	83.35	0.90

Source: X-rate Monthly average

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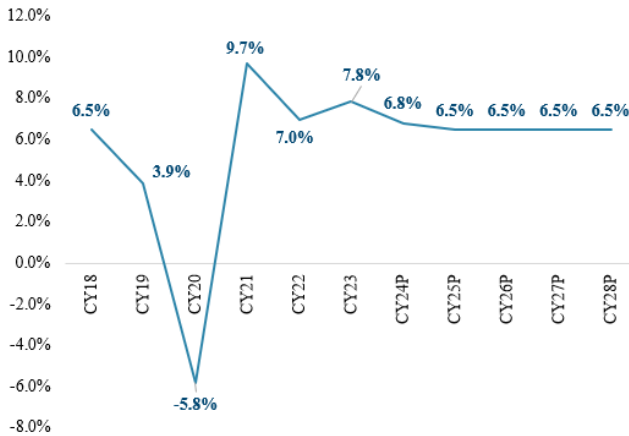
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**Macroeconomic Outlook**

## 1.1 India's GDP is estimated to reach US\$ 5.8T in CY28, growing at a CAGR of 10% from CY23 to CY28

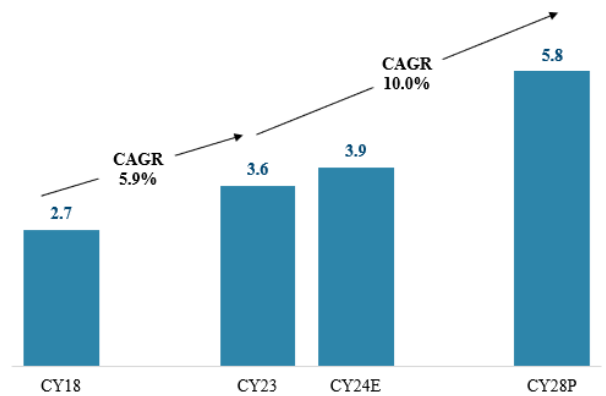
India is the fifth largest economy in the world and is expected to be the third largest by CY28, India is expected to reach US\$ 7T by CY30 as per government targets. Over the next 10-15 years, India is expected to be among the top economies on the back of rising demand, robust growth in various sectors, and increased private consumption.

**Real GDP growth – India**  
(Y-o-Y growth %, CY18-28P)



Source(s): International Monetary Fund, ILattice analysis

**India's Nominal GDP (at current prices)**  
(US\$ B, CY18-28P)



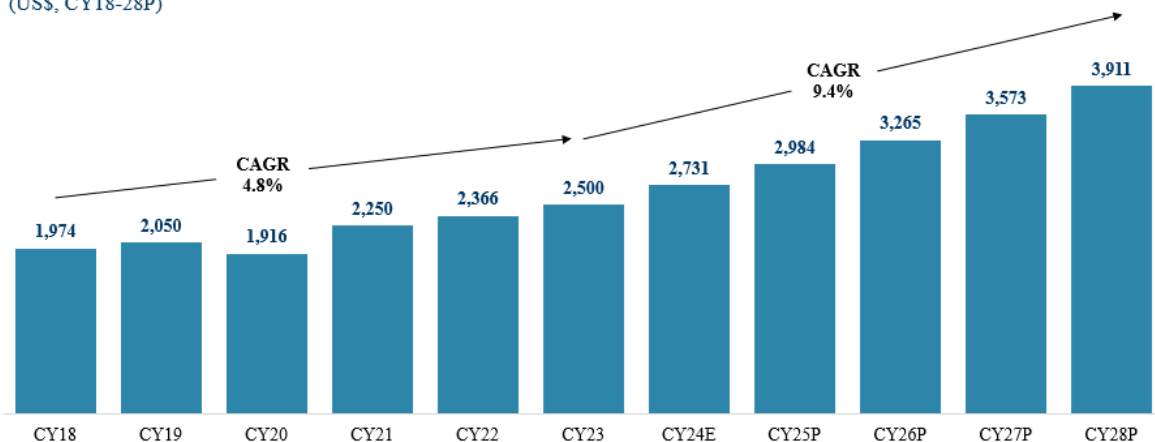
India's GDP (at current prices) grew from US\$ 2.7T to US\$ 3.6T between CY18 and CY23 on the back of robust reforms like GST, corporate tax revision, and revised FDI limits. As per IMF projections, India's GDP (at current prices) is expected to grow at a rate of 10% from CY23 to CY28, making it one of the fastest-growing large economies globally.

## 1.2 India's economic growth drivers

### 1.2.1 India's per capita income ~US\$ 2.5K in CY23 is expected to reach ~US\$ 4.0K by CY28.

India's per capita income is expected to rise from US\$ 2.5K to ~US \$4.0K by CY28 growing at a CAGR of 9.4%. With increased demand, substantial per capita income growth, and a demographic advantage, India is positioned as a market with vast growth opportunities. Over CY23-28, 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 (6.0%), the UK (5.2%), the USA (3.6%), and Germany (3.3%).

**India's GDP per capita**  
(US\$, CY18-28P)

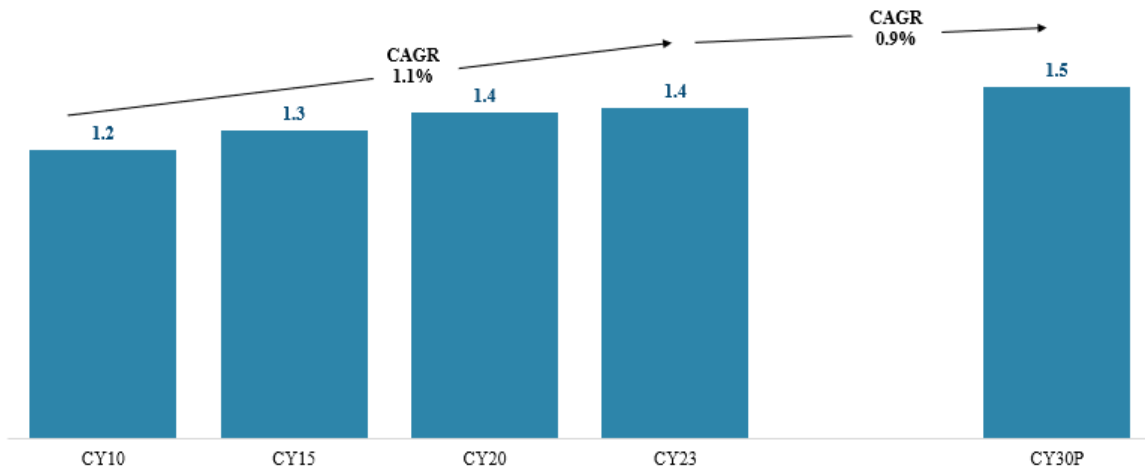


Source(s): International Monetary Fund, ILattice analysis

### 1.2.2 India's population is projected to reach 1.5B by CY30, ~18% of the world's population.

India's population from 1.2B people in CY10, grew at a CAGR of 1.1% till CY22 to reach 1.4B people; the Indian population is expected to grow at 0.9% CAGR from CY22 to 1.5B in 2030. India has surpassed China to become the most populous country in the world in CY23.

