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GLOSSARY OF ABBREVIATIONS USED

Sl. No.	Abbreviations used	Full form
1	4PL	Single point of contact for supply chain management, managing resources, Technology and Infrastructure and providing strategic insights and management.
2	APSEZ	Adani Ports and Special Economic Zone Limited
3	B	Billion
4	BMT	Billion metric tonnes
5	CAGR	Compound Annual Growth Rate
6	CAPEX	Capital Expenditures
7	CBIC/CBEC	Central Board of Indirect Taxes & Customs
8	CEGR	Centre for Education Growth and Research
9	CEZ	Coastal Economic Zone
10	CFS	Container Freight Station
11	CHA	Customs House Agent
12	CONCOR	Container Corporation of India
13	CR	Cold Rolled
14	CTO	Container Train Operator
15	CWC	Central Warehousing Corporation
16	CY	Calendar Year
17	DoC	Department of Commerce
18	DFBOT	Design, Finance, Build, Operate & maintain and Transfer
19	DFC	Dedicated Freight Corridor
20	DFCC	Dedicated Freight Corridor Corporation
21	DFCCIL	Dedicated Freight Corridor Corporation of India Limited
22	DPD	Direct Port Delivery
23	DRI	Direct Reduced Iron
24	E	Estimated
25	EDFC	Eastern Dedicated Freight Corridor
26	EXIM	Export Import
27	FDI	Foreign Direct Investment
28	FG	Finished Goods
29	FMCG	Fast-Moving Consumer Goods
30	FTWZ	Free Trade & Warehousing Zones
31	FTZ	Free trade Zone
32	FY	Financial Year
33	GCT	Gati Shakti Multimodal Cargo Terminal
34	GDL	Gateway Distriparks Limited
35	GDP	Gross Domestic Product
36	GOI	Government of India
37	GST	Goods and Services Tax
38	ICD	Inland Container Depots
39	LCV	Light Commercial Vehicle



40	MMLP	Multi Modal Logistics Park
41	MMT	Million Metric Tonnes
42	MSME	Micro, Small & Medium Enterprise
43	MT	Metric Tonne
44	MTO	Multimodal Transportation Act
45	ODC	Over Dimensional Cargo
46	PFT	Private Freight Terminal
47	PM	Packaged Material
48	RFID	Radio Frequency Identification
49	RKM	Route Kilometre
50	RM	Raw Material
51	SEZ	Special Economic Zone
52	UDAN	Ude Desh ka Aam Nagrik scheme
53	UMPP	Ultra Mega Power Project
54	ULIP	Unified Logistics Interface Platform
55	VAS	Value Added Service
56	TEU	Twenty Equipment Unit
57	TMC	Terminal Management Company
58	WEF	World Economic Forum
59	WDFC	Western Dedicated Freight Corridor

EXCHANGE RATE TABLE

Year (FY)	Rs. Equivalent of one US\$	US\$ equivalent of one Euro	Year (CY)	Rs. Equivalent of one US\$	US\$ equivalent of one Euro
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)	82.23	0.92



01

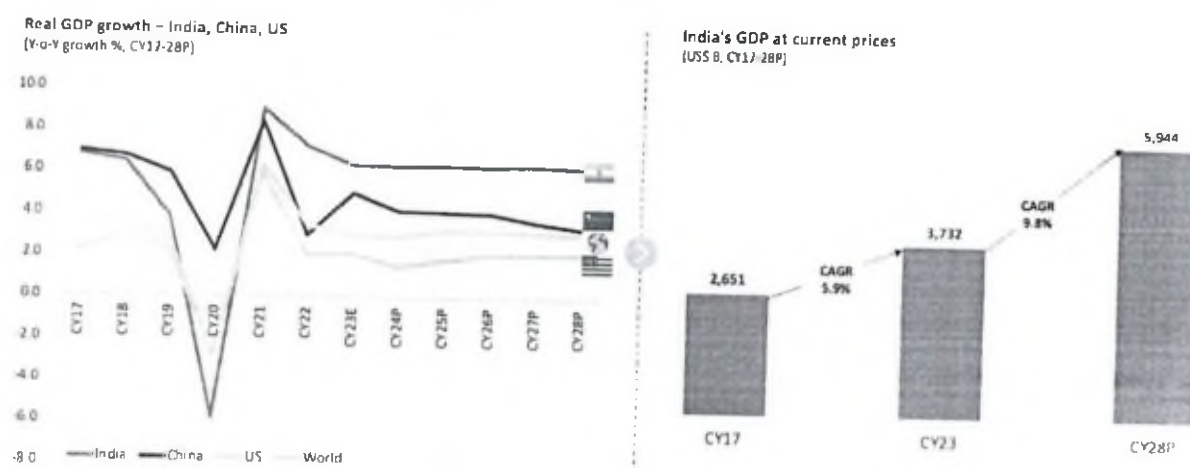
**Macroeconomics trends:
Indian economy is being
driven by high growth in both
internal & external trade**



1.1 India's GDP has witnessed a strong growth trend on the back of robust reforms and improving sector performance

1.1.1 India is expected to be the third largest economy by 2028 with a GDP of US\$ 5,944B

India is the fifth largest economy in CY23 and is expected to be the third largest by CY28. Over the next 10-15 years, India is anticipated to be among the top economies of the world on the back of rising demand, robust growth in various sectors, and increase in private consumption.



Sources: IMF, 11attice analysis

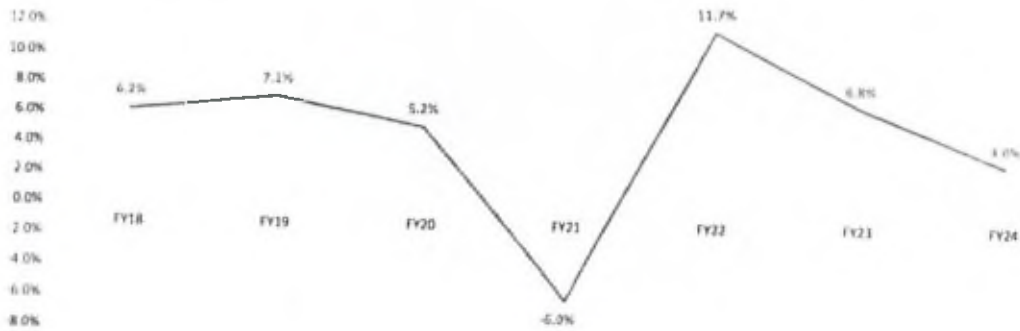
India's GDP (at current prices) grew from US\$ 2,651B to US\$ 3,732B between CY17 and CY23. The increase can be attributed to the robust reforms like GST, corporate tax revision, revised FDI limit, and growth across sectors. Due to the impact of the first wave of COVID-19, the Indian economy witnessed a negative real GDP growth rate of (5.8%) in CY20, however, the Indian economy recovered to deliver a real GDP Y-o-Y of 6.3% in CY23.

As per International Monetary Fund (IMF) projections, India's real GDP is expected to grow at a rate of 6.3% consistently between CY23 and CY28, compared to the global real GDP growth rate 3.0% on a Y-o-Y basis in CY23 and 3.1% in CY28, making it one of the fastest growing large economy globally.

GDP growth in India is expected to be driven by rising private final consumption expenditure in the next five years. Private spending contracted by 6% in FY21, however, it bounced by 11.7% in FY22 and continued the same trend with 6.8% in FY23 but in FY24 due to normalization of pent-up demand, sluggish wage growth and low household savings the private consumption growth as slowed to 3% in FY24. As per CEGR and WEF, Indian private consumption is expected to be driven by increasing proportion of working age population and rise in household income.



Private final consumption expenditure
(Annual growth %; 2018-2024E)



Source(s): RBI, 1Lattice analysis

Some of the major reforms and policies introduced by the Government of India during the past decade:

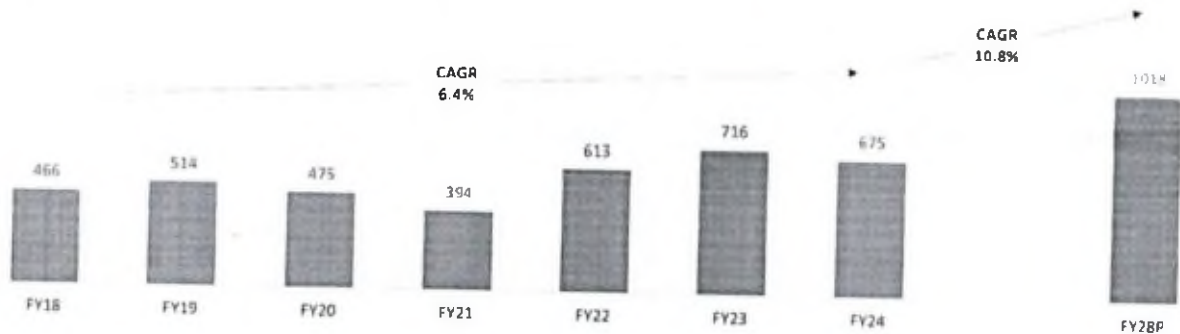
Major reforms and policies

-  **Make in India** campaign was launched in 2014 to showcase India as a global design and manufacturing hub
-  **Goods and Services Tax (GST)** was a major initiative to simplify the indirect tax system in the country by bringing all state and central indirect taxes into a single regime
-  **FDI ceiling was increased** and initiatives like Digital India, Start-up India, e-Governance and Skill India were launched to position India's digital economy for the next phase of growth
-  **Pradhan Mantri Jan Dhan Yojana (PMJDY)** scheme was launched focusing on financial inclusion of economically weaker section (EWS) and Lower Income group (LIG)
-  **National Infrastructure Pipeline (NIP)** scheme, five year long, started in FY20 aiming to provide world class infrastructure across the country that will attract both domestic & foreign direct investments
-  **Production Linked Incentive (PLI)** scheme, launched for 23 sectors, to provide a major boost to manufacturing and enhance exports
-  **National Logistics Plan 2022**, launched to lower logistics cost & improve ranking in Logistics Performance Index



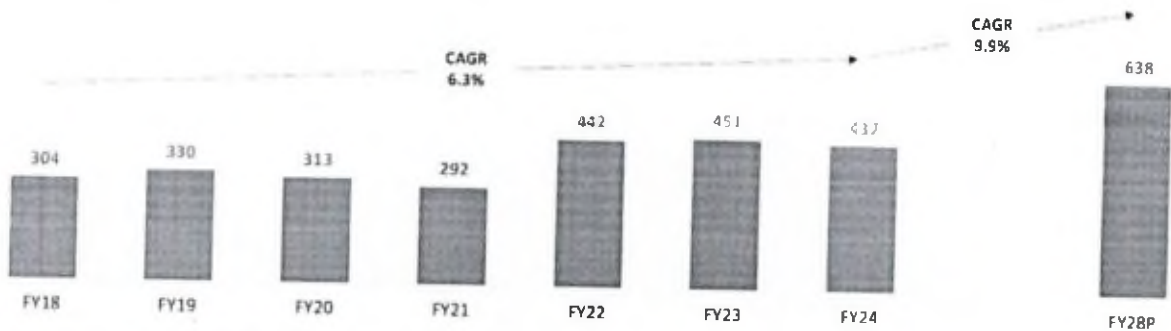
1.1.2 Merchandise Exports from India are anticipated to grow at a CAGR of 9.9% and imports at a CAGR of 10.8% in the coming years

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



Sources: RBI, Ministry of commerce and Industry, 11atllice estimates

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



Sources: RBI, Ministry of commerce and Industry, 11atllice estimates

- 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 the GDP.



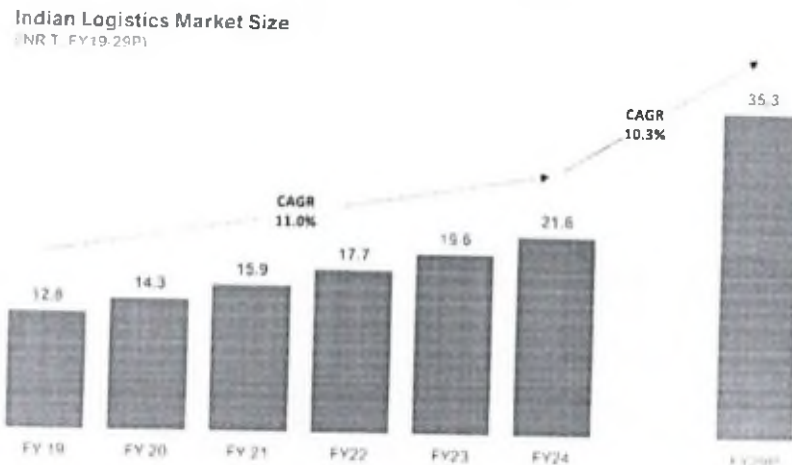
02

**The Indian logistics market is
poised for significant growth
over the next few years**



2.1 The Indian logistics industry is expected to increase 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\$ 5T¹ economy by 2025. As per the Economic Survey FY18, the logistics industry in India was pegged at INR 10.4T in FY17. The industry has grown at 11% CAGR to INR 21.6T (US\$ 262.3 B)² over FY17-24. 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%.



Sources: Economic survey, 11attice estimates, 11attice analysis

Key drivers of growth for the logistics sector:

Logistics industry is witnessing robust expansion led by sustainable supply-side and demand-side growth drivers. This includes growing spends on transportation, warehousing and supply chain management. The following represent some important enablers for the Indian logistics industry to reach ~INR 35T by FY28:

- Healthy economic growth with strong FDI momentum
- Increase in public infrastructure spending related to transportation through government policies (such as National Logistics Plan, DFCs, Gati Shakti, UDAN, Jal Marg Vikas etc.)
- Boost in exports and imports such as India's merchandise exports achieved INR 30..5T (US\$ 437B) in FY24, an increase of 40% over USD\$ 320B in FY20 and aims to gain a 5% share in global merchandise exports
- Boost in domestic manufacturing activity propelled by 'Make in India' initiative which is expected to potentially boost local ecosystem which will propel supporting industries like real estate, logistics etc.
- Favorable regulatory policies such as faster clearances through e-way bills, GST, grant of infrastructure status to reduce inefficiencies in the logistics sector
- Improved focus on logistics skilling and training infrastructure development
- Rapid growth in E-commerce and participation of MSMEs in evolving digital commerce space
- Emergence of demand centres beyond Tier-I/Tier-II cities with rapid rise in internet & smartphone penetration
- AI driven decision making, to improve efficiency and experience

B2B drivers of growth for the logistics sector:

¹ INR 381T @ 1USD = INR 76.1

² 1 US\$ = 82.36 INR



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 ~155 Million 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:** Increasing need for integrated end-to-end solutions by companies is pushing the case for outsourcing of supply chain management. Supply chain efficiencies and inventory management are increasingly considered strategic moats and companies are looking to side with logistics players for comprehensive long-term solutions with robust tech integration for competitive advantage.
- **Technology driven disruption:** Adoption of digitized supply chains become paramount in order to automate workflows, improve operational efficiencies and capacity utilization, increase real-time sharing and visibility, reduce paperwork and build data-driven decision support systems. Logistics companies are changing the industry landscape by incorporating sophisticated proprietary technologies such as AI / ML and robotics to integrated intelligent system loops and thus, will be able to harness tech adoption at scale and offer 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 turning towards greener solutions that are sustainable but also drive cost optimization within the business. Logistics providers are particularly well positioned to drive the transition to an electric fleet and use cleaner fuels in their operations; many companies are launching pilots and setting electrification targets. Smart warehousing with automated energy-efficient systems is seeing traction among these players.



B2C growth drivers of growth for the logistics sector:

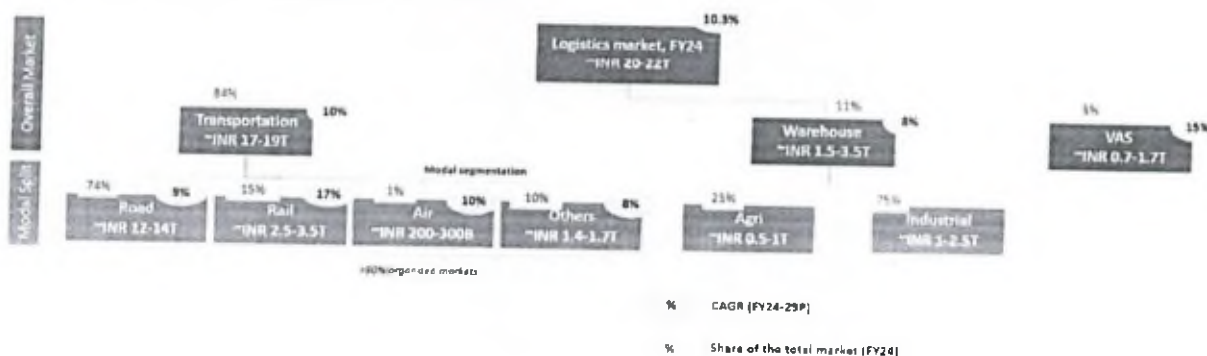
- **Growing disposable income and consumption:** The Indian logistics market is expected to witness significant growth due to a massive customer base, whose expanding disposable income and purchasing power is driving consumption in the country. Over the medium term, the average disposable income for 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.
- **Rise of the digital economy:** Indian logistics industry is spurred by the accelerated growth in online buying, especially with rapid penetration in Tier-2, Tier-3, and beyond cities. With the rise of social commerce and direct-to-consumer (D2C) commerce, last-mile delivery logistics and warehousing is seeing a lot of traction.
- **Changing consumer preferences:** Higher expectations of service quality in terms of reduced delivery time, real-time tracking of orders, updates and flexibility in delivery need to be met today to drive superior customer satisfaction. Time-definite and day-definite deliveries are becoming popular to ensure strict adherence to delivery timelines, along with the ability to contact customer service to answer shipment related questions. This will require reliable logistics to consistently deliver high service levels.

