Logistics

DFC to increase modal share of railways in freight; Formalization of sector to drive growth for organized road players

Freight Modal mix set to change in favor of Railways as DFC gets commissioned.

With DFC commissioning and road transport getting costly, rail share is set to rise

- The share of freight movement has started to shift from roads to railways, with the Phase-wise commissioning of dedicated freight corridors (DFCs). The National Rail Plan (NRP) expects the share of freight traffic by rail to go up to 40% by 2031 from ~18% in 2020.
- A sharp rise in fuel costs (diesel price in Mumbai has increased to INR 95 from INR 75 over the last four years) together with an increase in insurance charges is set to reduce the competitiveness of the roads. Additionally, the implementation of BS-VI and an increase in price of steel and other commodities has driven up the cost of trucks. Average cost of a CV (MHCV) has registered a CAGR of 6% to INR 2.3m as of Dec'22 from INR 1.7m in FY18.
- Hence, higher cost of operations of freight movement via road makes rail a more efficient mode of transportation.
- Due to the aforementioned reasons, volumes of some of the key commodities have started to shift to railways. On a monthly basis, average domestic Container volumes carried by Indian Railways have increased to 1.5m tonnes in FY22 from ~1m tonnes FY20.
- Further, Container Corporation of India (CONCOR) indicated that it has moved ~50,000 tons of bulk cement in specialized tank containers through rail in 9MFY23. As DFC becomes fully commissioned, several other commodities are expected to shift from road to rail.

While Road share in Freight modal mix would shrink, the share of organized segment would rise, owing to reforms such as E-way bill and GST.

Organized market share to increase gradually for road transport

- Although road transportation is losing its market share to railways, it will continue to dominate goods movement across India, with ~60% share by 2031 (currently, ~70% of the goods movement is via road).
- While roads would lose its share to railways on an overall level, the sector would experience a strong shift to the organized segment from the unorganized segment, with the introduction of reforms such as GST, E-way bill, and e-invoicing.
- Also, as cost of operations increases (because of fuel/toll/insurance/Compliance, etc.), the unorganized players are struggling to compete with the organized players.
- We expect the share of organized players in the road freight movement to increase to ~20-25% in the medium to long term (~10% currently).

Express segment seeing high competition with rising presence of new age companies

Competition intensifying with new entrants in the express segment

- Tech-driven entrants, including Delhivery and Ecom Express, are shaking up the sector, enabling greater efficiency in both the B2B and B2C segments. Some are more dominant in the B2C space and are now making their way into the B2B segment.

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- Our channel checks suggest that companies are constantly carving out the elements of the value chain, and exploiting digital technology in areas of route optimization, creating efficiency through the micro tracking of the fleet, and reducing costs.

Outlook for logistics remains robust with Government led reforms, changing industry preference and newer business segments opening up

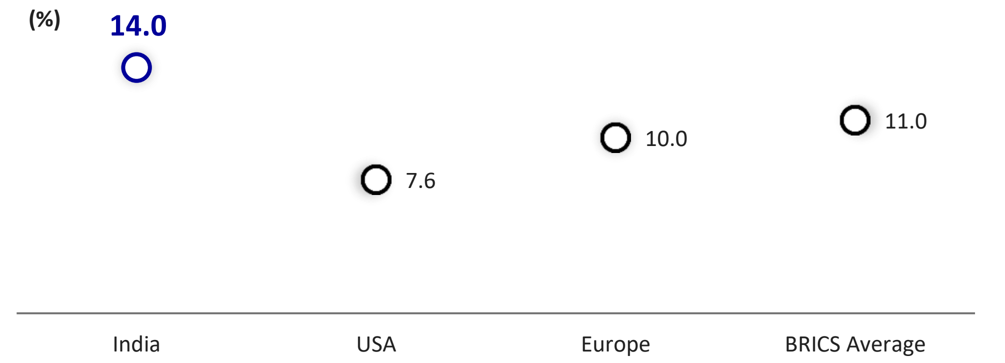
Demand Scenario and Outlook

- Demand from manufacturing (led by the "Make in India" campaign), retail, automotive, and pharmaceutical sectors have been strong. Favorable government policies such as Production Linked Incentive (PLI) scheme and Atmanirbhar Bharat are expected to further propel growth in the sector.
- Industry preferences are shifting toward integrated supply-chain services and other sophisticated solutions such as inventory optimization and data analytics from isolated offerings such as transportation or warehousing.
- High growth in ecommerce in India and demands for specialized needs of online delivery (faster delivery, return management, and cash on delivery) are expected to sustain in the future.
- Revenue growth over the medium term would continue to be driven by demand from varied segments such as e-commerce, FMEG, pharmaceuticals, and industrial goods, coupled with the industry's paradigm shift toward organized logistics, post implementation of GST and e-way bill.
- The higher share of railways in the overall modal mix and formalization of the sector is expected to drive the overall logistics industry, delivering a 10-12% CAGR over FY22-25E. Integration of technology and offering of value-added services (warehousing, express parcel, etc.) are likely to keep the growth momentum in the near to medium term.