**India's population growth**  
(B, CY10-30P)

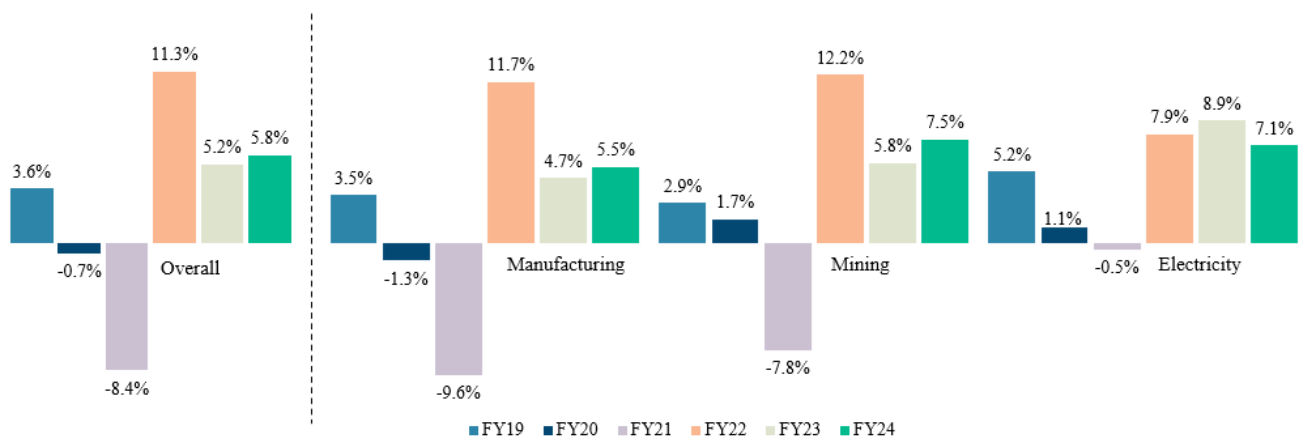


Source(s): United Nations, World Population Prospects 2022, IILattice analysis

### 1.2.3 India's Index of Industrial Production (IIP) grew by 5.8% in FY24, up from 5.2% in FY23, showcasing a 0.6% growth

According to the Ministry of Statistics and Programme Implementation, India's Industrial Production (IIP) growth rate had a strong recovery in FY22 (11.3%), observed a 5.2% IIP growth in FY23 and a slight increase to 5.8% in FY24. Overall, the growth has increased from FY19 at 3.6% to 5.8% in FY24, 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 FY24, mining grew by 7.5%, manufacturing by 5.5%, and electricity by 7.1%, showcasing sector-specific advancements.

**India's IIP growth – Sector-wise**  
(Y-o-Y growth %, FY19-24)



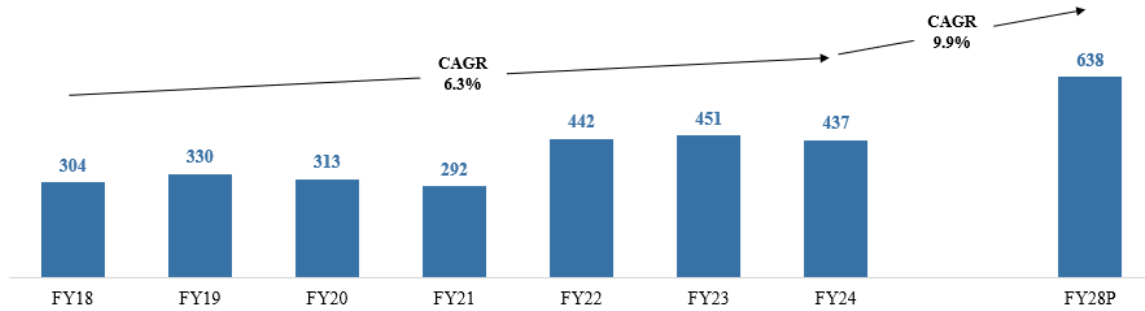
Source(s): Ministry of Statistics and Programme Implementation (MoSPI), IILattice analysis



### 1.3 Merchandise exports from India are anticipated to grow at a CAGR of 9.9% and imports at a CAGR of 10.8% in the coming years

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.

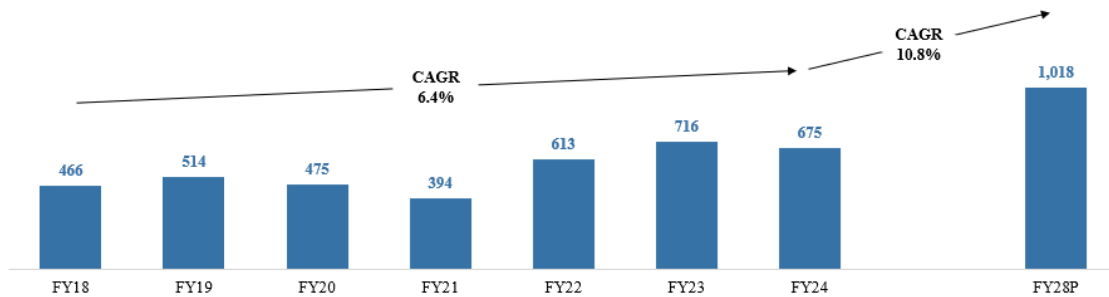
**Value of Merchandise Exports**  
(US\$ B, FY18-28P)



Source(s): RBI, ILattice analysis

Merchandise exports of the country are expected to grow at a CAGR of 9.9%, whereas merchandise imports are anticipated to rise at a CAGR of 10.8% in the upcoming years, translating to exports reaching US\$ 683B and imports reaching US\$ 1,018B in FY28. The total export and import trade movement contributed 45.9% (Exports: 21.9% and imports: 24.0%) of the GDP in CY23. 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, FY18-28P)



Source(s): RBI, ILattice analysis

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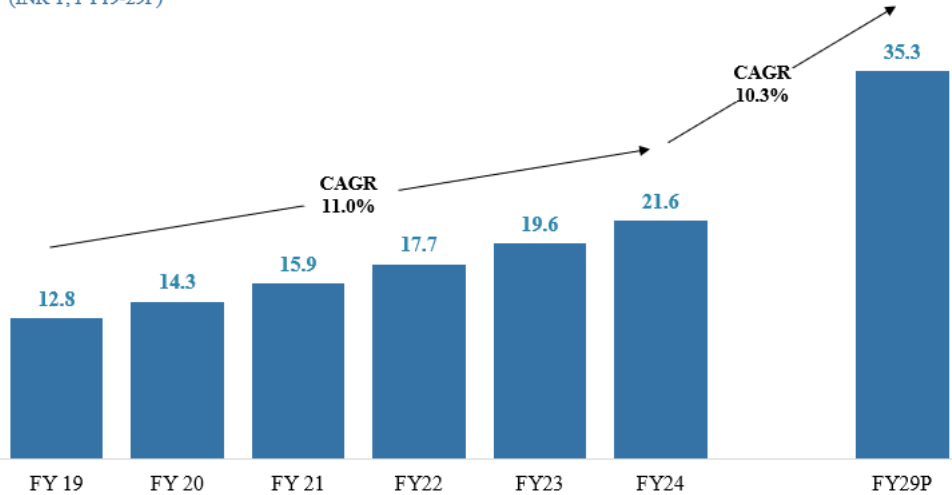
02

# Overview of Indian Logistics market

## 2.1 The Indian logistics industry is expected to grow steadily at a CAGR of ~10.3%, reaching INR ~35T by FY29

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 11% CAGR to INR 21.6T (US\$ 262.3 B) over FY19-24. According to industry reports and market estimates, the logistics industry is forecasted to reach ~INR 35.3 T (US\$ 424.1 B) by FY29, growing at a CAGR of 10.3%.

**Indian Logistics Market Size**  
(INR T, FY19-29P)



Source(s): Economic survey, I Lattice 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 35T by FY29, supported by several key enablers:

- Strong economic growth coupled with robust FDI inflows
- Increased public 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.
- In FY24, India's merchandise exports reached INR 30.5T (US\$ 437B), reflecting a 40% increase from US\$ 320B in FY20. This surge, along with the country's goal to capture a 5% share of global merchandise exports, is boosting the Indian 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 (52.4% in CY23) 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.