2.1.1 Transportation contributes bulk (84%) of the logistics market at US\$ 20-22T

The logistics sector is mainly dominated by transportation having ~84% share in percentage terms, which is likely to remain high due to rise in e-commerce and 3PL demand. Out of the contribution made by the transportation sector, road transportation has the highest share in terms of value i.e., ~INR 12-14T of total value of transportation through all modes. Rail transportation has the highest share in terms of percentage growth i.e., ~17%.

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, labeling 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 51.3 mn sq ft in FY23 to 76.2 mn 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): JBEF, Industry discussions, 11attice estimates, 11attice analysis



³ Delhi NCR, Mumbai, Bengaluru, Chennai, Kolkata, Ahmedabad, Pune & Hyderabad



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

2.2 India ranks at 38th position in Logistics Performance Index

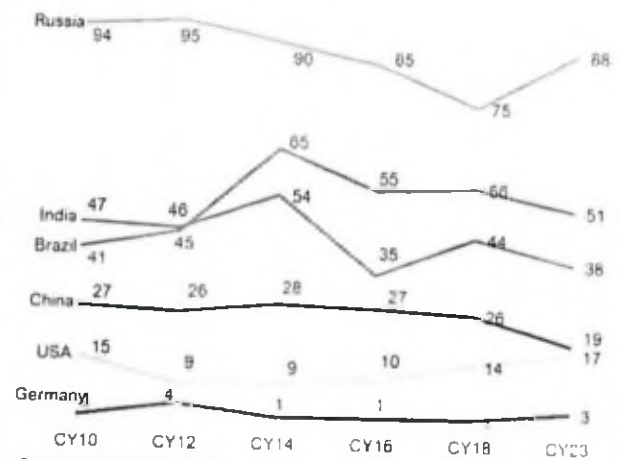
Placed at 38th rank in CY23 in the Logistics Performance Index report released by World Bank, India jumped 9 places since CY18. Index ranks countries on several dimensions such as the efficiency of the clearance process, quality of infrastructure, among others.

India has performed the best in the South Asia region and the sixth-best among lower-middle-income group countries.

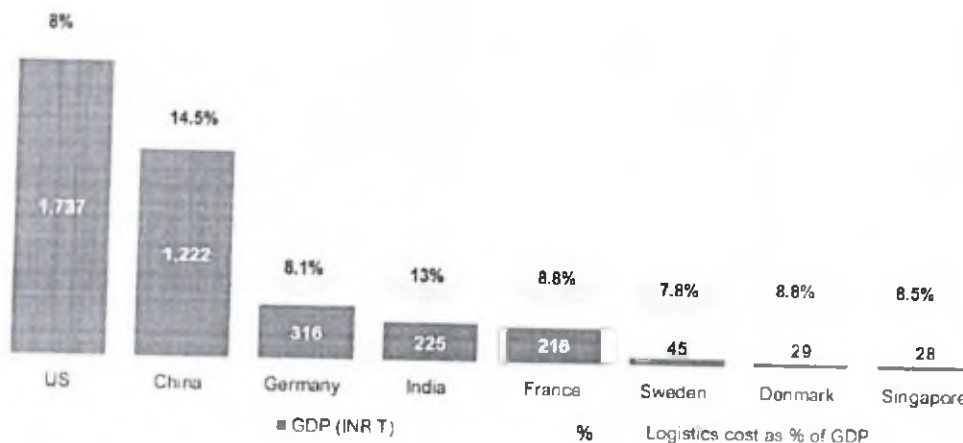
2.2.1 Government aims to bring down high logistics costs in India from ~13% to 7-8% of India's GDP, bringing India closer to its global counterparts

Logistics cost has been high in India at about 13% of GDP against an average of 7-8% for developed economies in 2020. The indirect logistics costs are large and estimated to be four times the average in developed countries. An unbalanced and skewed logistics modal mix, poor mileage of heavy trucks, poor road infrastructure, limited penetration by the organized players, fragmented networks, lack of technology adoption, and poor forecasting are all issues plaguing India's logistics sector

Logistics Performance Index (LPI) rankings



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



Source(s): IMF, 1Lattice analysis

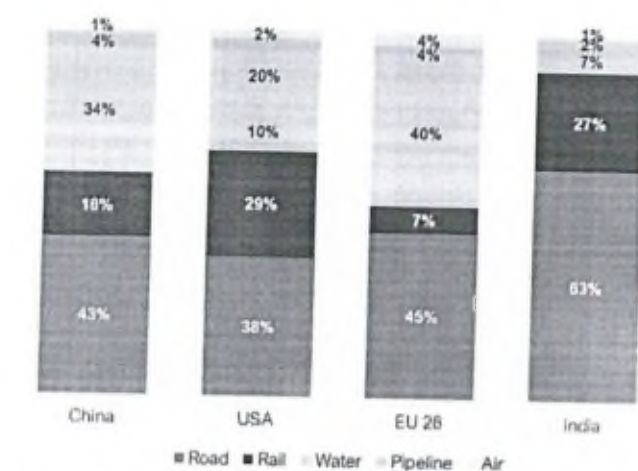


The Indian logistics sector has a significant potential to reduce inefficiencies, which could result in savings of up to INR 10 trillion. Transportation inefficiencies account for ~2% of the total logistics expenditure in India, that can be reduced by an improved modal share, trucking efficiency, and 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.

2.2.2 India has a highly skewed modal mix; (63% road transport by volume) compared to other economies

Developed countries have a balanced distribution across different modes based on their geography. However, in India, road cargo movement constitutes a significantly higher percentage (63% in FY21 and ~65% in CY22) than China (43%),

Modal split of freight transport
(FY21, by volume)



Source(s): NRP, Niti Aayog, MOR, 1Lattice estimates

the USA (38%), and Europe (45%). The EU has a high ratio of coastline to landmass, making an effective freight transport system possible through the Atlantic Ocean and the Mediterranean Sea. The USA has a low coastline to landmass ratio, resulting in a dominant rail share in freight transportation. In India, policies related to logistics have been focused on road transport, and significant investments have been made in this area. However, India's freight traffic mainly comprises bulk commodities, and more than 75% is transported over distances of more than 400km, which could be more economically served by rail and waterways.

2.2.3 Modal shift – shift from road to rail

Of the various modes of transportation, roads and railways are the most preferred modes of transportation. In FY21, road and rail share in the modal mix accounted for ~63% and ~27% respectively. Air holds ~1% of transportation while ~9% is held by others which include coastal shipping and pipeline transport. Whereas in CY22, road and rail share in modal mix accounted for ~65% and ~30% respectively

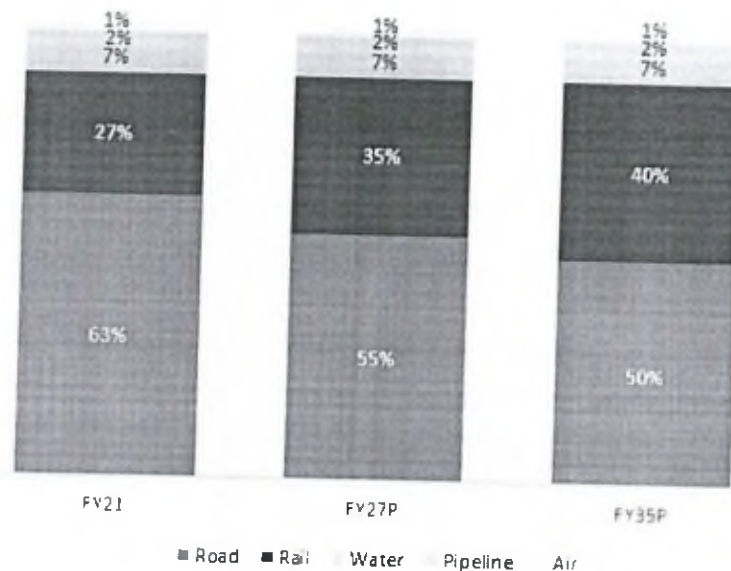
India has a skewed and inefficient modal mix because railways and waterways have not been able to tackle issues of guaranteeing timely delivery, last-mile reach and multi-modal connectivity, insufficient rail capacity, especially on high-density routes.

Rail networks have the potential to be the fastest and cost-effective transportation mode for freight in India. Not only are the costs of rail transportation significantly lower compared to other modes, but it also offers the



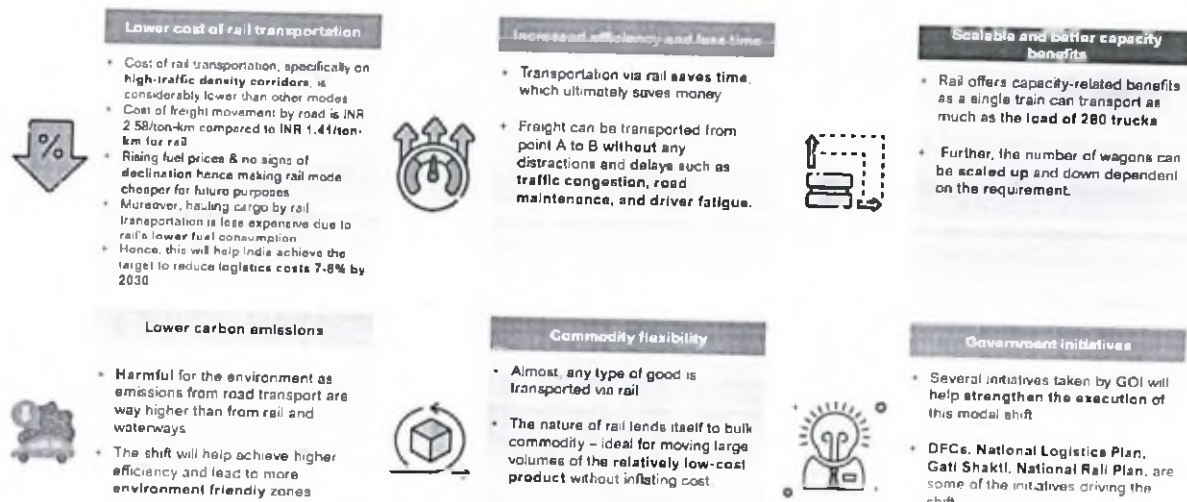
advantages of speed and capacity-related factors. Thus, rail is expected to take a significant share in future ~35% in FY27 & ~40% by FY35 as it could be the cost effective and efficient alternative for road transportation in India. Furthermore, the modal shift from road to rail due to lower rail transportation cost backed by rail's lower fuel consumption, rising fuel prices and corresponding crude oil prices hovering around \$100 / per barrel mark will prominently facilitate in bringing down India's logistics cost to 7-8% of the GDP by 2030.

Modal split of freight transport
(FY21-35P, by volume)



Source(s): NRP, ILLattice estimates

Drivers of the modal shift from road to rail in Indian economy:



Source(s): Secondary research, ILLattice analysis



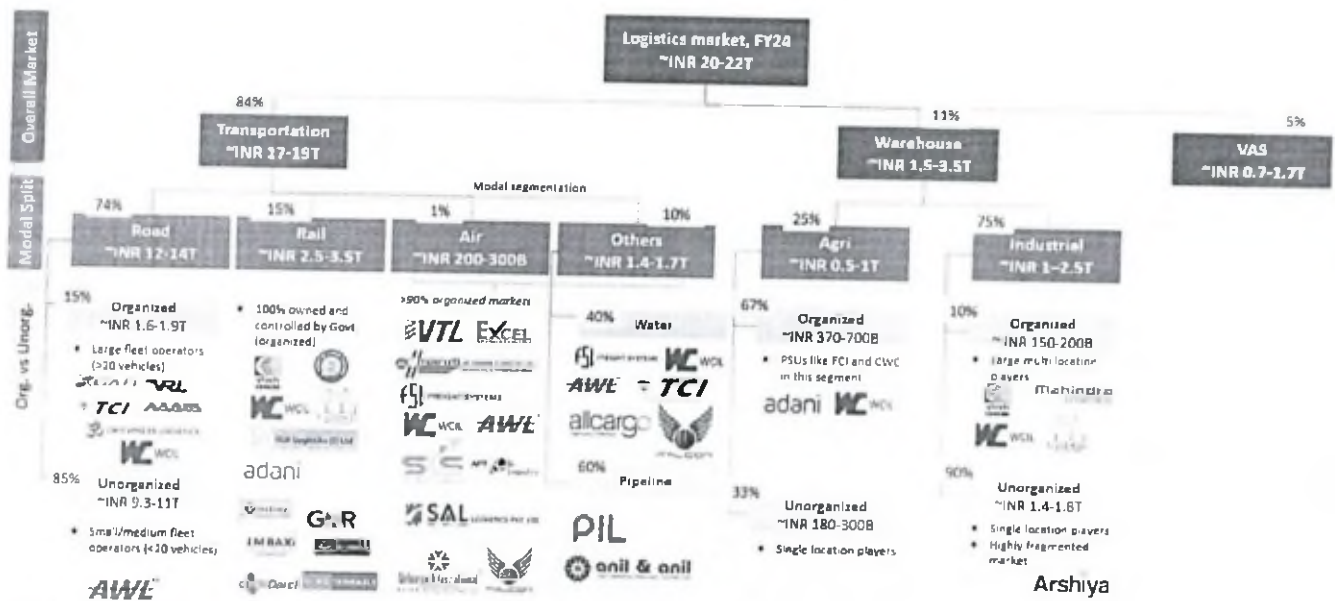
Indian Railways is coming up with initiatives in lucrative e-commerce space that will make it approximately 2.5 times quicker than road carriers and even compete with air cargo carriers. Indian Railways plan to launch 25 high-speed freight trains to handle e-commerce parcels and goods, offering one to two-day delivery on the busiest routes, mainly to hold parcels of e-commerce companies, an enterprise that's presently opts for road transportation. This initiative is supported by an updated parcel policy that includes door-to-door delivery. The plan will not only uplift e-commerce growth but also support the supply of essential goods, farm produce, and medical services.

With the help of technology-enabled integrated logistics services, rail logistics players can deliver services with greater timeliness and accuracy. E-commerce companies are partnering with Indian Railways to enhance delivery services in remote areas, where rail logistics are becoming increasingly important due to last-mile delivery challenges.

2.3 Market segmentation of logistics industry

With low barriers to entry and high degree of commoditization, the Indian road transportation industry is highly fragmented and dominated by a large number of unorganized players (1000+ active players). It is estimated that 75% of fleet owners own less than 5 trucks, 15% own between 6 and 20 trucks, and only about 10% own more than 20 trucks. On the other side, Rail transport is completely organized as it is fully owned and controlled by the Government of India. Airways, coastal, and pipeline transportation are also estimated to be 90% organized and dominated by major operators.