Inefficient modal mix keeps logistics costs elevated

India's logistics cost to GDP ratio hovers around 13-14% as compared to 8-10% for other major economies. The high cost of Logistics in India has been due to an inefficient modal mix, owing to a relatively inefficient road segment. More than 70% of the freight movement in India is via road as compared to 44% in China, 45% in Europe, and 39% in the US.

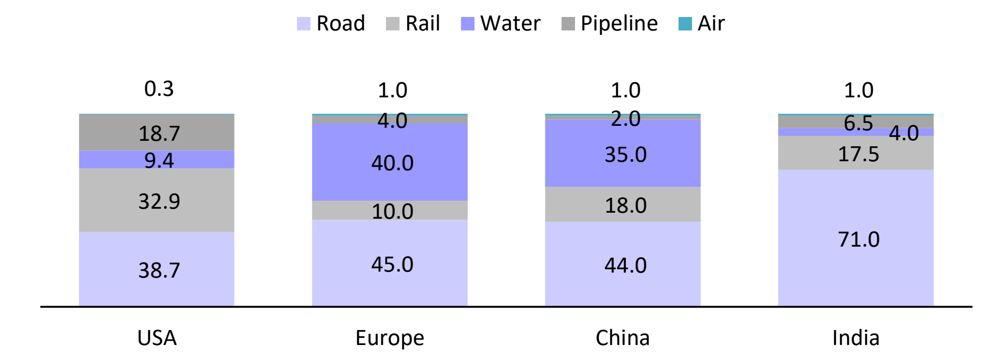
Exhibit 1: Higher Logistics cost, as a percentage of India's GDP, is adversely impacting competitiveness



Source: NITI Aayog, MOFSL

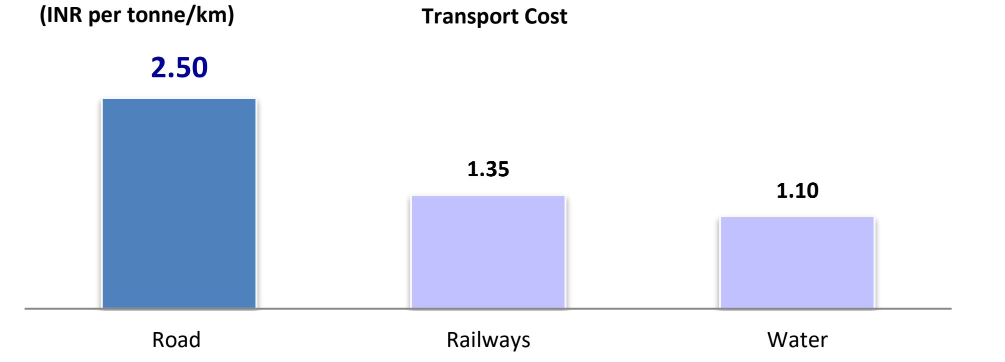
KEY REASONS FOR THE HIGHER COST OF LOGISTICS INCLUDE

Exhibit 2: Modal mix in India is skewed toward Road segment (2020)



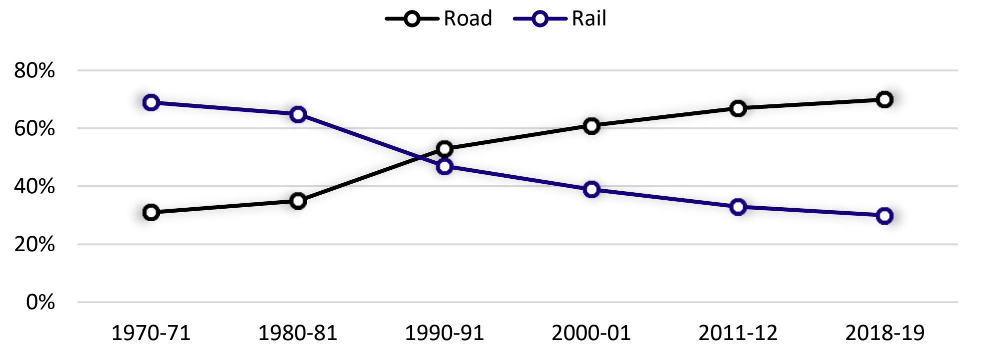
Source: NITI Aayog, MOFSL

Exhibit 3: Cost of Road transport much higher than others



Source: NITI Aayog, MOFSL

Exhibit 4: In the past, Railways has continuously lost its share to Roads



Source: Industry reports, MOFSL

KEY REASONS FOR RAIL LOSING SHARE TO ROADWAYS

Inability to provide end-to-end delivery

- Unlike roads, the railways are unable to provide last mile delivery. This creates an additional burden on the consigner