- **Rise in MSMEs demand:** MSMEs contribute ~31% to GDP, ~46% to exports and provide employment to ~155M people. Government initiatives such as 'Aatmanirbhar Bharat' and 'Make in India' are expected to boost MSME output and drive demand for logistics.
- **Surging domestic manufacturing and consumption:** FDI inflows in India has increased by ~57% from US\$ 45.14B in FY15 to US\$ 70.95B in FY24. 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 increase by 76%. To further boost manufacturing and employment opportunities, the Union Budget 2024-25 announced a hike of ~34% in incentive allocation from INR 4,645Cr in FY24 to INR 6,200Cr in FY25 for the PLI schemes in 14 key sectors

- **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 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:** India had the world's second-largest internet population at over 850 million users with the highest data consumption rate of 24.1GB per user per month. Higher internet adoption has also fueled the rate of smartphone penetration with the Tier-2 /3 cities and rural market propelling the growth of Ecommerce market in upcoming years. 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. 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**

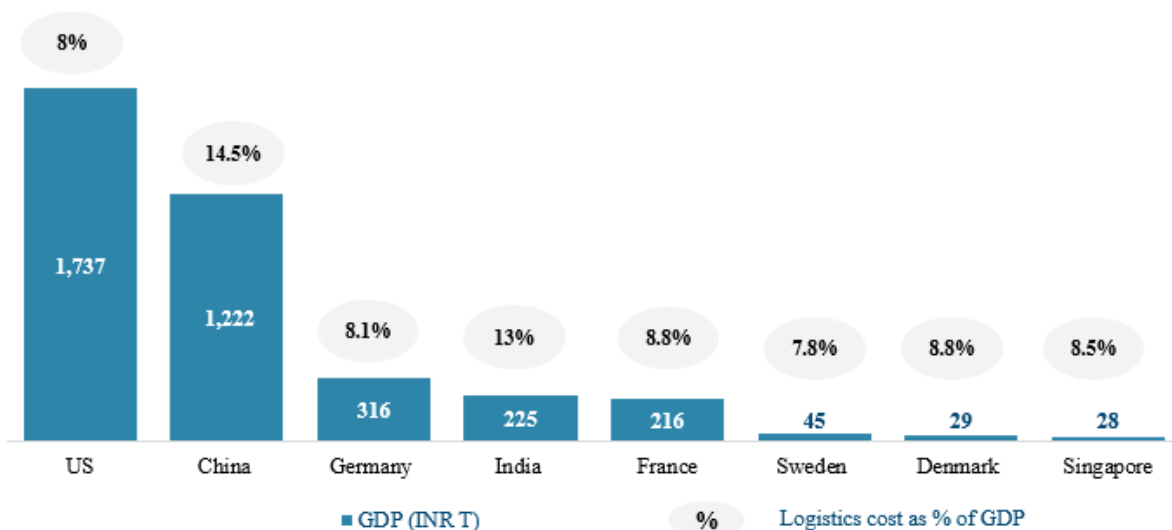
- **Make in India initiative:** The Make in India initiative, launched in 2014, aims to establish India as a global manufacturing hub by encouraging both domestic and foreign companies to set up production within the country. This has led to increased investment in infrastructure, technology, and skill 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. It also includes provisions for leasing railway land to foster infrastructure development and operational efficiency.
- **Sagarmala Project:** The Sagarmala Project, launched in 2015, seeks to modernize India's port infrastructure, improve port connectivity, and drive port-led development. By lowering logistics costs and enhancing the efficiency of coastal transportation, the initiative has strengthened the maritime supply chain, promoting smoother trade flows and reducing reliance on road and rail transport.

- **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 aims to create a unified logistics ecosystem by reducing costs, improving efficiency, and promoting the seamless movement of goods across the country. It focuses on standardizing logistics processes, leveraging technology, and fostering greater coordination among various stakeholders in the supply chain.
- **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.
- **Bharatmala Pariyojana:** Launched in 2017, this extensive road development initiative focuses on enhancing the efficiency of road transportation nationwide. By building new highways, upgrading existing roads, and improving connectivity to remote regions, Bharatmala Pariyojana is significantly cutting travel times and logistics costs, thereby enhancing overall supply chain performance.
- **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 will help in rise of organized players and evolution of player to offer multiple services enabling them to offer value added services and rise of 3PL / 4PL service providers

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, ILLattice analysis

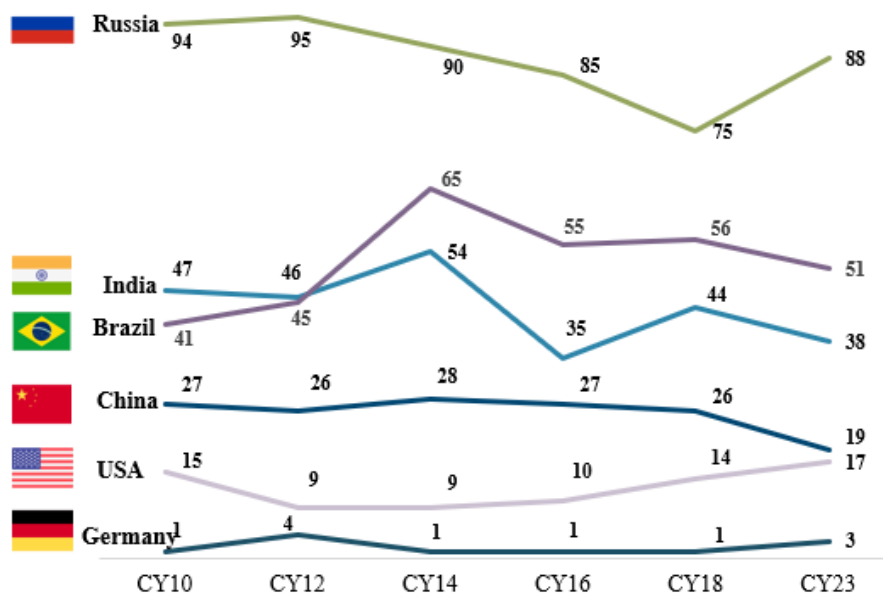


The Indian logistics sector has a significant potential to reduce inefficiencies, which could result in savings of up to INR 10 trillion. Transportation inefficiencies account for ~2% of the total logistics expenditure in India, that can be reduced by an improved modal share, trucking efficiency, and 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 38<sup>th</sup> position in Logistics Performance Index in CY23, jumping 9 places since CY18

Placed at 38<sup>th</sup> 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**

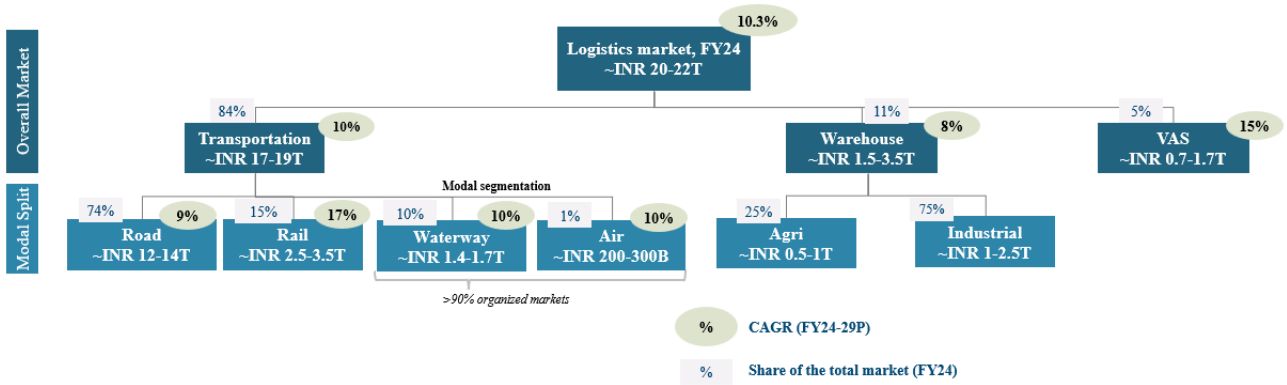


Source(s): World Bank, 1Lattice analysis

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\$ 20-22T

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 cities<sup>3</sup> is likely to grow by 14% over the next three years from 51.3 million sq ft in FY23 to 76.2 million sq ft by FY26, with e-commerce and the 3PL sector being the most prominent drivers.