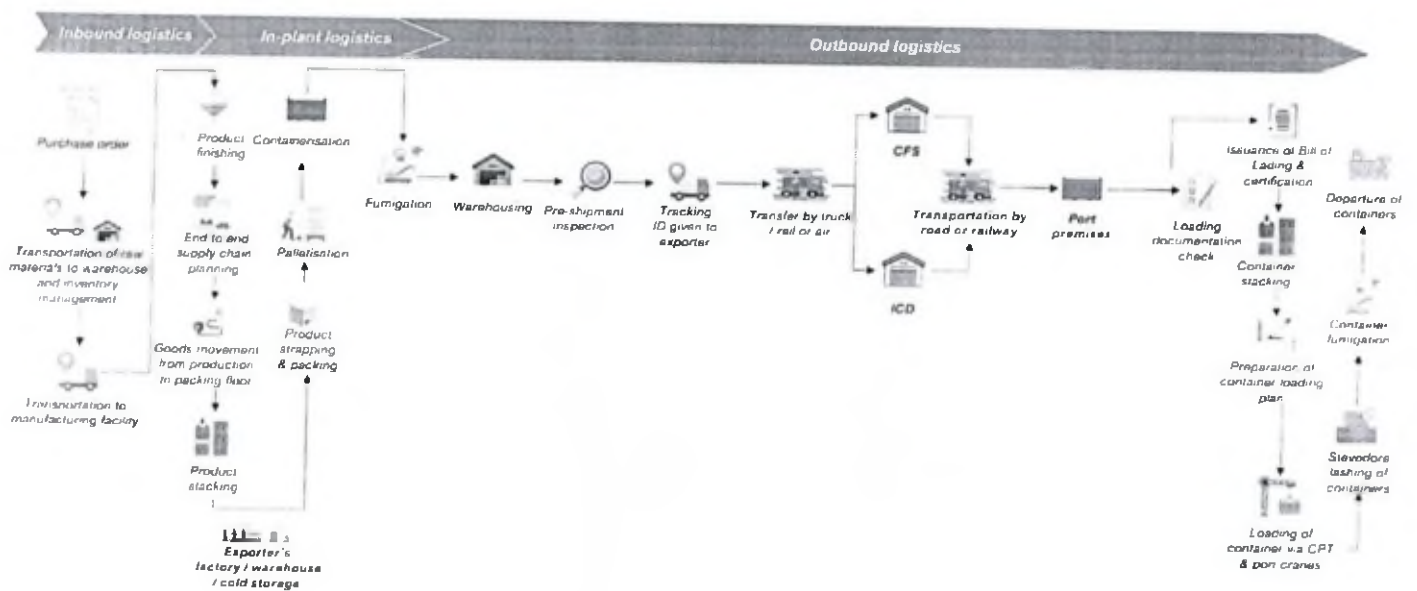




2.4 Major stakeholders in the EXIM cargo movement

There are several major stakeholders involved in the inbound and outbound movement in India.

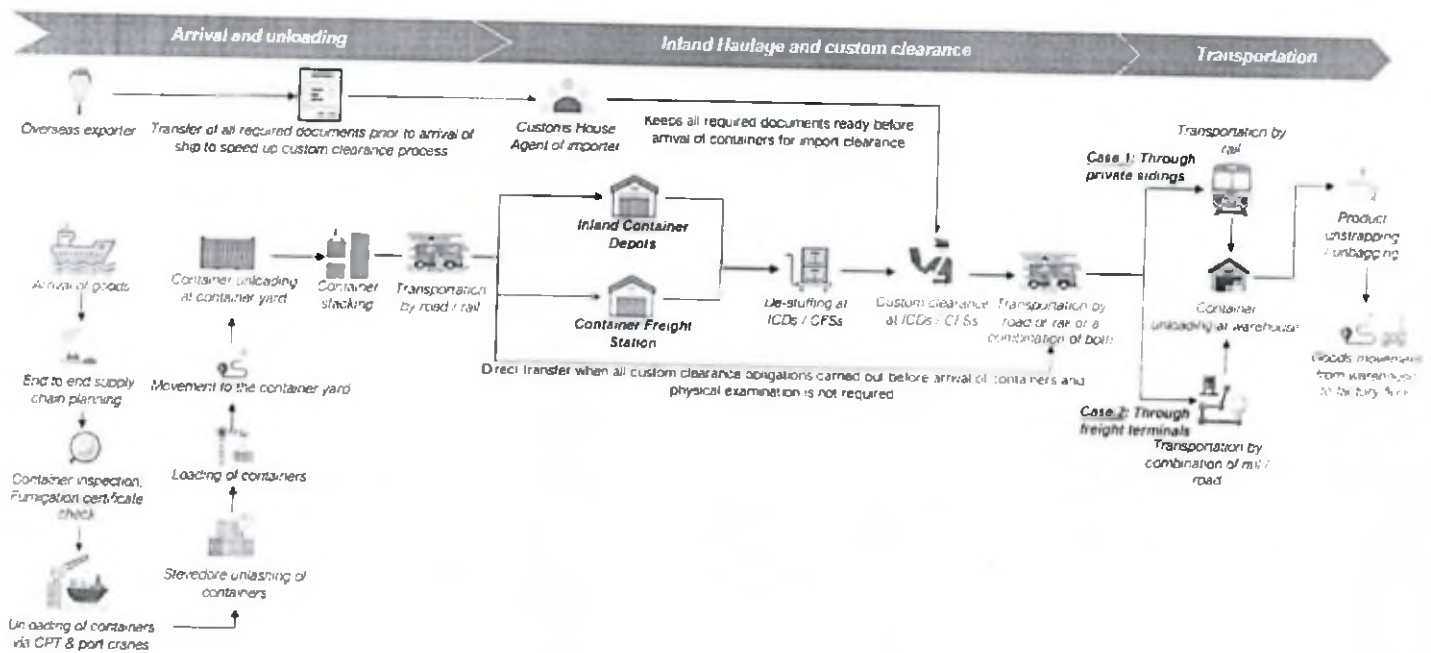
2.4.1 Outbound movement



Source(s): Secondary research, 11attice analysis



2.4.2 Inbound movement



Source(s): Secondary research, Itatice analysis



Ports: Port sector in India is being driven by high growth in external trade. India has 12 major ports and around 212 non-major ports. Mundra, Kandla, Paradip, Visakhapatnam and Jawaharlal Nehru Port are the top 5 ports in India.

Container terminals: They host the transfer of containers from ocean vessels to road and rail vehicles. There are 26 Indian container terminals in operation in India, with 14 terminals located on the west coast and 12 terminals located on the east coast of the country. As per Maritime India Vision 2030, container traffic is expected to grow at a CAGR of 8.2% by 2030 in base case scenario with GDP growing at 6% CAGR due to the high manufacturing growth owing to the push from Make in India campaign and Dedicated Freight Corridor (DFC).

Dry ports & CFS/ICD: Dry ports have strong links to seaports using reliable waterway, rail, or road services facilitating receipt, dispatch, and clearance of containerized cargo during export/inland haulage, documentation, and custom clearance. Between FY18 and FY22, the total number of Container Freight Stations (CFS) rose from 171 to 202, marking an 18% increase. During the same period, the number of Inland Container Depots (ICDs) grew from 70 to 88, reflecting a 26% growth. ICD & CFS segment has shown strong growth prospects and are expected to evolve because of rising containerization levels and the ability to provide value-added services.

Road and Rail connectivity: Evacuation of cargo from the port and movement to the port areas must be properly synchronized so that the inter-modal network functions smoothly. For handling the expanding volumes of cargo, capacity development and infrastructure improvements in and around ports are important. Extensive road and rail connectivity will facilitate handling of these increased cargo volumes.

Warehouses & cold storage: Warehouses help in storage for exporters at procurement stage and for importers after goods have been transported. In FY24, Indian warehousing and value-added services market was estimated at INR 2-4 Trillion. Agricultural warehousing constitutes 25% whereas Industrial warehousing constitutes 75% of the total market. The cold storage market in India is fragmented and unorganized with facilities being largely setup on an ad-hoc basis.

Free Trade and Warehousing Zones (FTWZ) and Special Economic Zones (SEZs): There are 280 operational SEZs in India as on 31st April 2024 out of which 25 are multi product SEZs, remaining are sector specific SEZs. There are 13 approved FTWZs in India, out of which 9 have been notified. Out of these 9 notified FTWZs, 5 are operational.

Multi modal logistics parks: A Multi-Modal Logistics Park (MMLP) is an inter-modal freight-handling establishment comprising warehouses, dedicated cold chain facilities, freight or container terminals and bulk cargo terminals. In FY21, Cabinet Committee on Economic Affairs mandated the development of 35 MMLP across the country. It has proposed to develop logistics parks in 15 cities with highest freight movement (covering more than 40% of the total road freight movement in India) in Phase I of the program. A total of 6 multimodal logistics parks (MMLPs) have been awaited until FY24

The above two value chains for inbound and out movement clearly indicates the need of an integrated logistics player in this value chain. With an asset-light approach, multimodal transportation, consolidation play, value-added services & the ability to handle complexities, an integrated logistics player will act as a force multiplier providing customized solutions to its customers depending upon their needs.



2.5 For FY20-25, a total of INR 13.69T, has been earmarked to railways under the National Infrastructure Pipeline

Under 'National Infrastructure Pipeline', a total of INR 13.69T has been allocated to railways for FY20-25, which is 13% of the total capital expenditure in infrastructure sectors. With increasing participation from public as well as private sector firms, both domestic and international, the freight traffic is likely to grow rapidly, resulting in employment opportunities and revenue generation from the industry.

In the Union Budget 2024-25, emphasis is placed on developing three major railway corridors—port connectivity, energy, mineral and cement, and high traffic density, which will streamline freight movement across the country. The budget also prioritizes building digital freight corridors to enhance cargo transport efficiency, ensuring real-time tracking and faster delivery times. Container Train Operator: The container rail traffic in India was ~85 million tonnes, having a share of ~5% of the total Indian railways' freight basket of 1,591 million tonnes in FY24. The container rail traffic grew at a CAGR of 8% over FY18-24. The container rail business is capital-intensive and requires a long gestation period to build volumes. Exim accounts for 75-80% of the container rail traffic while the domestic holds the rest 20-25%. Exim & domestic container rail traffic has registered healthy growth rate of 7% and 11.5% respectively over FY18-24.

Private freight terminals: Private Freight Terminals (PFT) are set up by the Terminal Management Company (TMC) on private land through private investment in terms of PFT policy for handling all types of traffic unless and otherwise notified under the policy. With the introduction of Gati-Shakti Multimodal Cargo Terminal (GCT) policy (PM Gati Shakti) (terminals where different modes of transportation will be integrated seamlessly with the railways transportation network) by Indian Railways in December 2021, the PFTs will now be governed by GCT Policy. There are in total 82 Private Freight Terminals in India as of FY24.

Dedicated Freight Corridor (DFC) is expected to be a game changer contributing to building efficient freight transportation system

DFC will play a key role in improving the proportion of Indian Railways in the modal mix and bringing down the high logistics cost in India. The Eastern DFC (1,337 route km) and Western DFC (1,506 route km) are being built to cover a total length of 2,843 route km (excluding the Sonnagar – Dankuni segment 538 km). The Sonnagar – Dankuni segment is being planned on a PPP model to develop via a design, finance, build, operate and maintain and transfer (DFBOT) model.

The Eastern DFC is fully operational whereas the WDFC is partially operational (1,220 km of 1,506 km as of Feb 2024). Once DFC is functional, most of the existing freight traffic will be assigned to it and the Dedicated Freight Corridor Corporation of India Limited (DFCCIL) will plan the most logical (shortest and/or fastest) route. DFC will open new avenues for improving rail connectivity in India.

With higher speeds and enhanced design features, DFC will help Railways provide a cheaper alternative to transport by road.

E-commerce companies like Amazon and Flipkart will be able to transfer freight through railways once the dedicated freight corridor project is complete. The freight corridor project will also open doors for the automobile sector. It will also play a vital role in enhancing productivity of CTO's as it comes with multiple benefits such as higher axle loads, increased speed, longer trains and double stacking.



2.6 Road and other modes of transportation have also witnessed several government initiatives in the past few years

According to IBEF, India has the second largest road network in the world. Around 3.05 TMT per kilometer of freight was moved via road transport across India in CY22 and around 66% of the overall freight transportation in India (by volume) was carried out by road. However, being highly fragmented, there is a high level of intermediation and inefficiency present in this industry.

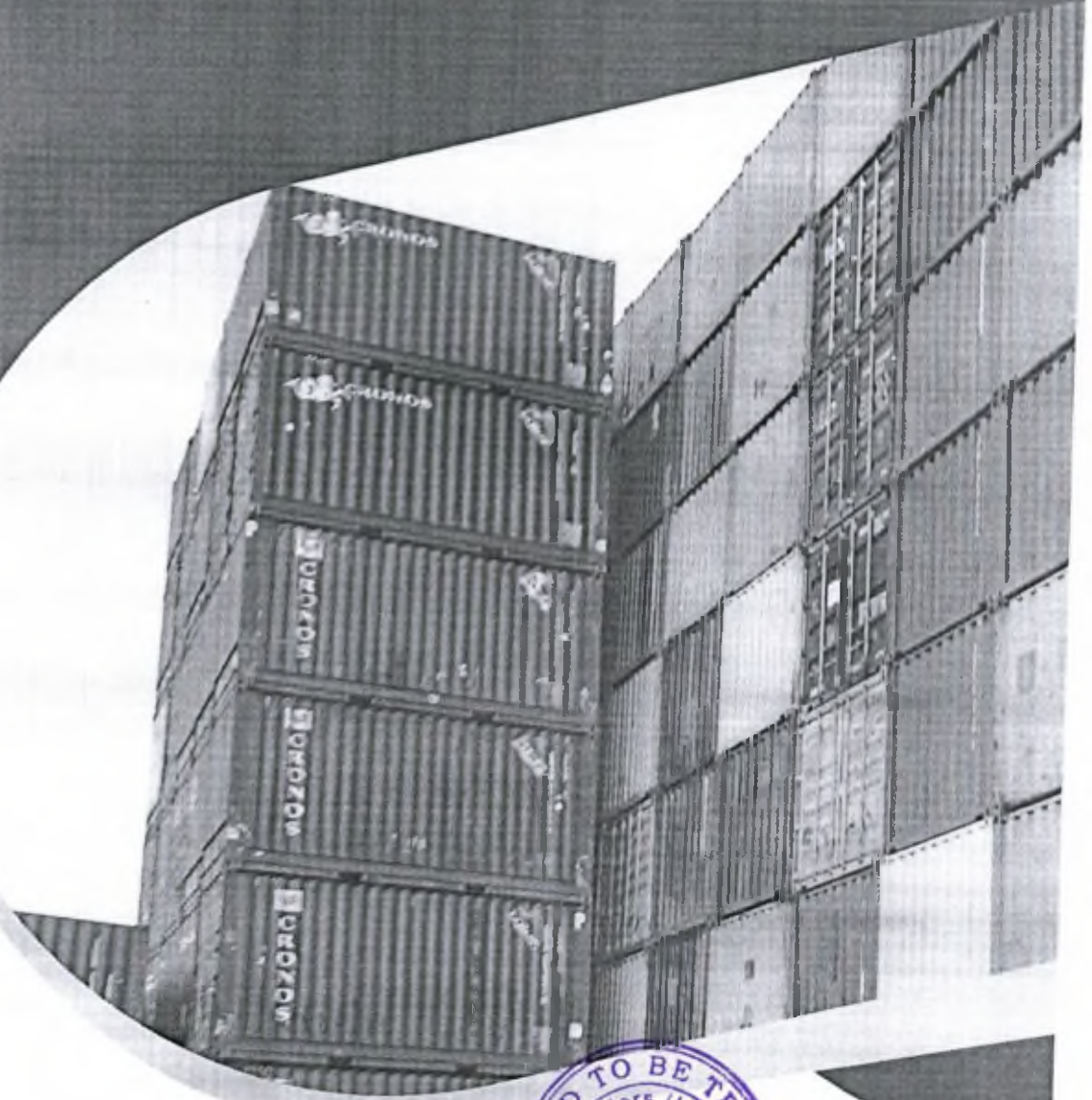
Government has undertaken various major initiatives to boost the air freight industry such as Krishi Udaan for expansion of scope of air freight subsidy, plan to launch 14 water aerodromes across country, etc. As of 8th Feb 2024, 76 RCS (Regional Connectivity Scheme) airports, including 2 water aerodromes and 9 heliports have been operationalized under the UDAN scheme. The Indian Government is planning to increase investments for development of airport infrastructure along with aviation navigation services by 2026.

With respect to the other modes of transportation, the way forward for water transport will depend on completion of various projects under Sagarmala, especially those aimed at improving port connectivity, Jal Marg Vikas Project, setting up coastal economic zones (CEZs), and establishing new ports.



03

The container market in India



3.1 India outpaced the world growth rate in container traffic and offers significant opportunity to increase penetration levels relative to population and GDP

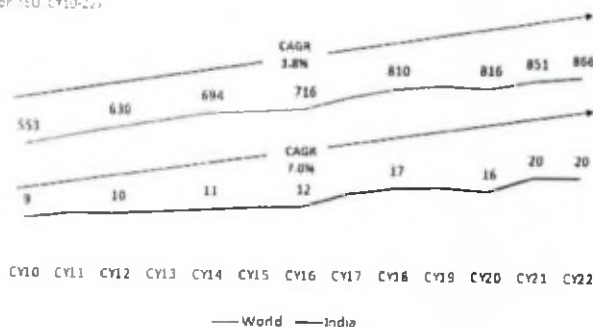
In CY22, 866 Million TEUs of containers were handled in ports worldwide. World container port throughput grew at 3.8% CAGR from CY10-22. India outpaced the world growth in container throughput growing at 7% CAGR in CY10-22.

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.