Track sharing with passenger Rail and capacity constraints

- Passenger and freight trains share the same tracks, with the former given higher priority. This leads to increasing lead times for rail-based freight and reduces reliability

Lack of arrangement to aggregate smaller loads

- There is a lack of standardized processes to aggregate smaller loads for contracting individual or partial wagons. That's why non-bulk items such as Electronics are transported via Road

Lower speed of trains

- Freight trains in India usually travel at lower speeds than global standards. This increases lead times of goods and adversely impacts demand

Source: MOFSL

Logistics costs to reduce with increasing share of rail in freight movement

- In order to bring the overall logistics costs of India to competitive levels, the Government of India has formulated the National Rail Plan (NRP), where the share of Indian railways in the overall modal mix is envisaged to increase to 40% (~18% in 2020) by 2031.
- Further, with dedicated freight corridors getting operationalized in phases, the market share for rail would likely increase in the modal mix.

National Rail Plan (NRP) Vision 2030

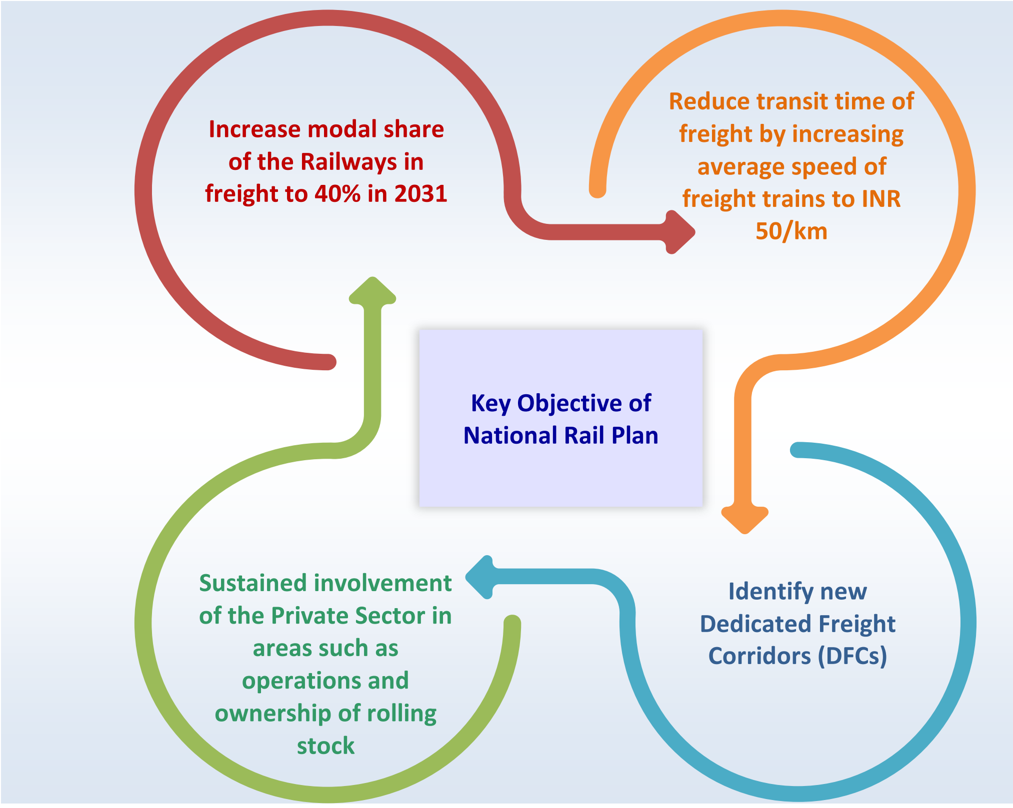
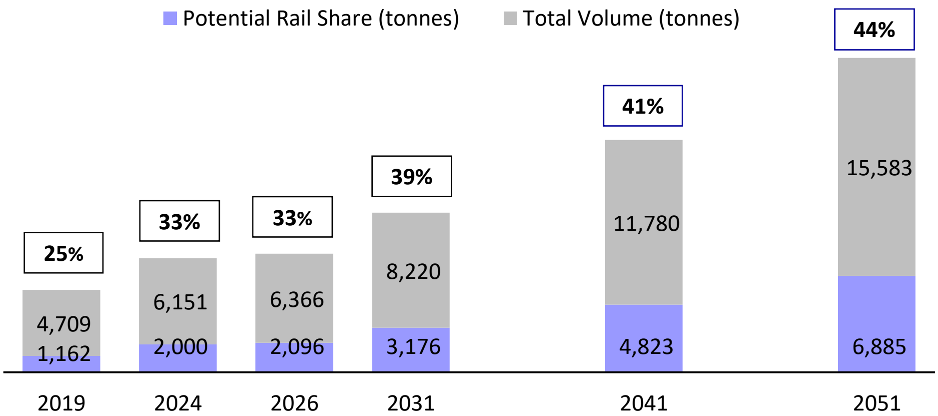
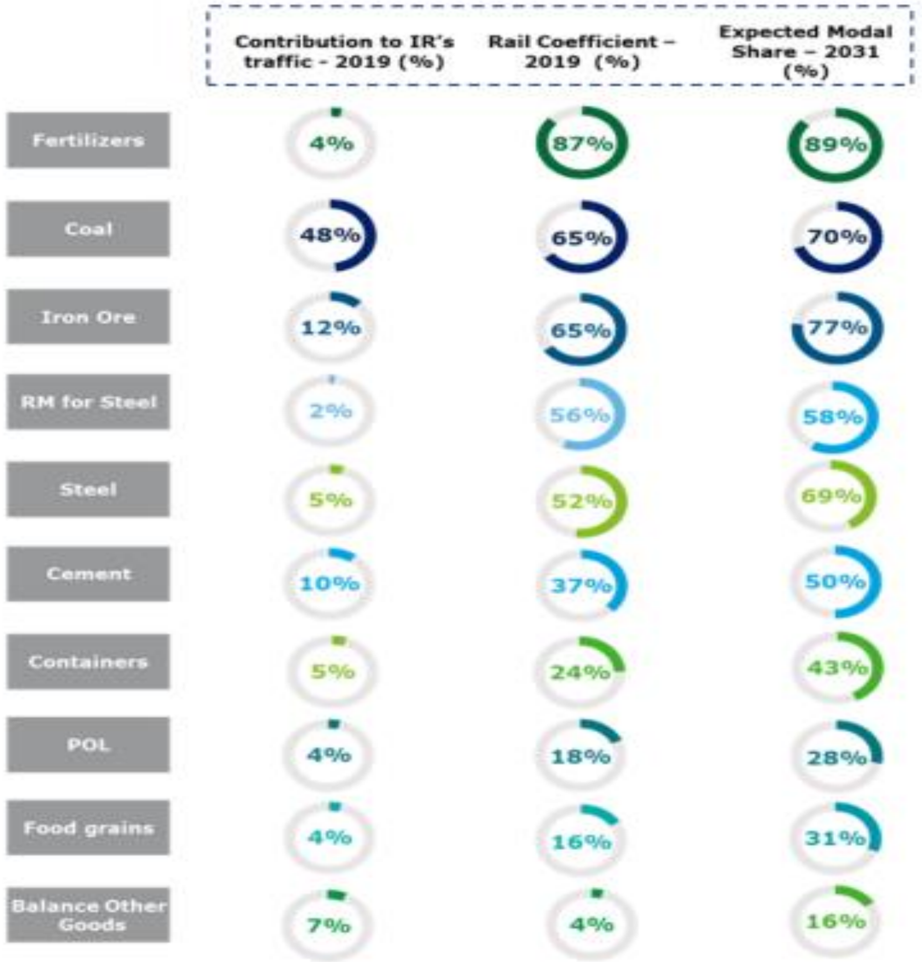