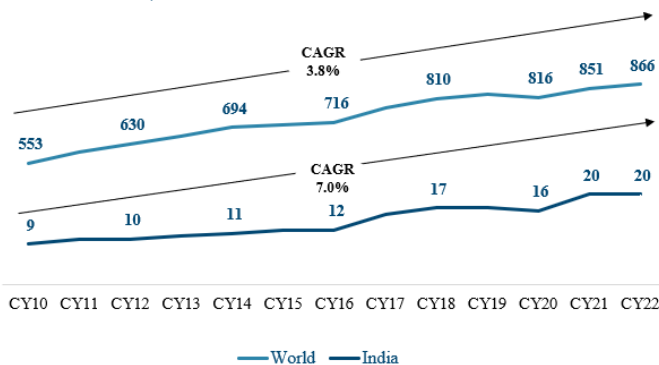
Note(s): Does not factor EXIM cargo movement, VAS – Value added services  
Source(s): I.Lattice analysis

The Indian supply chain services market (VAS) comprising 3PL and 4PL segments is estimated to be at INR 0.7-1.7 T in FY24 and is expected to grow at a faster CAGR of 15% between FY24-29 to reach INR 1.3-3.6T when compared to the overall logistics market CAGR of 10.3% between FY24-29. 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

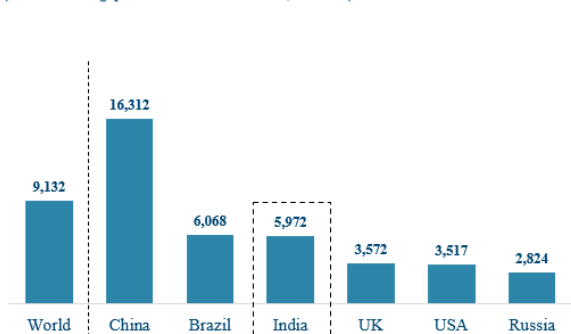
In CY22, 866 million TEUs of containers were handled in ports worldwide. World container port throughput grew at 3.8% CAGR from CY10-22. India outpaced the world growth in container throughput growing at 7% CAGR in CY10-22.

**Container throughput**  
(Million TEU, CY10-22)



Source(s): UNCTAD, Secondary research, I.Lattice analysis

**Average container intensity in major economies**  
(Container throughput in TEU / US\$ 1B of GDP, CY16-22)



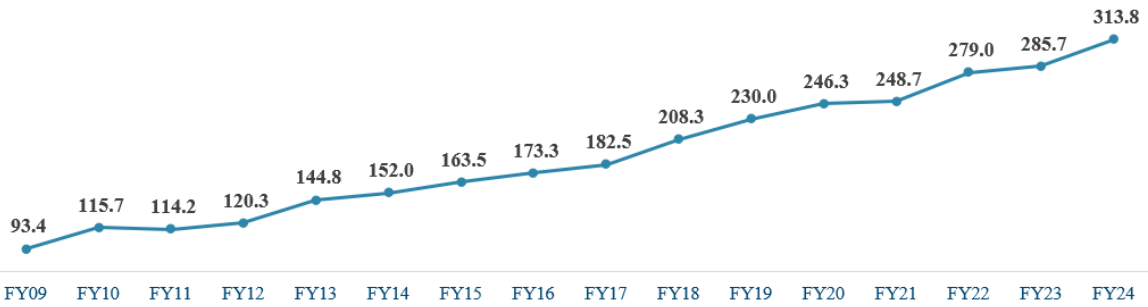
Source(s): UNCTAD, World Bank, Secondary research, I.Lattice analysis

When compared to the average global container throughput per US\$ 1B of GDP, India lags at ~5,972 TEU/US\$ 1B GDP while the world throughput stood at ~9,132 TEU / US\$ 1B GDP. India is still ahead of countries like USA, UK and Russia.

## 2.8 Container traffic growth was led by non-major ports which increased at 13% CAGR over FY16-24

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.

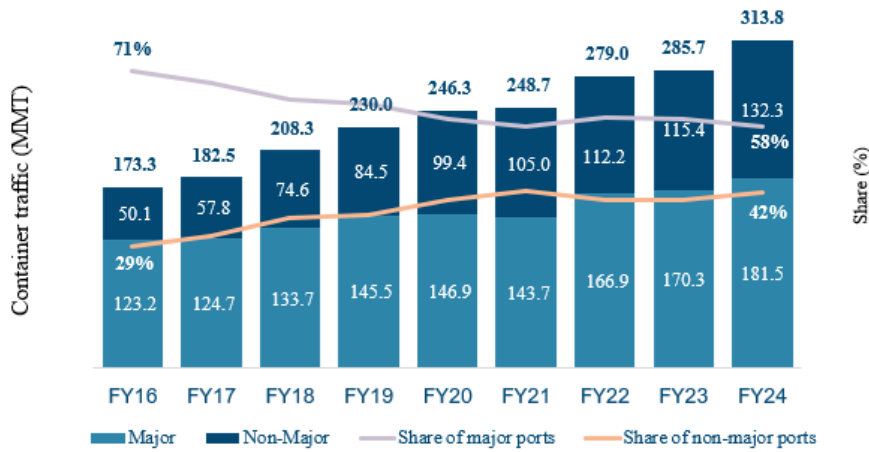
**Container traffic volume trend**  
(Million Metric Tonnes, FY09-24)



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

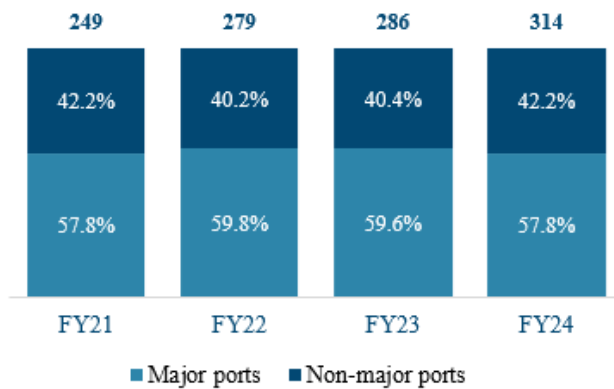
Container traffic increased at a CAGR of 8.1% from FY17-24 led by non-major ports, growing to 313.8 MMT in FY24. It grew at a YOY rate of 1% to 279 MMT in FY22 owing to the slowdown in trade caused by COVID-19.

**Share of Major and Non-Major ports in container traffic**  
(M Metric Tonnes, %, FY16-24)



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

**Share of container traffic**  
(M Metric Tonnes, FY19-24)



Source(s): BPS 2021, Ministry of Ports, Shipping & Waterways, ILattice 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 57.8% in FY24. 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 42.20% in FY24 from 28.92% in FY16.