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

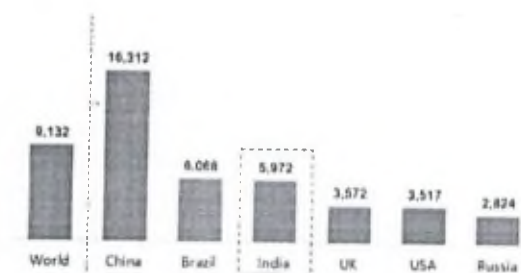
Containerization in India increased at a fast pace in the last decade driven by facilities such as easy container identification with unique codes, lower packaging, and transportation cost due to break bulk handling, own warehouse services and lack of pilferage and losses of cargo. Direct port delivery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

Container 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)

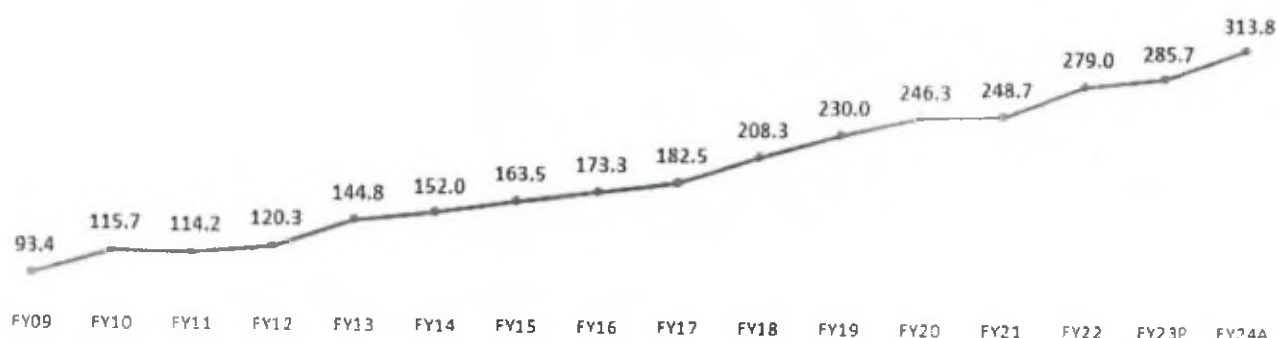


Source(s): UNCTAD, World Bank, Secondary research, I.Lattice analysis

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.



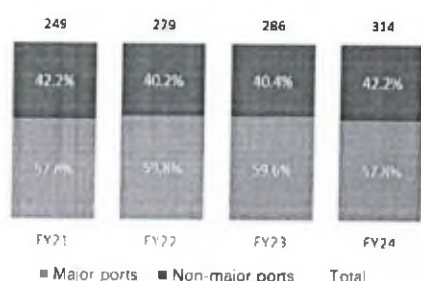
Container traffic volume trend (Million Metric Tonnes, FY09-24)



Note(s): P – Provisional, A – Advanced Estimates

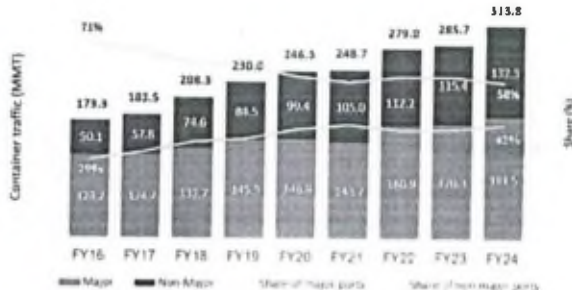
Source(s): BPS 2021, Ministry of Ports, Shipping & Waterways, Ilatrice analysis

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



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

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



Source(s): BPS 2021, Ministry of Ports, Shipping & Waterways, Ilatrice 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.

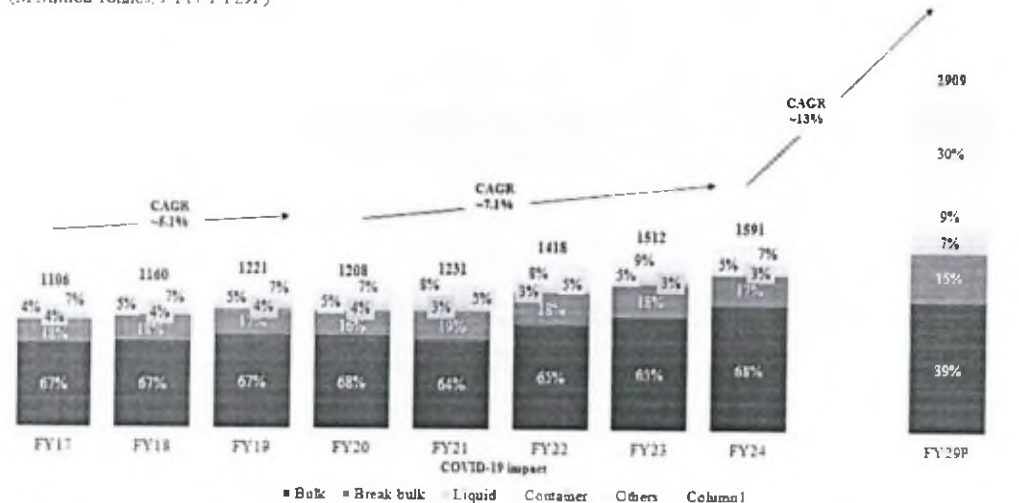
3.3 Rail container volume is expected to grow at a faster rate with a CAGR of 25% in FY29 as compared to overall railway freight volume

The overall rail freight volume constitutes coal, iron ore, cement, fertilizers, pig iron and finished steel, container, and others. It has seen a CAGR of ~5.3% from FY17-24. Coal is the major constituent of the rail freight market comprising almost 50% of total volume. The container volume has a minor share in overall rail freight volume at ~5% and which is expected to increase to 9% by FY29. The railway freight volume is estimated to grow to 2,909 MMT by FY29.

This is driven by operationalization of DFCs, which will improve the efficiency and timelines. The general efficiency has also increased due to higher investments observed in railways, increased share of rail due to suitable government policies, set up of new container terminals, etc. Factors such as the proliferation of hub and spoke model, quicker transit for longer distances, growing containerization & higher fuel prices reducing the share of road freight transportation will drive the growth of domestic rail volume in India.



Railway freight volume
(M.Million Tonnes, FY17-FY29P)



Note(s): Bulk includes iron ore, coal, pig iron, & finished steel & steel plants raw materials except pig iron; Break bulk includes fertilizers, cement, food grains; Liquid includes mineral oil
Source(s): Indian Railways, National railway plan, Expert discussions, 1Lattice analysis

Note(s): Bulk Includes iron ore, coal, pig iron, & finished steel & steel plants raw materials except pig iron; Break bulk includes fertilizers, cement, food grains; Liquid Includes mineral oil

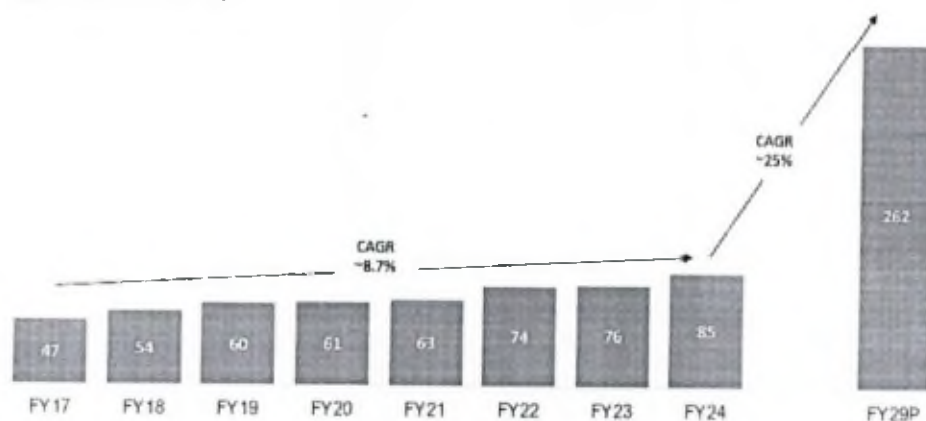
Source(s): Indian Railways, National railway plan, Expert discussions, 1Lattice estimates

Overall, rail container volume grew at a CAGR of ~8.7% between FY17 to FY24. In FY24, overall rail container volume amounted to 85MMT and is estimated to grow at a CAGR of ~25% between FY24 to FY29 growing to 262 MMT in FY29.

This is due to shippers digressing from transporting in break bulk or general cargo to container transport, set up of new container terminals, favourable economic conditions etc. which will drive the change in train freight volume over the next 5 years.

Source(s): Ministry of railways, National Rail Plan, 1Lattice estimates

Rail Container Volume
(Million Tonnes, FY17-FY29P)



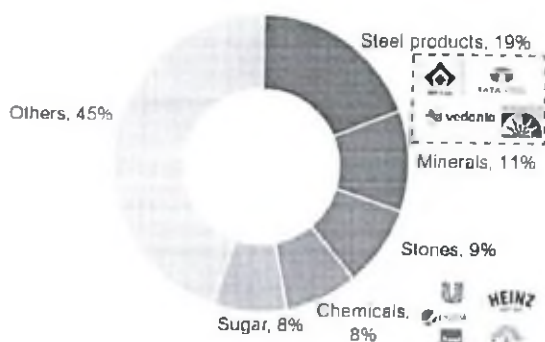
Source(s): Ministry of railways, National Rail Plan, 1Lattice analysis



3.4 Major commodities transported through containerized cargo in EXIM movements

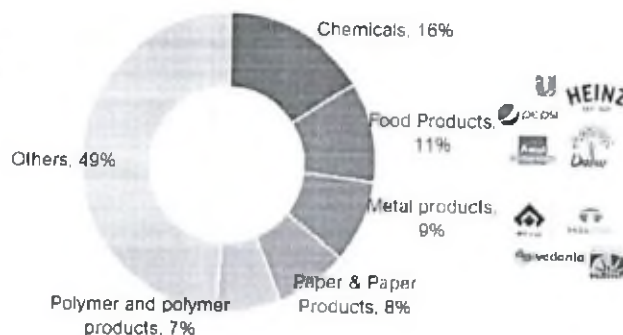
3.4.1 Steel products and minerals are the major commodities exported in containers

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): Secondary research, I-Lattice analysis

Major container commodities imported by India (% CY21)



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

In terms of 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 15.2MMT of minerals were exported from India in CY21 with ~57.9% being exported to China, Korea Republic, Japan, Bangladesh and Indonesia. Some of the largest operators of container cargo dealing in steel and mineral products are Vedanta, TATA Steel, Jindal Steel and Power, SAIL, Bhushan Steel and Power, Hindalco, etc.

3.4.2 Chemicals and food products are the major commodities imported in containers

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 has given rise to increased demand for imported food products with its share rising from 10% in CY10 to 11% in CY21.

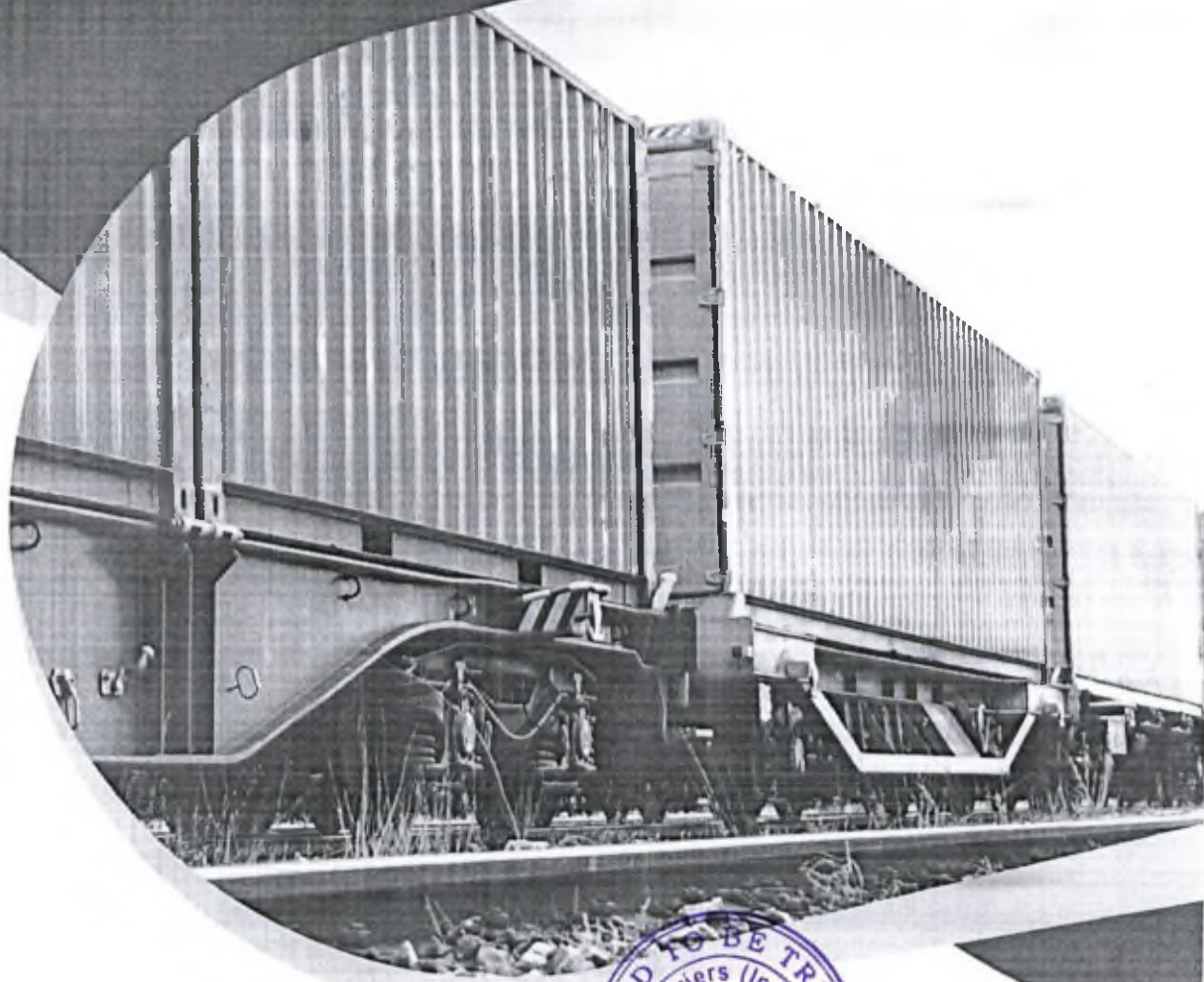
Major players who export and import in chemical products such as soda ash, fatty alcohol, fatty acids, etc. are Nirma, Godrej chemicals – business segment of Godrej Group, Jericho Chemicals, Aditya Birla Grasim, etc.

Major players who export and import food products such as carbonated drinks, etc. are Coca Cola, Pepsi, Amul, HUL, TATA Consumer Products, Dabur, Heinz, ITC, etc.



04

Assessment of container rail multimodal market

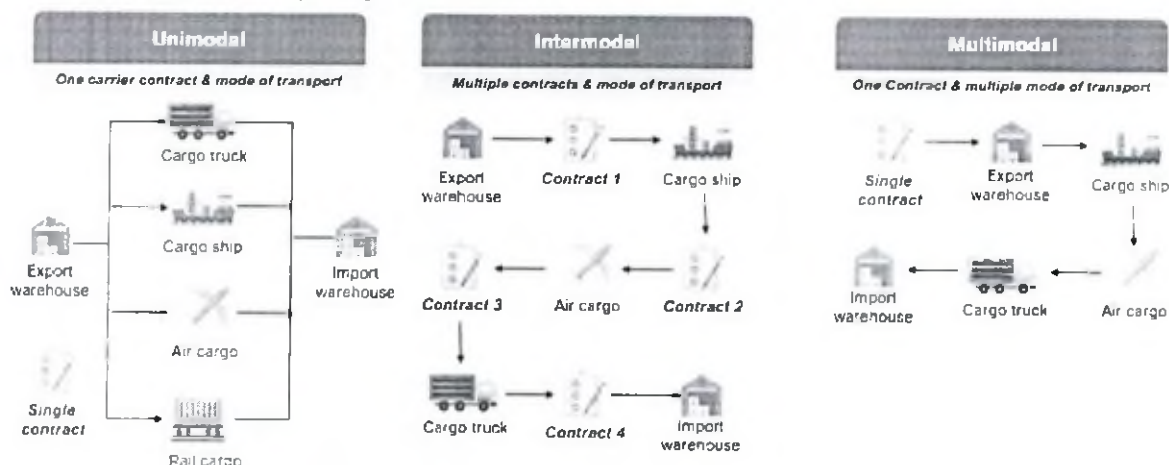


4.1 Introduction

The concept of multimodal logistics came into existence with the rise in international trade and globalization. Multimodal logistics refers to a transport system operated by one carrier with more than one mode of transport under the control or ownership of one operator.

The logistics industry across the globe is realizing the importance of an integrated transport system. A planned and coordinated multimodal transport minimizes the loss of time and risk of loss, pilferage, and damage to cargo at transshipment points. It reduces the burden of issuing multiple documentation and helps to reduce the cost of exports.

Different types of transport system

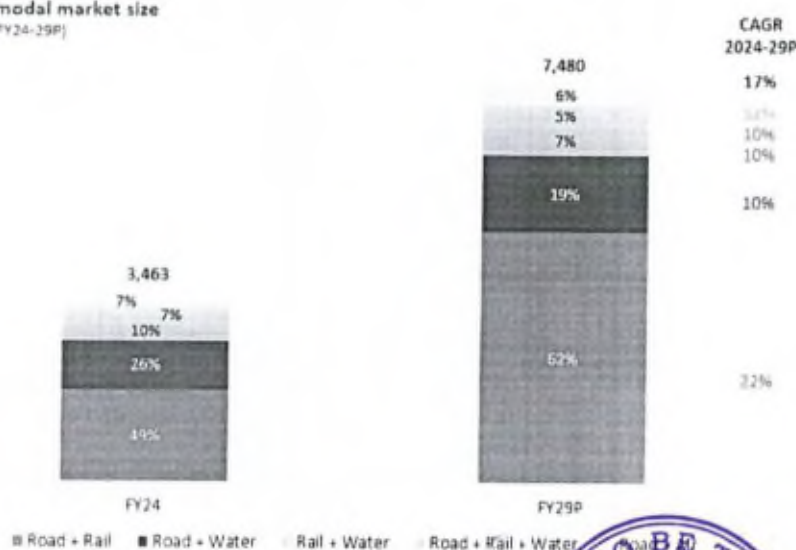


Source(s): Secondary research, 11attice analysis

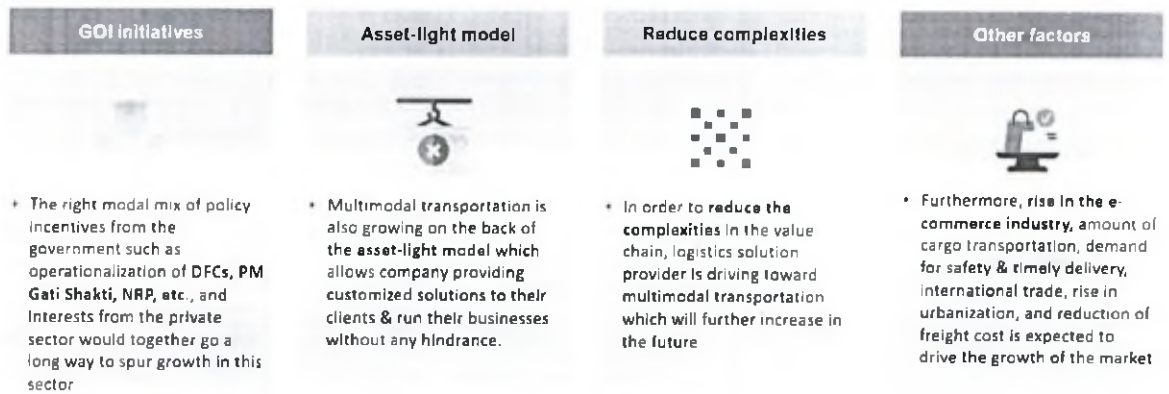
4.1.1 Multimodal (railroad) market Size

Multimodal transportation is divided into several segments such as railroad, road-water, road-air, others, etc. The multimodal market is around INR 3,463B in FY24 which is expected to grow to INR 7,480B by FY29 growing at a CAGR of 17%. The share of multimodal market is approximately ~18% of the total logistics market in FY24 (INR 20-22T) which is expected to grow to 10% of the total logistics market (INR 31-33T) by FY28

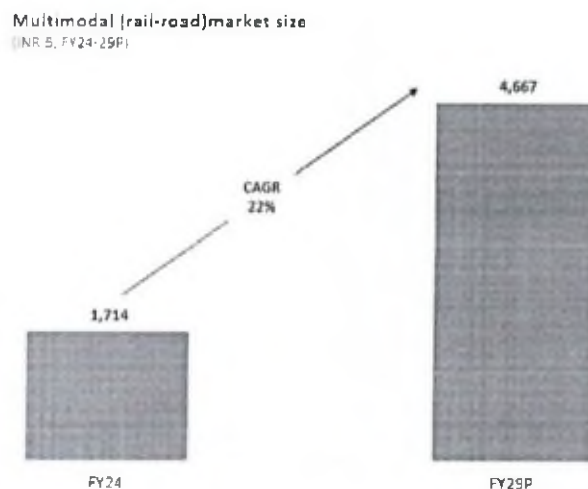
Multimodal market size
(INR B, FY24-29P)



Growth drivers of multimodal market:



Out of this, the multimodal (railroad) market is around INR 1,714B in FY24 which is expected to grow to INR 4,667B by FY29 growing at a CAGR of 22% in that period. The share of multimodal (railroad) market is approximately 10% of the total transportation market in FY24 which is expected to grow close to twice the size to 15% by FY29.



Source(s): Expert discussions, 11attice estimates, 11attice analysis

4.1.2 Multimodal Policies and regulations

- PM Gati Shakti:** The Gati Shakti National Master Plan also known as National Master-Plan for multimodal connectivity was launched in October 2021 and is an INR 100 Lakh crore project with a target of building 'holistic infrastructure' in India. It aims to digitally unify 16 different ministries driven by seven modes of road, rail, airports, ports, mass transport, waterways & logistics infrastructure. After unification, data exchange on Unified Logistics Interface Platform (ULIP) will



ensure efficient movement of goods, reduce cost and time. In the future, 100 cargo terminals equipped with multimodal facilities will be developed under this plan.

Key targets set for different heads under the scheme are:

Ports	National Waterways	Railways	MMLPs	Others
				
Capacity of the major ports to be increased from 1,282 million tonnes in Fiscal 2020 to 1,759 million tonnes in Fiscal 2025	During fiscal 2020-25, cargo movement to be increased from 74 million tonnes to 95 million tonnes	Target of 1,600 million tonnes by fiscal 2025 as compared to 1,210 million tonnes in fiscal 2020	Indian railways will set up 500 multimodal cargo terminals by fiscal 2025	Gas pipeline length to be doubled from 17,000 km to 34,500 km

- The National Logistics Policy 2022:** Launched in 2022, the policy aims at developing the entire logistics ecosystem, with two major visions – lowering the logistics cost, improving India's ranking in the Logistics Performance Index & creating multimodal logistics which will help in enhanced multimodal infrastructure. It also aims to enhance logistics sector competitiveness through a unified policy environment & an integrated institutional mechanism.

Key Objectives	Rationale
Logistics efficiency	Reduced logistics cost as a percentage of GDP from 13-14% to 8-10%
Improve performance	Improve the Logistics Performance Index ranking, aim to be among the top 25 countries by 2030
Digital tracking	- Digital initiatives like e-tolling, electronic document flow, digital verification will improve in transit warehousing - Tracking & tracing cargo movement will increase predictability
Multimodal transport	- Creation of MMLPs will help in enhanced multi modal infrastructure - Ensure all transport modes are used optimally

Source(s): Secondary research, 11attle analysis

- Other government initiatives to promote multimodal freight:** Multimodal freight transport refers to the movement of goods in containers or trailers via successive modes of transportation (usually road-rail-road) under a single contract. Some of the share from road transport can be combined with rail to create a more efficient system with a better quality of service, more reliability, lower costs and emissions. With supporting government initiatives and market structure, the share of multimodal transport in India is expected to grow.



Government initiatives to promote multimodal freight

	Investment in logistics parks	In 2017, the government sanctioned INR 2 lakh crore for building 35 multimodal logistics parks across the country
	Optimizing siting of logistics parks	These logistics parks are expected to handle 50% of the road freight activity and reduce total logistics costs by 25%
	Piloting double-stack trains	- The Indian government plans to create a central authority called Multi-Modal Logistics Park Authority (MMLPA) with representatives from relevant ministries - They will help identify optimal locations and ensure MMLPs function correctly
	Building out Inland Container Depots	Indian Railways recently operated its first double-stack dwarf train, which is shorter in height and can easily pass through the current routes
	Existing stakeholder ecosystem	- India has built a network of almost 300 ICDs, which are the key to enable multi-modal transport as they enable better integration between road and rail - The government has announced plans for new rail-side logistics parks and warehouses to upgrade freight terminal infrastructure - Indian Railways' subsidiary Container Corporation of India Limited (CONCOR) is the market leader in intermodal container movement, accounting for about 80% of the market share - Apart from CONCOR, there are 14 other private operators in the intermodal business

Source(s): Secondary research, 11attice analysis

4.1.3 Complexity in Multimodal Logistics

Integrated Logistics supply chain is increasingly becoming complex due to the presence of multiple stakeholders to achieve vertical integration. This complexity can be reduced to a greater extent with the help of seamless planning & implementation and a number of value-added services which can be provided to help resolve day-to-day issues and help build customer stickiness.

4.1.4 Advantages of Multimodal Logistics in India

Advantages of multimodal transportation		
	Saves cost	- Cost savings are reflected in the thorough freight rates charges by the MTO & in the cost of cargo insurance - Savings passed on to consumers, demand increases
	Minimized time loss	- Trans shipments are more planned and coordinated as single operation - Reduced risk of loss, pilferage, and cargo damages - MTO maintains his own communication links for smooth carriage process
	Less documentation	Multimodal transportation has reduced burden of documentation and formalities to the minimum
	Reduces cost of export	The inherent advantages of multimodal transport system will help to reduce the cost of exports and improve their competitive position in the international market
	Faster transit of goods	- Reduces the disadvantages of distance from markets and tying-up of capital - Due to increased globalization, distance between origin and consumer is increasing where multimodal gives an edge
	Single window operation	The consignor must deal with only the MTO in all matters relating to the transportation of his goods, including the settlement of claims for loss of goods, or damage or delays in delivery at destination

Source(s): Secondary research, 11attice analysis



4.2 Market assessment in Rail logistics

India has the fourth-largest rail network in the world after USA, Russia, and China. As of FY24, total route km was 68,584km, of which more than 41% was double/multiple tracks. According to Ministry of Railways, Indian Railways total loading was 1.6 B Metric Tonnes which was 5.2% higher than last year's loading of 1.5 BMT.

4.2.1 Government initiatives driving the growth of rail logistics

- Dedicated Freight Corridor will be a game changer contributing to building efficient freight transportation system

Section-wise progress

EDFC

Section/ Packages		Length (km)	Commissioning Target
Bhaupur-Khurja		351	Commissioned
Bhaupur - DDU	Bhaupur-Rooma	50	Commissioned
	Rooma-Sujatpur	130	Commissioned
	Sujatpur-DDU	222	Commissioned
DDU -Sonnagar		137	Commissioned
Khurja-Dadri		46	Commissioned
Pilkhani- Ludhiana		179	Commissioned
Khurja-Pilkhani		222	Commissioned

WDFC

Section/ Packages		Length (km)	Commissioning Target
Rewari-Palanpur	Rewari-Madar	306	Commissioned
	Madar-Palanpur	353	Commissioned
Palanpur-Makarpura		290	Commissioned
Makarpura -Sachin		135	Commissioned
Sachin-Vaitarna		186	Commissioned
Vaitarna-JNPT		109	31 Dec 2024
Dadri-Rewari		127	Commissioned

Source(s): DFCCIL, 1Lattice Analysis

DFC will play a key role in boosting the proportion of Indian Railways in the modal mix and bringing down the high logistics cost in India. The Eastern DFC (1,337 route km) and Western DFC (1,506 route km) are being built, to cover a total length of 2,843 route km (excluding the Sonnagar – Dankuni segment 538 km). The Western DFC will originate from Dadri in Uttar Pradesh and terminate at Jawaharlal Nehru Port Trust in Mumbai, travelling through states of Uttar Pradesh, Haryana, Rajasthan, Gujarat, and Maharashtra. The Eastern Dedicated Freight Corridor commencing from Sahnewal near Ludhiana (Punjab) will transverse through the states of Punjab, Haryana, Uttar Pradesh, Bihar and Jharkhand to terminate at Dankuni in West Bengal.

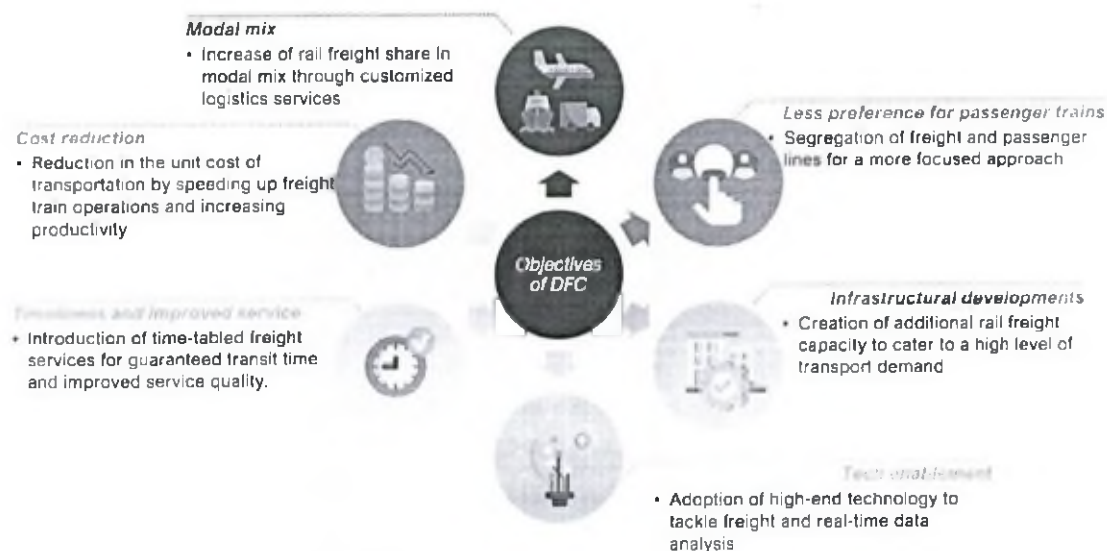


The Ministry of Railways has initiated the construction of two Dedicated Freight Corridors (DFCs): the Eastern Dedicated Freight Corridor (EDFC) stretching from Ludhiana to Sonnagar (1,337 km) and the Western Dedicated Freight Corridor (WDFC) from Jawaharlal Nehru Port Terminal (JNPT) to Dadri (1,506 km). The construction of EDFC has been successfully finished, while 1,397 km out of 1,506 km of WDFC has been completed. At present, 200 trains run daily on the EDFC network, with the track infrastructure capable of accommodating up to 250 trains daily.

DFCs contribution in building efficient freight transportation system:

In the next five years, as per DFCCIL, Indian Railways is targeting to increase its freight traffic to 3.30B tonnes by 2030 from 1.16B tonnes in 2018. Furthermore, each kilometer-long freight train on the EDFC has the potential on average to replace 72 trucks. This will reduce traffic congestion on India's overburdened roads and highways, which carry a staggering 63% of the country's freight, as well as making the roadways safer while increasing the rail share and improving energy efficiencies through technological innovation. The freight corridors will take off 70 percent of freight load in the form of goods trains from the passenger network and the logistics cost may be trimmed by about 50%, thus helping in reduction of the overall logistics cost.

Outputs achieved after the implementation of DFC:



- **National Rail Plan (2024):** This entails 100% electrification, additional lines along the high-density networks, upgradation of speed to 160kmph on Delhi-Howrah and Delhi-Mumbai routes, and elimination of all level crossings on all GQ/GD routes. The National Rail Plan thus when fully implemented will develop capacity, infrastructure & drive gradual shift in the freight modal share from current 27% to 45% in the 2050.
- **PM Gati Shakti:** The Government is investing heavily in building rail infrastructure in the country. PM Gati Shakti Master Plan is an INR 100 lakh-crore project with a target of building 'holistic infrastructure' in India. It contemplates development of an integrated platform to monitor the progress of projects and logistics initiatives spanning across different ministries which will aid in increasing coordination and planning infrastructure creation and connectivity.
- **National Infrastructure Pipeline:** Under 'National Infrastructure Pipeline', a total of INR 13.69T has been allocated to railways for the period between FY20-25, which is 13% of the total capital



expenditure in infrastructure sectors. With increasing participation from public as well as private sector firms, both domestic and international, the freight traffic is likely to grow rapidly, resulting in employment opportunities and revenue generation from the industry.

4.3 Freight terminals

Access to rail connectivity is a key component of the logistics value chain, allowing for the movement of bulk cargo over long distances cost effectively. Indian Railways plays a pivotal role in transportation of goods via rakes which can be loaded at originating rail freight terminals & unloaded at destination freight terminals.