03

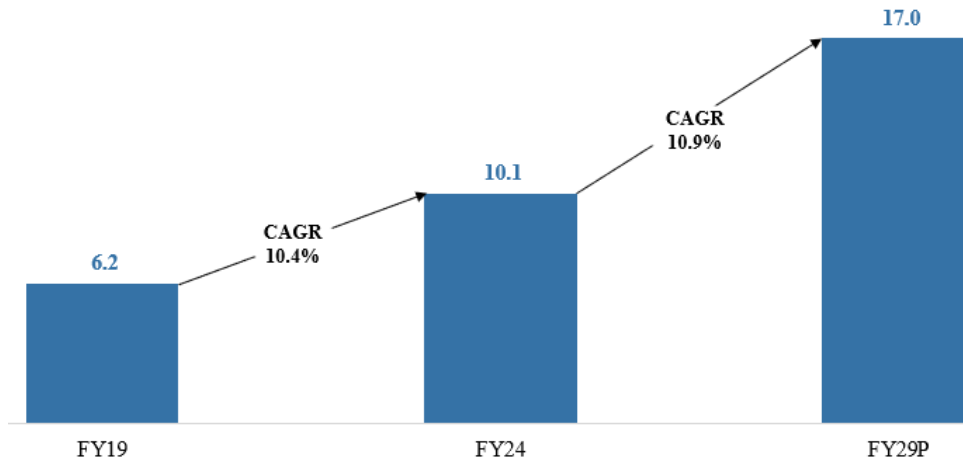
**Indian Freight forwarding  
sector overview**



**3.1 Indian freight forwarding market was 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.

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



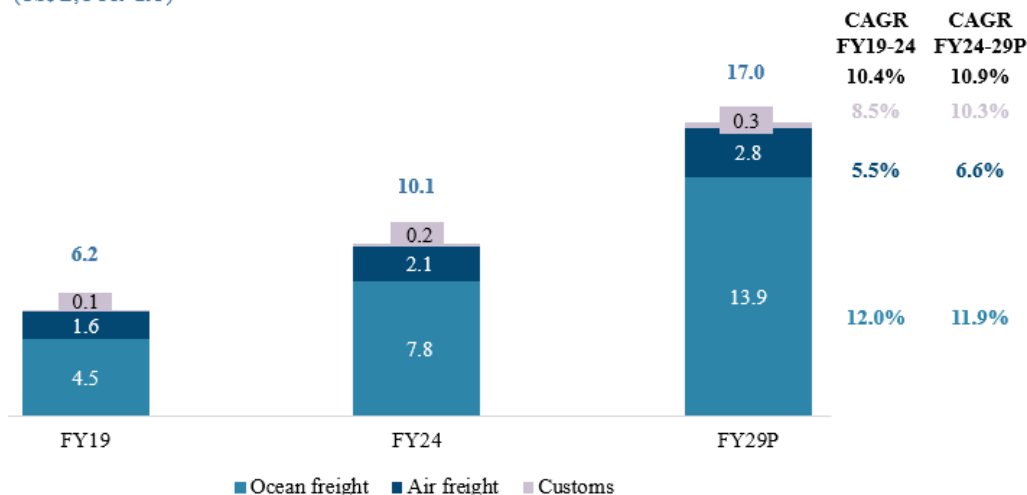
Source(s): Ministry of ports, shipping and waterways, ILLattice analysis

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. As India's economy continues to grow and diversify, the demand for efficient and reliable freight forwarding services has intensified, fueled by the expansion of trade, the rise of e-commerce, the expanding manufacturing sector, infrastructural development, technological advancements, and government initiatives and policies.

**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.

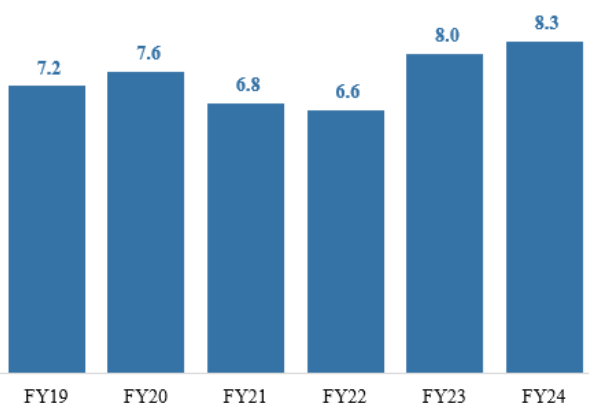
**India freight forwarding industry - By Ocean, Air and Customs**  
(US\$ B, FY19-29P)



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

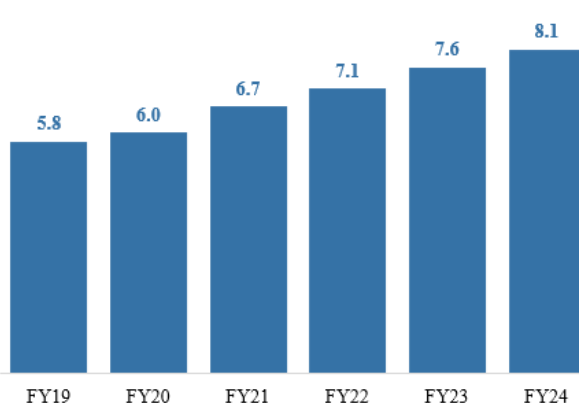
Indian ocean freight market has expanded from US\$ 4.5B in FY19 to US\$ 7.8B in FY24 and is projected to reach US\$ 13.9B by FY29, with a robust CAGR of 11.9% over FY24-29. Similarly, the Indian air freight market has grown from US\$ 1.6B in FY19 to US\$ 2.1B in FY24 and is expected to reach US\$ 2.8B 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 ocean import**  
(TEUs in millions, FY19-24)



Source(s): Ministry of ports, shipping and waterways, 1Lattice analysis

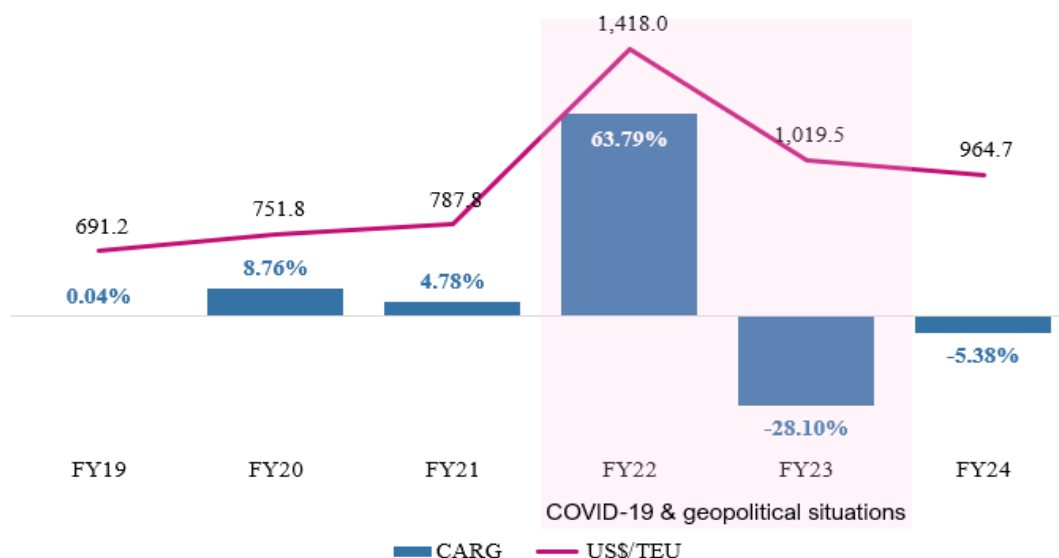
**India's ocean export**  
(TEUs in millions, FY19-24)



Source(s): Ministry of ports, shipping and waterways, 1Lattice 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.