With the introduction of Gati-Shakti Multimodal Cargo Terminal (GCT) policy (terminals where different modes of transportation will be integrated seamlessly with the railways transportation network) by Indian Railways in December 2021, the PFTs will now be governed by GCT Policy.

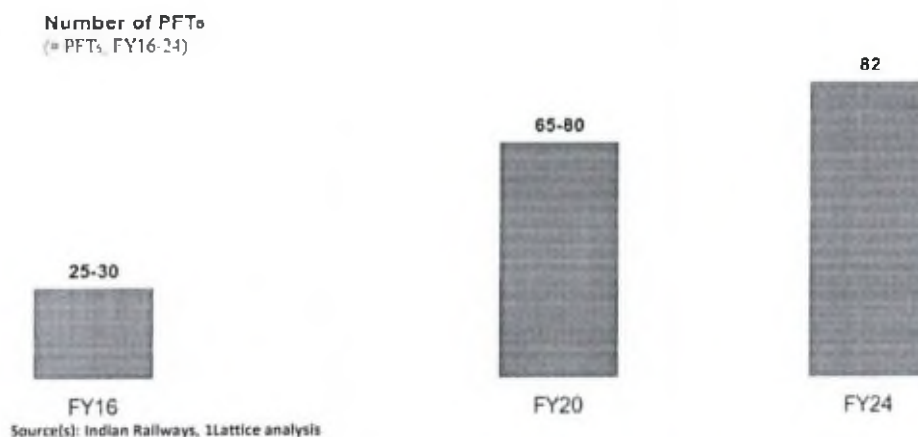
There are in total 82 Private Freight Terminals in India

S.no	Operated by	# of PFTs
1	CONCOR	13
2	DP world (CWC and Kribhco Infrastructure)	7
3	Pristine	4
4	Vimla Infrastructure	4
5	Adani Logistics	4
5	Gateway Distriparks	3
8	Distribution Logistics Infrastructure	3
9	Hind Terminal	2
10	J.K. Cement works	2
11	Others	40
	Total	82

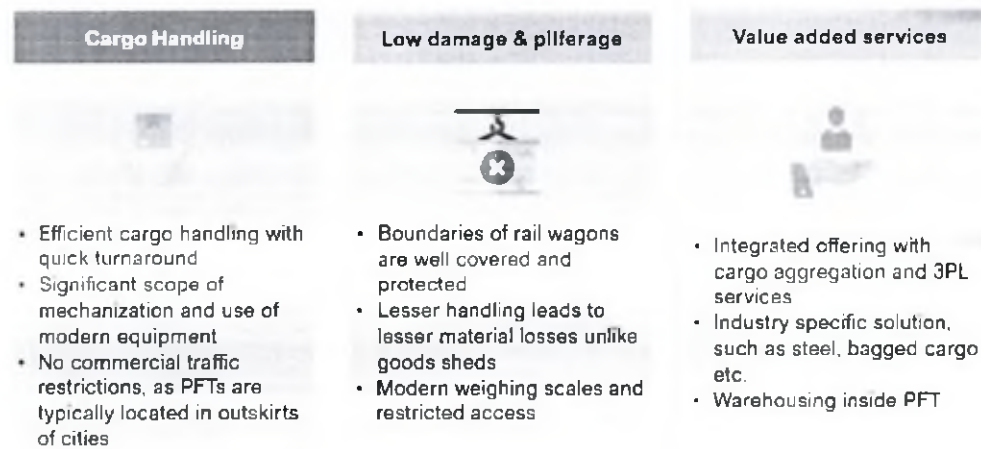
Note(s): Others include PNP Port, Uttam value steels, IREL, Jindal Stainless steel, Arshiya Limited, etc. which have 1 PFT each

Source(s): FOIS, 1Lattice analysis

The number of PFTs have grown from 25-30 in FY16 to 82 in FY24.



PFT serves domestic cargo by facilitating rail transport access, offering assistance such as warehousing, transportation for incoming / outgoing cargo & value-added services such as cargo aggregation, packaging, etc. Key commodities handled by PFTs are Iron and Steel, Ores, Cement, Export Iron Ore and Automobiles.



Source[s]: Secondary research, 1Lattice analysis

PFTs location which is mostly outskirts of the city helps in 24x7 handling of goods along with subsequent transportation via road. Factors such as single point responsibility, better infrastructure, integrated services (including cargo aggregation & 3PL), provides an edge to PFT in cargo handling over other freight terminals such as Indian railways goods shed

4.4 DFC is expected to increase railways share in freight transportation thus increasing multimodal transportation in India by making it economically viable for more private players to invest in the Container Train Operator (CTO) industry

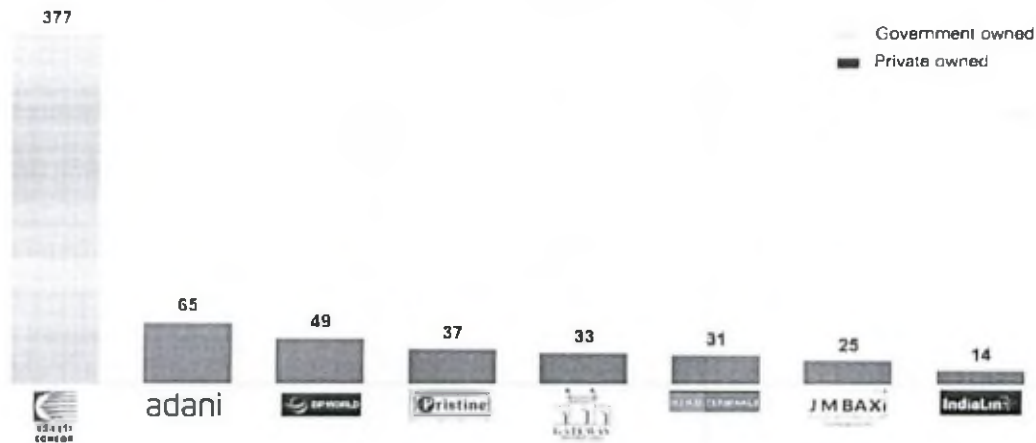
CONCOR dominates the Container Train industry in terms of container rakes whereas Adani is the largest private Container Train Operator (CTO)

The container train market was opened for private players in 2006. 14 container train operators including CONCOR signed up initially, currently, 17 operators are licensed, of which 15 are active in terms of operations. The main focus has been on the container movement service from the western ports to the northern hinterland. CTOs also act as an asset vendor for asset-light companies enabling them to scale their business by outsourcing their asset requirements.



Key players in CTO market

of operational rakes, FY24



Source(s): Annual report, Company websites, Industry report, Secondary research, 11attice analysis

4.4.1 Key trends for CTOs in India

Key trends	Rationale
 Dedicated Freight Corridor	Dedicated Freight Corridor is expected to be the game changer for CTOs - Currently, passenger trains and freight trains use the same lines, but passenger trains get priority over freight trains which cause unnecessary delay for freight trains - The DFC will allow freight trains to run freely without any hindrance from passenger trains - Around 70% of the freight trains currently running on the Indian Railway network are planned to be shifted to the dedicated freight corridors gradually as the corridors get completed - The corridors will be constructed with new design features to enable them to withstand heavier loads at higher speeds - Speed will increase to 100 kmph after DFCs. The load capacity will also increase due to the new moving dimensions and train length and width
 Containerisation	Containerization is the future - At present, coal is the key commodity for the railways (~50% of total freight in FY24), but in the next decade, the contribution of coal will steadily come down to about 20-25% as India reduces its dependence on fossil fuels - Rice, wheat, and other food grains are shifted to containers, thus entering containerized rail freight in a big way
 Reliability & transit time	- Indian Railways has introduced a special "Freight express" service concept for export trains which has seen services from the hinterlands to the port being moved on committed time basis - This has given confidence to the trade and improved the asset turn-around for greater efficiency for service providers - This kind of transit-reliability will enable modal shift from road to rail.

Source(s): Secondary research, 11attice analysis



4.4.2 Key issues for CTOs in India

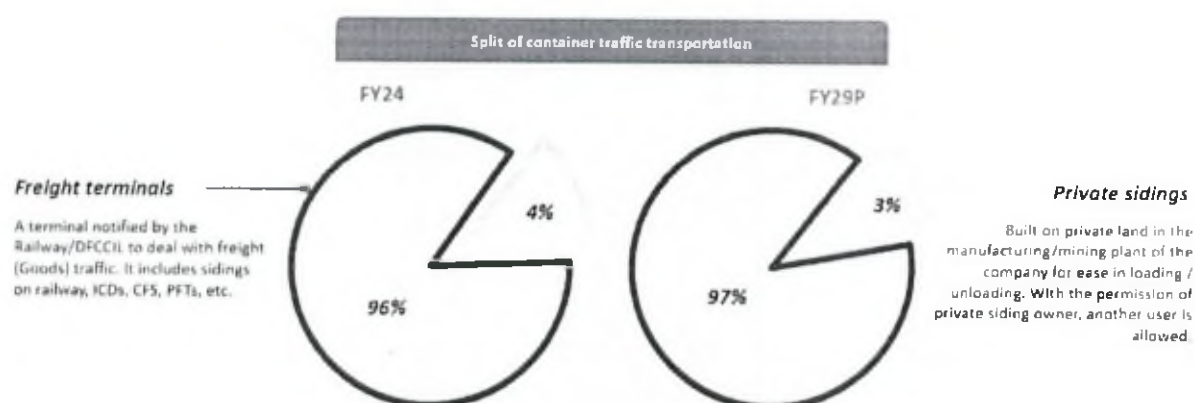
Cost of repositioning empty containers	- The cost of repositioning empty containers & wagons is high (as much as 60% of loaded cost), which adds considerably to overall cost for container services - It affects the availability of containers for exports, thus affecting the overall loaded container movement
Infrastructure access and development	- CONCOR continues to get preference to avail government land over other private container train operators despite being governed by a common concession agreement - Limits access to terminals developed on public land and encourages monopolistic pricing conditions for terminal use by CONCOR
Closed cross border markets such as Bangladesh	- While Nepal has been opened up for all private operators, Bangladesh still remains a restricted sector with only government controlled CONCOR permitted to operate services leading to monopolistic pricing effecting both costs & volume - Opening up such markets will increase competition & improve service quality
Controlled maintenance of privately owned wagons	- The IR which insists on controlling maintenance of privately owned wagons does not have the same incentive to repair & maintain assets as the operators who actually own the wagons. - This adds to the cost & reduces the up-time available from the assets
Logistical barriers	- Roads / trucks provide DTD services enabling direct pickup / drop from factory, port, ICD - For rail movement, containers are brought to station, where loading happens on a rail wagon resulting in multiple loading & unloading points - Limited stations with requisite equipment to pick up / load containers to truck / wagon

Source(s): Secondary research, 11attice analysis

4.5 Market assessment in Container Rail-Road logistics

The total container freight in India is either transported via private sidings or through freight terminals. In FY24, container traffic transported through private sidings is estimated to be only ~4% of the total traffic, leaving the majority ~96% through freight terminals. This split is expected to change as 97% for freight terminals leaving only 3% for private sidings by FY29. Requirement of special infrastructural arrangements in private sidings, development of multimodal logistics park supported by government initiatives will drive the shift to freight terminals from private sidings.

Due to the complex nature, high infrastructure cost and poor evolution of private siding, the new constructions are shifting from private sidings to freight terminals which will further drive the growth of the rail container multimodal market.



Source(s): Expert discussions, Secondary research, 11attice estimates

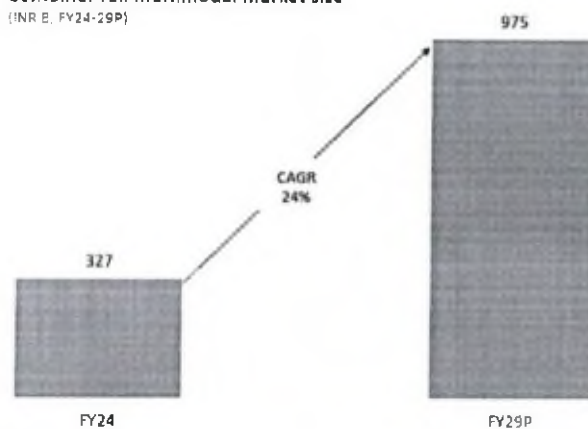


In case of traffic handled via freight terminals, road transportation plays a vital role as it provides integral last-mile connectivity in the logistics chain. Last-mile delivery is among the most complex process in the whole logistics process due to challenges like unpredictable nature, fluctuating customer demand, uncontrolled carbon emissions, lack of visibility in the supply chain, etc.

Container rail multimodal (railroad) market is estimated to grow at a CAGR of approximately 24% over the span of 5 years, increasing from INR 327B in FY24 to INR 975B by FY29. The share of container rail multimodal (railroad) market is approximately 2% of the total logistics market in FY24 which is expected to grow to 3% by FY29.

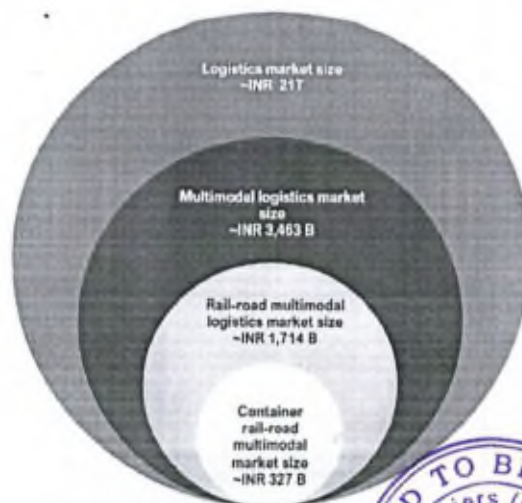
The growth of container rail multimodal market will be driven by the increasing shift from private siding to freight terminals along with rising need of containerization market in India & running of double stack containers. Furthermore, development of DFCs specifically WDFC can act as dedicated opportunity for the growth in this sector due to maximum share of container traffic transported through this corridor as compared to other commodities.

Container rail multimodal market size
(INR B, FY24-29P)



Source(s): Expert discussion, Ilatrice estimates

For the FY24, out of the total multimodal (railroad) market the share of container multimodal (railroad) is around 9% which is expected to approximately increase to 13% by FY29. In FY23, other than CONCOR, WCIL operated the largest volumes of containers by a private asset-light logistics player with a market share of 3% based on container volumes handled followed by Pristine Group (2%), Gateway Distriparks, Adani ports & logistics and JMBaxi at 1% each. The container freight volume is expected to grow from 85 MMT to 262 MMT over FY24 to FY29 at a CAGR of 25%.



Source(s): Expert discussion, 11attice estimates

Container rail-road multimodal market (US\$ 327B) in FY24 is ~19.1% as share of Rail-road multimodal logistics market (US\$ 1,714B), ~9.4% of Multimodal logistics market (US\$ 3,463B) and ~1.5% of the overall Logistics market in FY24. Multimodal transportation is emerging as a trend in logistics industry as customers are more willing to avail services from a player who can handle complexities with timeliness and accuracy with value-added services and provide them with customized solutions as per their needs. Hence, this current scenario of complex logistics, urges the need for the development of multimodal logistics. Such multimodal players handling complex logistics provides seamless integration of value-added services leading to increased customer dependence and stickiness, as a result such players garner more share of customer's logistics needs and requirements.



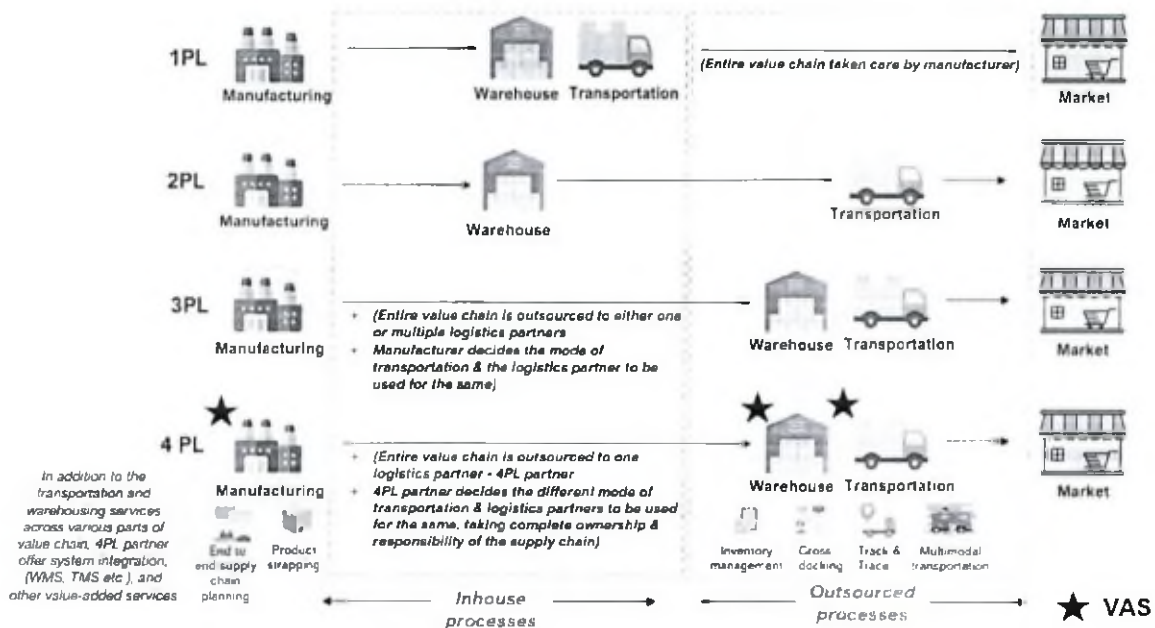
05

Value-added services in logistics market



5.1 Value-added services in logistics movement

The term “value-added services” are defined as services that add extra feature, form or function to the basic service. Over the past decades, competition in the logistics industry has steadily increased which has driven the need of offering value-added services to customers as it helps them optimize production costs, improve time management, reduces supply chain complexities, and improves quality control and traceability. Meeting customer demands is another major driving force behind value-added services.



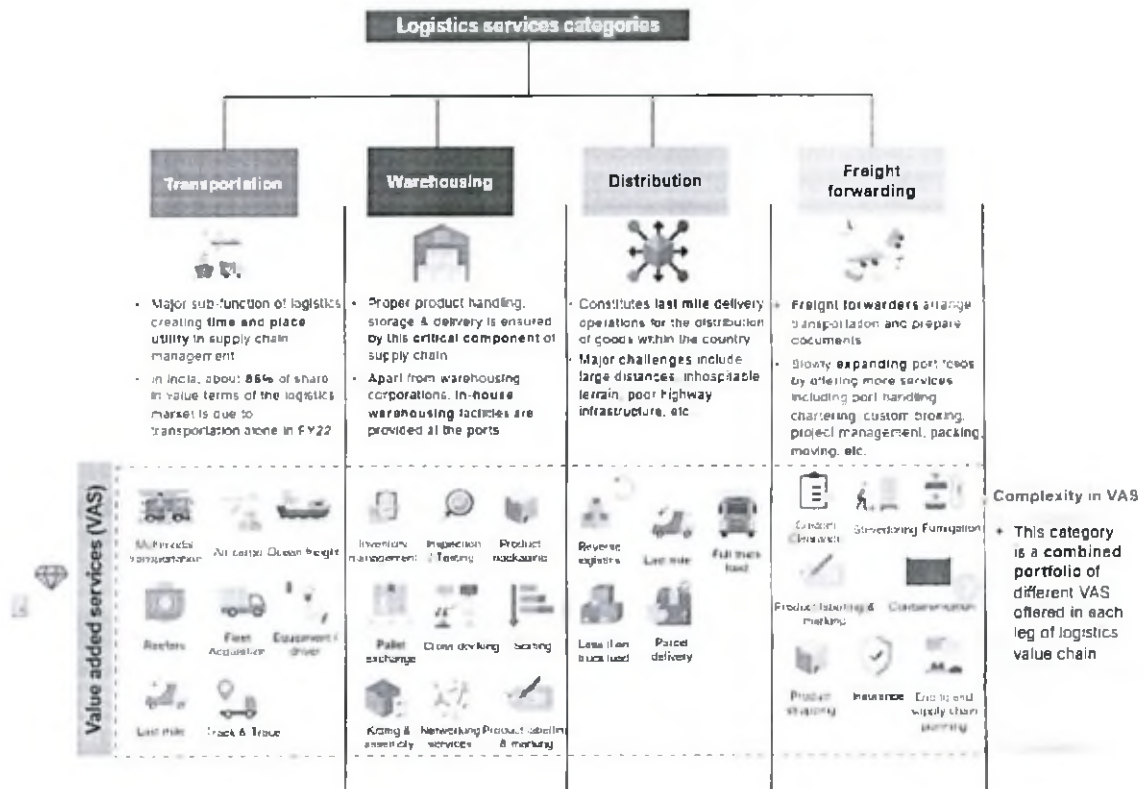
Source(s): Secondary research, 11attice analysis

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 partners not only takes 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 fulfilment, and customer satisfaction by enabling them to focus on their core business.



Source(s): Secondary research, 11attice analysis

As we can see, each segment of logistics has a set of varied value-added services to offer to their customers. This increases the complexities in the value chain which can be reduced with proper planning & implementation of these services. Currently, VAS act as a backbone in the entire existence of the multimodal logistics service otherwise without the capability to handle complexity transportation will be single mode.

5.1.1 Importance of value-added services (VAS)

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

- With the growing customer demand and increasing competitiveness, the nature of value chain becomes complex with a lot of layers of services in it. Hence, the proper planning and execution of these VAS will help in **reducing these value chain complexities**.
- VAS act as a **backbone** for the entire multimodal logistics service industry. It is due to VAS that multimodal transportation is possible as it **optimizes** to the most cost-effective mode.
- By streamlining the supply chain, value added logistics contributes to **reduction of production cost**. Some drivers for this reduction are improved efficiency of manufacturing with appropriate shipment size, packaging, and inventory levels
- Due to latest technological innovations, VAS allows **traceability** of the shipments thus providing a systematic operation by preventing internal confusion
- Effective time management** as VAS ensures goods and services are available when required along the supply chain with better inventory and transport management
- VAS contribute to **quality control** by incorporating operations such as packaging, labelling, dunnage etc.





Source(s): Secondary research, 1Lattice analysis

5.1.2 Market potential:

The Indian container rail multimodal (railroad) market & value-added services market presented a large addressable opportunity size of INR 1,300B in FY24 and is expected to grow to INR 2,916B by FY29 at a CAGR of 18% between FY24 and FY29.

	FY24	FY29P
Container multimodal (railroad) market (INR B)	327	975
Value added service market (INR B)	973	1,941
Total addressable market (INR B)	1,300	2,916

Source(s): 1Lattice analysis



5.2 Conclusion

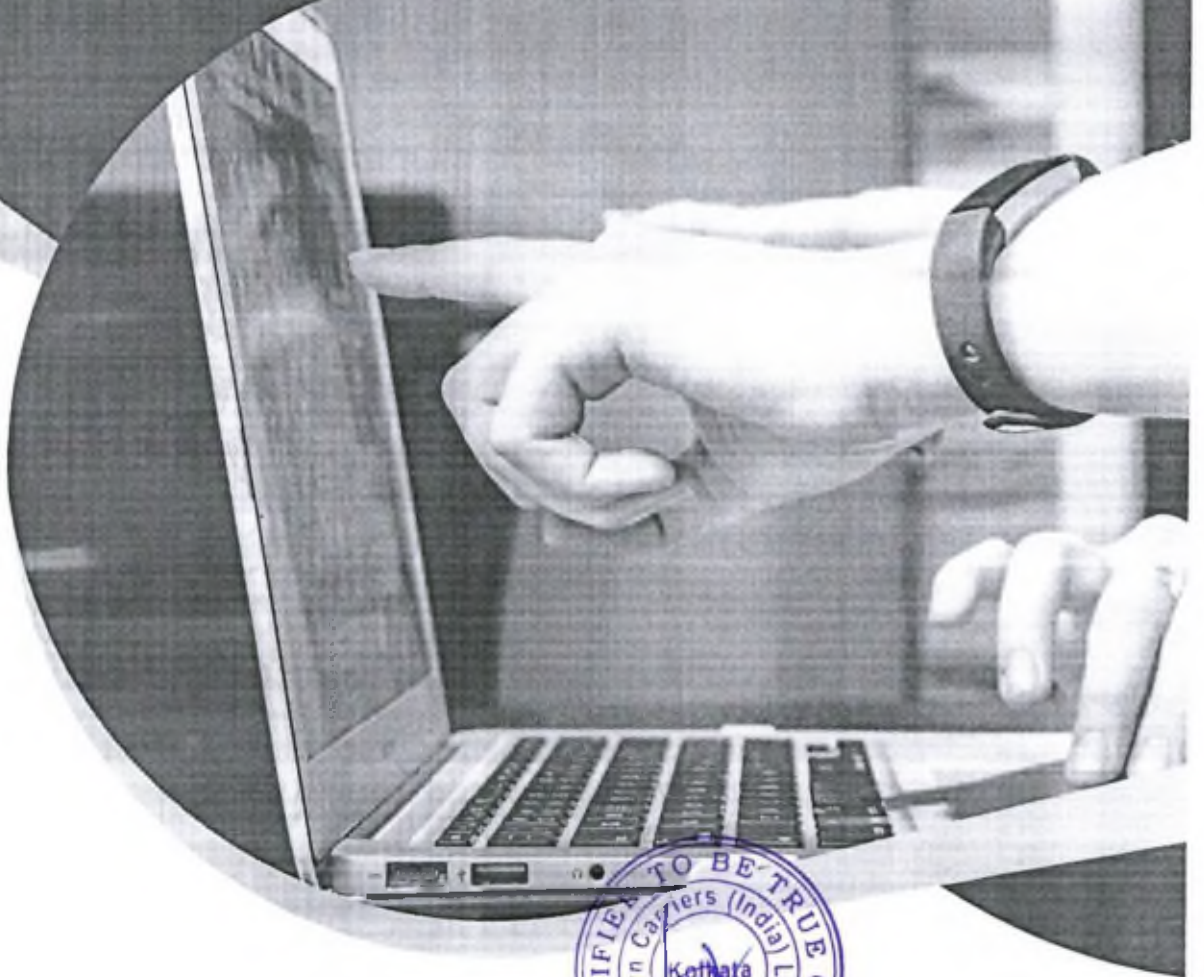
As seen from above, at each leg of value chain there are several value-added services offered, thus increasing complexities. The entire value chain of logistics is complex and has different layers of complexity thus allowing room for various value-added services to be offered at each juncture. Hence, this set of integrated value-added services provides expertise and coordination which play a significant role in reducing friction among customers and increase stickiness. Players handling multimodal transportation provides seamless integration of these value-added services leading to increased customer dependence on them, as a result such players garner more share of customer's logistics needs and requirements.

In the future, the growth of value-added services along with tech-driven players will transform the logistics sector in India.



06

Competitor benchmarking



6.1 Company Synopsis

6.1.1 WCIL's Service Offerings

With over 5 decades of experience, Western Carriers (India) Limited is the largest private multimodal rail focused 4PL asset light logistics company in India in terms of container volumes [handled / operated] by private players in FY23 with operations spanning the length and breadth of the country.

WCIL is one of India's largest and fastest growing logistics solutions providers with a fully scaled business.

- Other than CONCOR, WCIL operated the largest volumes of containers by a private asset-light logistics player with a market share of 3% (Domestic 6% & EXIM 2%) in FY23 based on container volumes handled and specializes in handling complex logistics by providing end-to-end supply chain solutions
- WCIL is larger⁴ than any private CTO⁵ in the country operating on an asset-light model based on volume of containers operated in FY23
- Based on 1Lattice analysis, WCIL is one of the largest platinum business associate of CONCOR in terms of railway TEUs providing 6% of the domestic railway TEUs to CONCOR in FY24
- Based on 1Lattice analysis, WCIL is the largest associate partner of CONCOR in terms of railway TEUs providing 4% of the export-import market railway TEUs to CONCOR in FY24
- WCIL is the only Associate Partner of CONCOR which provides substantial volume (4% in FY24) of EXIM business to them

WCIL has an asset light model for multimodal logistics as it owns just over 500 shipping containers (mostly specialized containers such as open top useful in transporting special commodities) , over 400 GPS-enabled heavy commercial vehicles and over 100 pieces of heavy equipment and does not own any private freight terminals or railway flat, wagons, rakes, etc; instead outsource its entire rail requirement from Container Train Operators as per client requirements. WCIL has been at the forefront of integrating modern technology into its services.

Business model comparison between Traditional 3PL service providers and WCIL

Parameters	Traditional 3PL service providers	Western Carriers (India) Limited
Level of service offerings	Transportation, warehousing & value-added services	End to end supply chain management*
Typical nature of asset ownership	Asset-light, mainly partner operated assets	Asset-light; leased infrastructure & fleet, selective ownership of strategic technology assets
Technological capabilities	Moderate with mainly manual operations	High with full control over the value chain
Complexity of operations	Medium	High

Note(s): *End to end supply chain includes transportation, warehousing, value added services and technology offerings to handle complexity of supply chain operations

⁴ Basis volume of containers operated

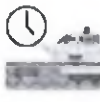
⁵ Container Train Operator



WCIL is one of the leading players in multimodal container / rail 4PL and complex supply chain services in India, handling complex logistics in the country for some of the renowned Indian corporates operating on an asset light model in FY24. They continue to evolve their business with progressing needs of their customers, many of whom are industry leaders in their respective sectors. WCIL's rail logistics services include the usage of a parcel cargo express train that runs from Maharashtra to Assam, commonly referred to as the Western Bullet.

WCIL serves all major routes and thus is well positioned to capture growth in the container traffic. WCIL holds experience of handling some prestigious projects.

Export Value Chain			
Stages	Value added services		WCIL offerings
 Packaging and transportation	 End to end supply chain planning	Planning of the entire supply chain i.e. transportation mode, logistics partner, CHA etc.	- Complete ownership & responsibility of the supply chain 100% customized to client requirements be it in plastics, wooden, steel - Arranged for all export cargo as per client needs - Customized as per requirement of client and specifications
	 Product packaging	- Done at exporter's factory - Goods packed into boxes / cartons by company's representatives	
	 Pre-shipment inspection	- Done at exporter's factory - Boxes packed are checked before shipping for documentation, type of goods transported, etc.	
	 Containerisation	Product packed into boxes are sealed and stuffed into containers and then transported via mode of road, rail, ship, etc.	
 Export haulage and documentation	 Transportation by road / rail	- Uses multimodal transportation among the combination of road, rail, air, etc. - Encompasses both first mile and last mile delivery operations	24x7 track and trace operations by team - Leaders in road safety management - Own team uses proprietary checklist - Instruction written in simple language
	 Loading document check	- Shipping agent performs all paperwork, custom checks, port dues, etc. - Done at port premises	
 Departure	 Stevedoring	- Securely tying up goods by lashing, palleting - Containers are lashed after being loaded on the ship by stevedores	- Provides stevedoring services to various shipping companies - For both break bulk and container cargo 100% as per export country needs with responsibility of WCIL
	 Container fumigation	- Fumigation of containers is done depending on the type of product / exporting countries - Done by trained technical staff	

Import value Chain			
Stages	Value added services		WCIL offerings
 Arrival and unloading	 End to end supply chain planning	Planning of the entire supply chain i.e. transportation mode, logistics partner, CHA etc.	- Complete ownership & responsibility of the supply chain - Inspection and custom clearances at all ports done by WCIL's team - Done for both break bulk and container cargo by own team - Own team of professionals with no tie-ups with sub vendors
	 Container inspection	- Done at the importer's port - Inspector checks container structural ability, exterior, damage signs, etc.	
	 Cargo unloading at container yard	- Unloading with the help of automated guided vehicles (AGVs) - Done by importer's representative	
	 Stevedoring	- Done before transporting good to container yards - Stevedores unlash or untie the containers	
 Inland haulage and custom clearance	 Custom House Agent of Importer	- Done at ICDs / CFSs - Done by custom house agents after containers are stacked properly in container yards	- Multimodal operator with AEO & CHA licenses nationwide - Error-free paperwork - As required both at custom and client side for end use - Re-stuffing as per client need
	 Cargo unloading at ICD/CFSs	- Done at ICDs / CFSs - After the approval from custom house, destuffing of containers takes place	
 Transportation	 Transportation by road / rail	- Done after custom clearance and destuffing, to transport goods to importer's factory - Uses multimodal transportation - combination of rail & road in case of no private siding	- Dedicated goods train across India - Mini rakes, VPU rakes, single wagon configurations constitutes its multimodal service portfolio



WCIL is one of the national logistics company to hold CHA licenses in its own name at most major ports in India. By doing their own CHA work, they are able to ensure seamless EXIM supply chain capabilities to their customers at all ports of entry and exit. WCIL has more than 5 decades of experience in CHA work in all major ports and in both breakbulk as well as containerized cargo. WCIL is one of the national logistics players whose promoters are both CHA license holders in their own personal capacity giving them a unique advantage in guiding personally this very intricate supply chain component in a cost-effective and competent manner.