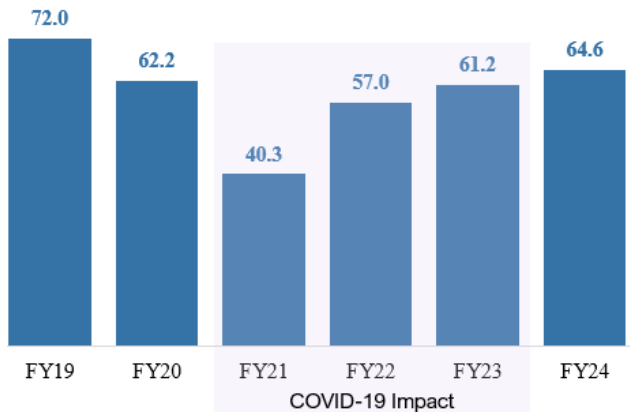
**Aggregate ocean freight rates**  
(FY19-24)



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

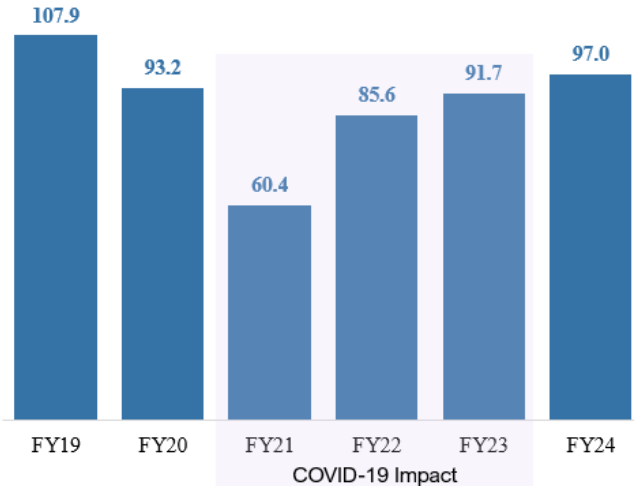
Aggregate ocean freight rate jumped in FY22 from FY21, to ~US\$ 1,418 per TEU and slightly declined to ~US\$ 1,020 per TEU in FY23. This sudden increase in the aggregate ocean freight rates is due to the disruption caused by COVID-19 pandemic and the geopolitical situations caused due to prolonged Russia Ukraine war.

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



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

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

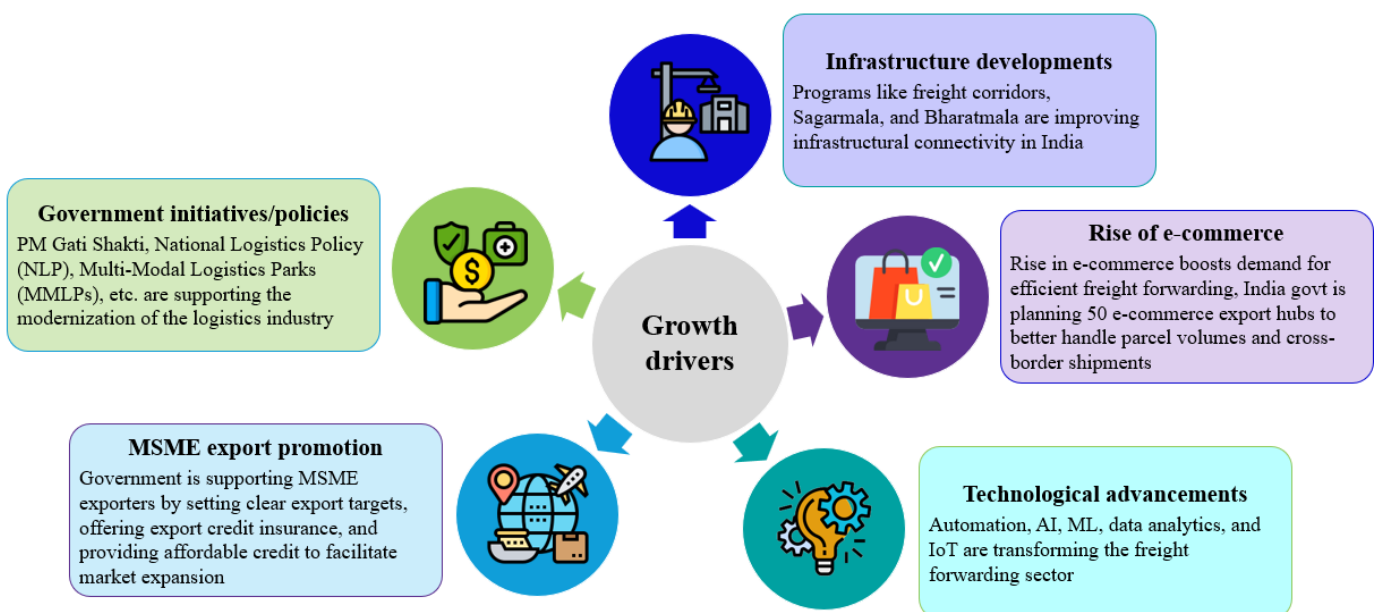


Source(s): Directorate general of civil aviation, I Lattice analysis

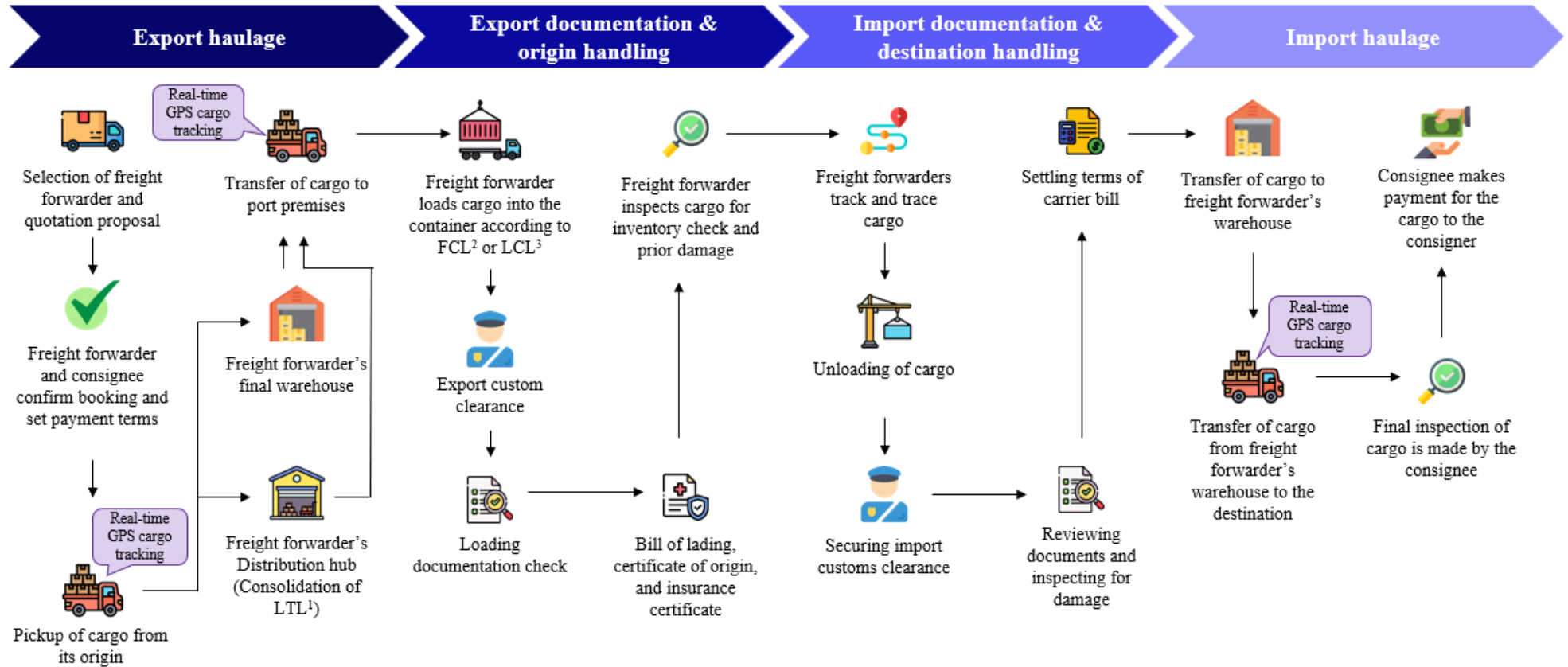
Indian air imports show a decreasing and then an increasing trend. It fell to 40.3 thousand tonnes in FY21 largely due to the impact of the COVID-19 pandemic. However, since FY22, air imports have shown steady recovery, reaching 57.0 thousand tonnes in FY23 and further increasing to 64.6 thousand tonnes 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.

### 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 Sagarmala and Bharatmala, 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).



### 3.4 Freight forwarding value chain







Note(s): <sup>1</sup>Less than truckload, <sup>2</sup>Full container load, <sup>3</sup>Less than container load  
 Source(s): Sennder, 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

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



 Lattice

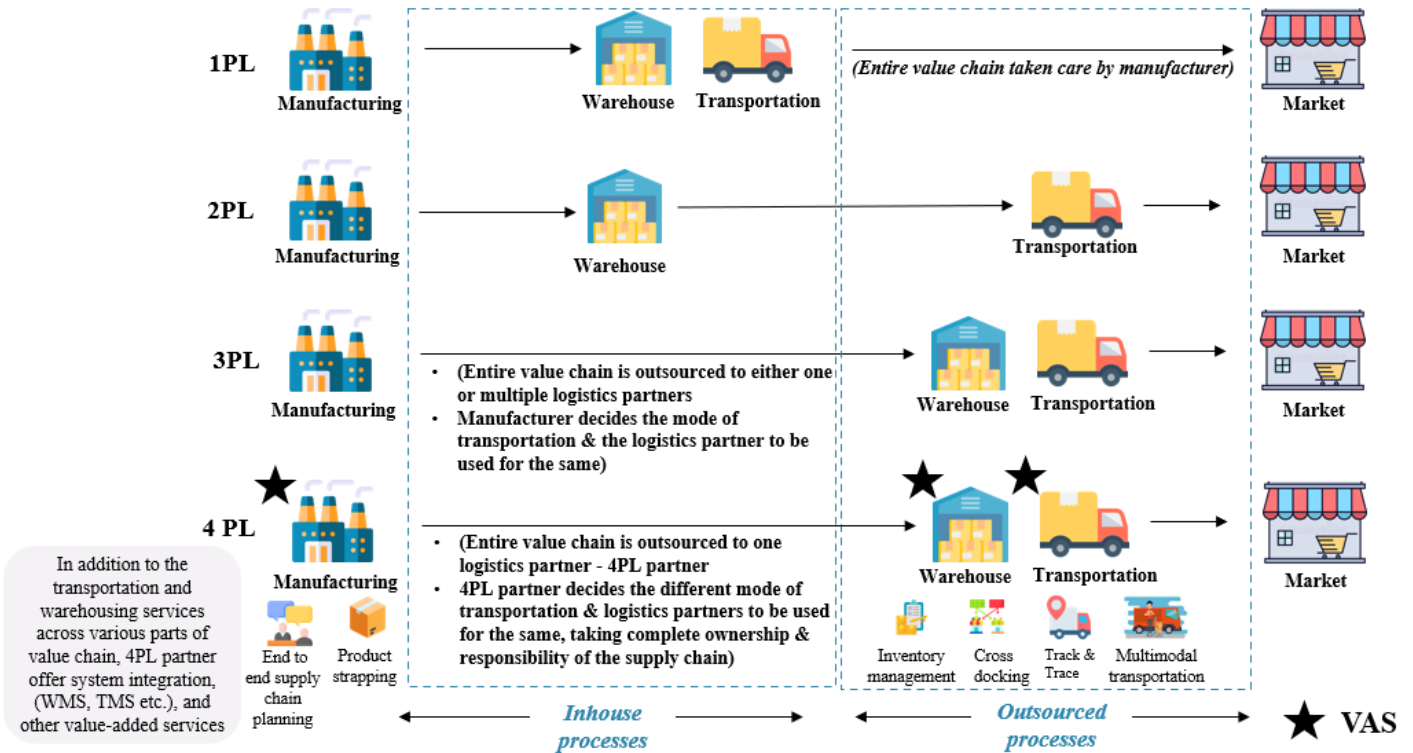


04

 **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.

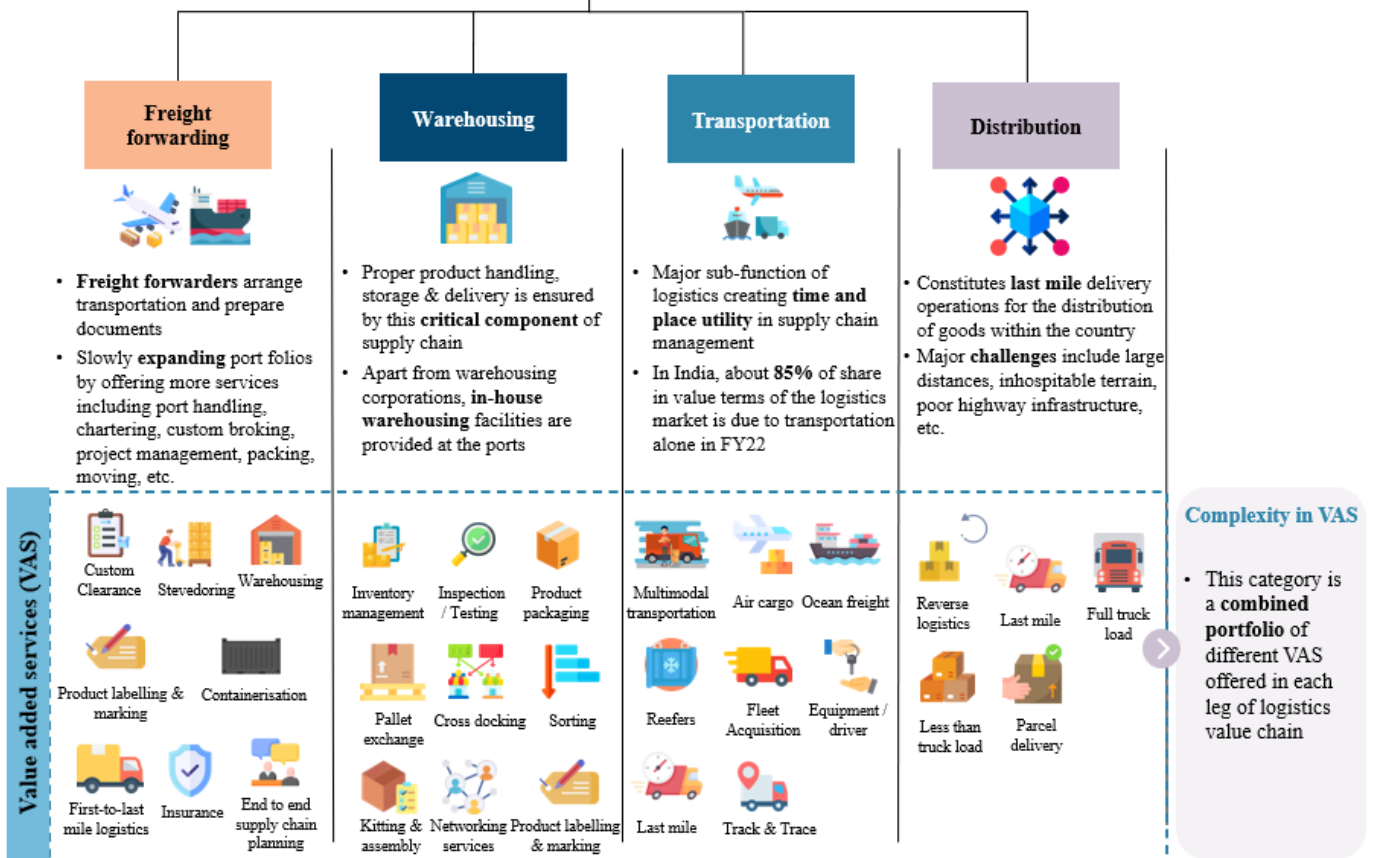


Source(s): iLattice analysis

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 include 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.