WCIL has the road transport capability to serve the entire gamut of options from 1 MT package in Ace/LCV to 16 MT-21 MT in Truck to 42 MT in DC Trailers pan-India. It provides service offerings such as customized fleet for meeting customers' specific needs, for example, it runs customized, canopy trailers with V- Groove floor for transportation of high-value CR Coils for a large steel manufacturer. These special trailers reduce damage to the CR coil surface ensuring end customer requirement. Similarly, WCIL serves the FMCG industry in both RM/PM and FG movement in trucks throughout the country. WCIL's over 400 GPS-enabled heavy commercial vehicles are GPS mounted to enable track and trace and are equipped with FAST TAG for tolls. WCIL is one of the first in India to implement GPS systems on all cross-country moving commercial vehicles, one of the early implementers of FastTag cards for cashless toll payments, one of the early implementers of ATM cards for drivers to reduce cash requirements as well as for integrating expenses into their systems seamlessly and have also undertaken an RFID-focused beta project in India.

WCIL also offers stevedoring services from most major ports to their esteemed customers making their services end-to-end and seamless. They have experience in both breakbulk as well as containerized cargo for the same.

In addition to standard road, rail, water logistics (sea and river), WCIL's value-added offerings at various stages in the logistics value chain include but not limited to in-plant logistics, cargo and material handling, warehouse management, order management and pre-shipment inspection and quality control checks which is one of the key differentiators of their business. WCIL's customers achieve efficiency, flexibility, and cost benefits along with solving various complexities and issues faced by them. For instance, WCIL's Club Load Rake movement done for a leading steel manufacturer combines notified commodity (steel) with non-notified commodity (DRI- Sponge Iron) and thus, gave a substantial cost saving and increased flexibility to the client. This is only one example of keeping client interest at the forefront of any supply chain planning which ensures customer satisfaction.

As a result, WCIL provides integrated, customized end-to-end services across the logistics value chain to their customers. Such customized services have inherent entry barriers.

6.2 Competitive benchmarking

Container Corporation of India Ltd. (CONCOR) established in 1988, is now a market leader having the largest network of 66 ICD / CFS in India. The primary operation of CONCOR is to provide inland transportation of containers from ports using rail transportation along with the management of cold storage chains and warehouses.⁶

Over the past few years, CONCOR has been offering freight forwarding in India to transport their cargo safely and speedily between major centres of production and consumption. CONCOR offers growth opportunity, in the form of 'Business Associates' and 'Associate Partners' to reputed freight forwarders

⁶ Company website



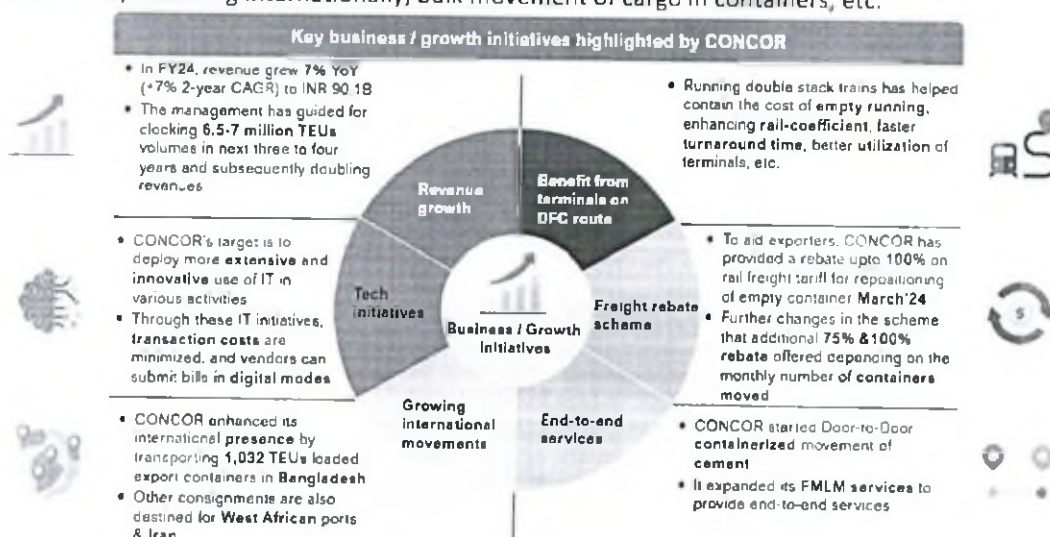
/ transport companies, with national / regional network to integrate their services with CONCOR to be more competitive in a globalized economy.

Based on 1Lattice analysis, WCIL is one of the largest platinum business associate of CONCOR in terms of railway TEUs providing 6% of the domestic railway TEUs to CONCOR in FY24

Based on 1Lattice analysis, WCIL is the largest associate partner of CONCOR in terms of railway TEUs providing 4% of the export-import market railway TEUs to CONCOR in FY24

Facilities & services of CONCOR:

CONCOR is working on various initiatives by expanding its bouquet of services, which include setting up of PFTs, expansion through setting up MMLPs on the DFC network, increase in double stack haul, e-business, venturing internationally, bulk movement of cargo in containers, etc.



Source(s): Analyst reports, Secondary research, 1Lattice analysis

6.2.1 Competitive benchmarking with business associates & associate partners of CONCOR:

WCIL operates on an asset-light model and takes railway flats, wagon, rakes etc. on hire instead of owning them. Though WCIL has the flexibility to hire from any private CTO – it hires from CONCOR due to its long business relationship. Thus, CONCOR acts as an asset provider for WCIL.

Based on 1Lattice analysis, WCIL is the largest platinum Business Associate⁷ & Associate Partner⁸ of CONCOR as of FY24 in terms of railway TEUs in FY24. ~6% of the domestic railway TEUs and 4% of the export-import market railway TEUs of CONCOR's business are handled by WCIL making it the only associate partner of CONCOR which provides substantial volume (4% in FY24) of EXIM business to them.

⁷ Terminology used by CONCOR for their partners in domestic business

⁸ Terminology used by CONCOR for their partners in EXIM business



	Year	Parameters		
			CONCOR	WCIL
Rail TEUs	FY20	Domestic ('000)	593	41
		EXIM ('000)	3,155	123
	FY21	Domestic ('000)	608	43
		EXIM ('000)	3,036	136
	FY22	Domestic ('000)	804	67
		EXIM ('000)	3,269	150
	FY23	Domestic ('000)	954	71
		EXIM ('000)	3,407	122
	FY24	Domestic ('000)	1,072	61
		EXIM ('000)	3,407	152

Source(s): CONCOR investor presentation accessed by 1Lattice, Expert discussions, 1Lattice estimates and analysis,

The other major partners of CONCOR include TransRail Logistics Ltd (DARCL), TCI CONCOR, Srinivasa Roadways, etc.

	Year	Parameters		Player 1	Player 2	Player 3
			Western Group Delivering Trust			
Rail TEUs	FY20	Domestic ('000)	7%	3%	3%	1%
		EXIM ('000)	4%	-	1%	-
	FY21	Domestic ('000)	7%	6%	5%	1%
		EXIM ('000)	4%	-	1%	-
	FY22	Domestic ('000)	8%	6%	2%	1%
		EXIM ('000)	5%	-	1%	-
	FY23	Domestic ('000)	7%	6%	2%	2%
		EXIM ('000)	4%	-	1%	-
	FY24	Domestic ('000)	6%	7%	2%	2%
		EXIM ('000)	4%	-	1%	-

Source(s): CONCOR investor presentation accessed by 1Lattice, Expert discussions, 1Lattice estimates and analysis,

WCIL's asset-light model, deep understanding of its customers' requirements, several years of industry experience of its promoters and their Company of over five decades, execution capabilities and their relationships with third-party service providers and vendors, has contributed to an increase at a CAGR of ~6% in container volume handled by them through rail transportation, from 179,287 TEUs in Fiscal 2021 to 212,500 TEUs in Fiscal 2024. The aforementioned factors have contributed to their position as one of India's largest and fastest-growing logistics solutions providers with a fully scaled business.



6.2.2 Competitive benchmarking with private CTO players in terms of volume of container rail traffic:

CONCOR leads the CTO market in India by holding ~65%⁹ of the container rail traffic transported in India over FY20-23. The remaining container traffic is managed by private CTOs operating in India. Of this 65% plus market share of CONCOR, WCIL provided 7% in domestic and 4% in EXIM in FY23. Hence, WCIL's domestic and EXIM market share based upon container volume handled was 6% and 2%, respectively, in Fiscal 2023 which is larger than any private CTO¹⁰ in the country. In line with its asset-light model, WCIL does not own any rakes any private freight terminals or any railway flats, wagons and rakes etc.

WCIL operated the largest volumes of containers by a private multi-modal rail focused 4PL asset-light logistics player with a market share of 3% (Domestic 6%¹¹ & EXIM 2%) in FY23 based on container volumes handled and specializes in handling complex logistics by providing end-to-end supply chain solutions.

Parameters (FY23)		WCIL	Player 1	Player 2	Player 3	Player 4	Player 5	Player 6	Total
Container not transported using leased rakes	Domestic (TEUs, '000)	71	X	7	11	25	X	6	1,295
	EXIM (TEUs, '000)	122	97	68	17	93	50	24	5,899
	Total (TEUs, '000)	193	97	75	29	118	50	30	7,194
Market share*	Domestic	6%	0%	1%	1%	2%	0%	0%	-
	EXIM	2%	2%	1%	0%	2%	1%	1%	-
	Overall	3%	1%	1%	0%	2%	1%	1%	-

Note(s): Players include top 6 leading companies such as JMB&I, Adani Logistics, Gateway Disruptors, Hind terminals, DP World and Pristine Group not in any particular order

Awaiting for the FY24 annual report of Concor for data on EXIM and Domestic volume transported in million tons, which is used as part of methodology to calculating the market share

Source(s): Annual reports accessed by 1Lattice, Expert discussions, 1Lattice estimates and analysis

⁹ 63% EXIM & 79% domestic

¹⁰ In comparison to leased capacities of other private CTOs catering to domestic & EXIM container movement

¹¹ CONCOR has ~75% of market share and WCIL hold 7% market share of CONCOR



WCIL's ROE and RoCE was among the highest in the industry in FY22 and WCIL's RoE was among the highest in the industry in FY24.

Parameters	WCIL Group Western Sky	Player 1	Player 2	Player 3
Revenue from Operations (INR million)	16,857.69	86,534.10	12,538.00	55,059.70
Revenue growth rate (%)	3.23	5.93	1.03	7.36
Profit after tax (PAT) (INR million) ⁽¹⁾	803.47	12,320.40	1,316.90	(520.70)
PAT Margin (%) ⁽²⁾	4.77	14.24	10.50	(0.95)
EBITDA (INR million) ⁽³⁾	1,519.24	23,282.80	1,943.90	2,469.4
EBITDA growth rate	20.07	5.83	(3.60)	(10.40)
EBITDA Margin (%) ⁽⁴⁾	9.01	26.91	15.50	4.40
Net Debt/EBITDA ⁽⁵⁾	1.52	(1.40)	(0.09)	1.08
Debt to Equity Ratio ⁽⁶⁾	0.67	(0.00)	0.00	0.67
Return on Equity (RoE) (%) ⁽⁷⁾	22.41	10.65	20.25	(9.78)
Return on Capital Employed (RoCE) (%) ⁽⁸⁾	29.23	13.44	24.32	3.80
Working Capital Days ⁽⁹⁾	96.00	(2.00)	28.00	(40.00)

Note(s): Players includes companies such as TCI express, Concor and Mahindra Logistics not in any particular order

Player 1 Net debt / EBITDA and ROCE for FY24 is calculated without 'current maturities of borrowings and accrued interest' as that is available in notes of annual report, which is yet to be released

1. PAT refers to restated profit after tax.

2. Profit margin refers to profit for the year/period divided by revenue from operations during the relevant year/period, and expressed as percentage

3. EBITDA refers to earnings before interest, taxes, depreciation and amortization.

4. EBITDA Margin refers to EBITDA during a given period as a percentage of revenue from operations during that period

5. Net Debt to EBITDA Ratio refers to net debt (i.e., borrowings (current and non-current) and current maturities of long-term borrowings less cash and cash equivalents and other bank balances (current and non-current) divided by EBITDA.

6. Debt to Equity ratio is calculated as total borrowing divided by total equity

7. RoE refers to profit for the year/period, divided by the average total equity (sum of opening and closing divided by two) during that year/period and is expressed as a percentage.

8. RoCE refers to EBIT divided by Capital Employed and expressed as a percentage. EBIT refers to earnings before interest and taxes. Capital Employed refers to the sum of Net Worth, long-term borrowing, lease liability and deferred tax.

9. Working capital days refers to trade receivables days less trade payable days. Trade receivables days have been calculated as trade receivables divided by revenue from operations multiplied by 365 days for the complete fiscal years. Trade payables days have been calculated as trade payables divided by operational expenses multiplied by 365 days for the complete fiscal years.

Source: The financial information of WCIL is derived from the restated audited consolidated financial information of WCIL, its erstwhile subsidiary, namely Western Skyville Private Limited and their associates, namely Success Suppliers Private Limited, S M P Properties Private Limited and F.M Carriers Private Limited, Financial Years ended March 31, 2024, March 31, 2023, March 31, 2022 and March 31, 2021.

Source for above mentioned industry peer information: Peer company's annual reports accessed by 11altice, 11altice analysis.

6.2.4 Competitive benchmarking in terms of ability to handle multimodal logistics and value-added services:

WCIL has a diverse range of value-added services at each step making it a truly integrated one-stop complex logistics solution provider, The portfolio of services offered by WCIL also includes VAS related to warehouse facilities offered at CFS / ICDs / ports, etc. These services include palletization, sorting, labeling, repacking, inventory management, etc.



Parameters		WCIL	Player 1	Player 2	Player 3	Player 4	Player 5	Player 6	Player 7
Services	Strapping	✓							NA
	Palletisation	✓							NA
	Goods labeling / marking	✓							NA
	Shipment Inspection	✓	✓	✓	✓	✓		✓	NA
	Containerization	✓	✓	✓	✓	✓	✓	✓	✓
	Fumigation	✓	✓	✓	✓	✓	✓	✓	NA
	Custom clearance	✓	✓	✓	✓	✓	✓	✓	✓
	Cargo loading / unloading	✓	✓	✓	✓	✓	✓	✓	✓
	Stevedoring	✓	✗	✓	✓	✓	✓	✓	✓
Business segments	Warehousing	✓	✓	✓	✓	✓	✓	✓	✓
	Domestic	✓	✓	✓	✓	✓	✗	✓	✓
	EXIM	✓	✓	✓	✓	✓	✓	✓	✓
Geographical presence		✓		✓	✓			✓	✓
Type of modes (Multimodal, intermodal)		Multimodal	Intermodal	Multimodal	Multimodal	Multimodal	Intermodal	Multimodal	Multimodal

No presence Partial presence Full presence

Note(s): Players include companies such as JMB&I, Adani Logistics, Gateway Distriparks, Hind terminals, DP World, Pristine Group and TCI express not in any particular order

Source(s): Company websites and investor presentations accessed by 11altice, Primary conversations, 11altice estimates and analysis

WCIL also manages end-to-end, entire documentation process for its customers with the ease of an in-house CHA team using its own customs license. WCIL has the ability to deliver time-bound small courier cargo and jumbo packages throughout India, by serving as a "one-stop/single-window logistics company" for its customers, irrespective of their size. WCIL has gained popularity among its customers due to several crucial reasons. The major reason is the 'one-stop/single-window' concept where WCIL provides the entire gamut of services to its customers thus ensuring deliverables in a cost-optimized & time-efficient manner. Thus, the nature of contract, the utmost sense of responsibility to deliver end-to-end multimodal services in a most efficient manner constitutes some of the critical reasons behind their solid value proposition. Premium value-added services such as stevedoring and fumigation are performed by WCIL's own team of trained stevedores/fumigators for each consignment. Hence WCIL controls and manages the entire 4PL/complex supply chain for their customers using their own resources giving them unmatched ability to ensure customer satisfaction.

Hence, WCIL is one of the few players in the Indian logistics industry with the capability to deliver cost-efficient, time bound and customized services and solutions which include large container movement, logistics and long-haul deliveries and vendor-coordination across the supply chain along with value-added services such as product packaging, cargo handling, customs clearance, pre-shipment inspection, containerization, in-plant logistics, JIT inventory management and warehouse planning.

6.2.5 Key threats and challenges faced:

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

1. **Increased Competition:** Rail logistics faces stiff competition from rising private CTO players along with road and maritime transport service providers, leading to potential price wars and reduced market share



2. **Slower adoption of Rail Modal:** Slower shift from current dominant road modal to rail modal shift would require substantial investment of capital and time for companies to change operations, leading to slower adoption rates
3. **Operational Risks:** Rail accidents or aging rail infrastructure or equipment malfunctions can halt operations, resulting in costly delays and reputational damage
4. **Capacity Constraints:** Limited capacity on key routes can cause bottlenecks, delays, and increased transportation costs
5. **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
6. **Technology Risks:** Rapid technological change requires costly upgrades, while reliance on digital systems increases vulnerability to cyber threats



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We will be happy to share perspectives

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