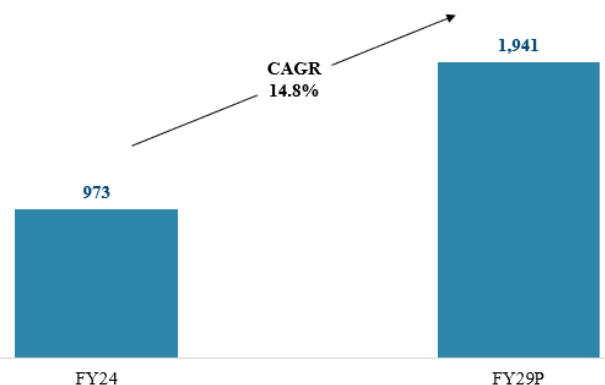
## Logistics services categories



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 973B in FY24 and is expected to grow to INR 1,941B by FY29P at a CAGR of 14.8%.

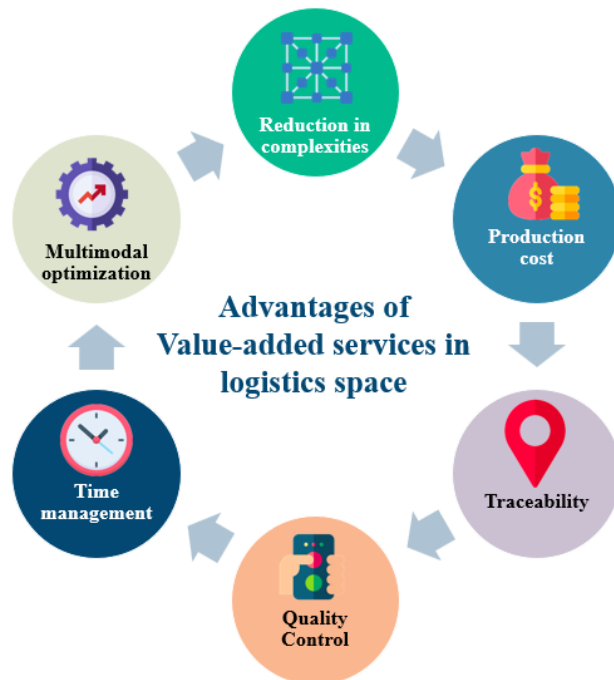
**Value added service market in logistics space**  
(INR B, FY24-29P)



## 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.



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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' service portfolio 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 95K+ ocean freight TEUs per year. At present, it operates in over 110 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 Logistics' 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 3<sup>rd</sup> top supporter of MAERSK for 2 consecutive years (FY15 & FY16).

Glottis Logistics is a member of freight forwarding networks such as, WCA Inter Global, FIATA International Federation of Freight Forwarders Association, the International Air Transport Association and Federation of Freight Forwarders' Associations in India. 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 Logistics competes with a variety of local, regional and global logistics service providers of varying sizes, operations and financial resources.



## **Key industry good which Glottis operate 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 22.8% from FY24-29. The solar capacity addition contributed to about 66% 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 has a solar potential of 749 GW, assuming that solar PV modules cover 3% of the waste land area. Comparatively, India had an installed cumulative capacity of 82 GW of as on March 2024. Glottis has been instrumental in ocean haulage / freight movement of 13.8GW (cumulative) as on March 2024, indicating 16.83% of the total installed solar capacity. Glottis has supported in shipment of ~6GW solar panels in FY24 which attributes to ~40% of the installed solar capacity in FY24 (15GW solar capacity installed in FY24). India aims to create Solar power capacity of 280 GW by 2030.

**Timber:** The sector is projected to grow at 8.0% CAGR over FY24-29. 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 5.7% over FY19-24. 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 4.9% over FY19-24. The sector is projected to grow at 4.1% CAGR over FY24-29. 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.

					
<b>Operational metrics</b>	 # countries served	110+	40+	180	7+
	 Ocean TEUs handled	95K+/year	54K+/year	NA	90K+/year
	 Air volume handled	450+ tons/year	340+ tons/year	NA	NA
	 Warehouse size	1.5L sq ft	NA	NA	140L sq ft
<b>Services</b>	 Ocean freight	✓	✓	✓	✓
	 Air freight	✓	✓	✗	✗
	 Custom clearance	✓	✓	✗	✓
<b>Verticals handled</b>	 Renewable energy	✓	✗	NA	✓
	 Engineering goods	✓	✓	NA	✓
	 Minerals	✓	✗	NA	✗
	 General cargo	✓	✓	NA	✓
	 Agro	✓	✓	NA	✓

No or limited presence ✗ Presence ✓

## 5.2 Financial benchmarking:

Parameters	Company	FY22	FY23	FY24
<b>Revenue from operations (INR M)</b>	Glottis Logistics	8,758.28	4,785.69	4,974.09
	Tiger Logistics India	6,151.07	4,333.48	2,402.59
	Allcargo Terminals	1,282.15	7,057.09	7,329.81
	Transport Corporation of India	32,588.05	37,825.73	40,242.64
<b>EBITDA (INR M)</b>	Glottis Logistics	506.40	339.89	408.55
	Tiger Logistics India	371.57	259.23	150.23
	Allcargo Terminals	129.67	1,434.35	1,173.36
	Transport Corporation of India	4,385.30	4,683.70	4,264.10
<b>PAT (INR M)</b>	Glottis Logistics	323.87	225.71	315.27
	Tiger Logistics India	336.33	232.12	129.64
	Allcargo Terminals	38.58	587.94	446.98
	Transport Corporation of India	2,928.23	3,205.89	3,544.60
<b>EBITDA (%)</b>	Glottis Logistics	5.78%	7.10%	8.21%
	Tiger Logistics India	6.04%	5.98%	6.25%
	Allcargo Terminals	10.11%	20.32%	16.01%
	Transport Corporation of India	13.46%	12.38%	10.60%
<b>PAT (%)</b>	Glottis Logistics	3.70%	4.72%	6.34%
	Tiger Logistics India	5.47%	5.36%	5.40%
	Allcargo Terminals	3.01%	8.33%	6.10%
	Transport Corporation of India	8.99%	8.48%	8.81%
<b>ROE (%)</b>	Glottis Logistics	368592.96%*	227.95%*	76.41%
	Tiger Logistics India	45.19%	23.78%	11.70%
	Allcargo Terminals	24.97%	26.98%	17.87%

	Transport Corporation of India	20.47%	18.84%	17.69%
<b>ROCE (%)</b>	Glottis Logistics	330.28%*	258.66%*	96.39%
	Tiger Logistics India	84.81%	55.59%	17.66%
	Allcargo Terminals	5.61%	39.03%	23.70%
	Transport Corporation of India	22.96%	21.96%	14.47%
<b>Net Debt/ Equity</b>	Glottis Logistics	4760.64	3.26	0.23
	Tiger Logistics India	0.00	0.00	0.10
	Allcargo Terminals	6.67	0.15	0.15
	Transport Corporation of India	0.04	0.04	0.08

Note(s):

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

$EBITDA = Profit\ Before\ Tax + Finance\ Cost + Depreciation\ and\ Amortization - Other\ Income$

$EBITDA\ Margin = EBITDA / Revenue\ from\ operations$

$PAT\ Margin = PAT / Revenue\ from\ operations$

$ROE = PAT / Shareholder's\ Equity$

$ROCE = EBIT / Capital\ Employed; EBIT = EBITDA - Depreciation\ and\ Amortization; Capital\ Employed = Shareholder's\ Equity + Total\ Debt - Cash\ and\ Cash\ Equivalent$

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

### 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:** Indian merchandise import have been US\$ 442B and US\$ 451B in FY22 and FY23, whereas in FY24 it is US\$ 437B similarly, merchandise export have been US\$ 613B and US\$ 716B in FY22 and FY23, whereas in FY24 it is US\$ 675B. 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.
- **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



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Agile

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