Exhibit 5: As per NRP, share of Railways to increase to 40% by 2031



Source: NRP, MOFSL

Exhibit 6: Projection of rail share in key commodities groups



Source: National Rail Plan, MOFSL

DFC to increase share of Railways in modal mix

The Dedicated Fright Corridor (DFC) is expected to result in a change in the modal mix toward the cost-efficient Railways segment. The Dedicated Freight Corridor Corporation of India (DFCCIL) has so far commissioned ~2,300 kms of the proposed 2,843kms, pertaining to stretches undertaken by the government for both the corridors.

Exhibit 7: Completion status of WDFC and EDFC

Section/packages		Length	Commissioning target	Financial progress
WDFC				
Rewari-Palanpur	Rewari-Madar	306km	Commissioned	82%
	Madar-Palanpur	353km	Commissioned	
Palanpur-Makarpura		290km	Dec'23	
Makarpura-Sachin		135km	Jun'23	
Sachin-Vaitarna		186km	Jun'23	
Vaitarna-JNPT		109km	Mar'24	
Dadri-Rewari		127km	Mar'23	
EDFC				
Bhaupur-Khurja		351km	Commissioned	94%
Bhaupur-DDU		402km	Mar'23	
DDU -Sonnagar		137km	Commissioned	
Khurja-Dadri		46km	Commissioned	
Pilkhani–Ludhiana		179km	Jun'23	
Khurja-Pilkhani		222km	Jun'23	

Sources: DFCCIL, MOFSL

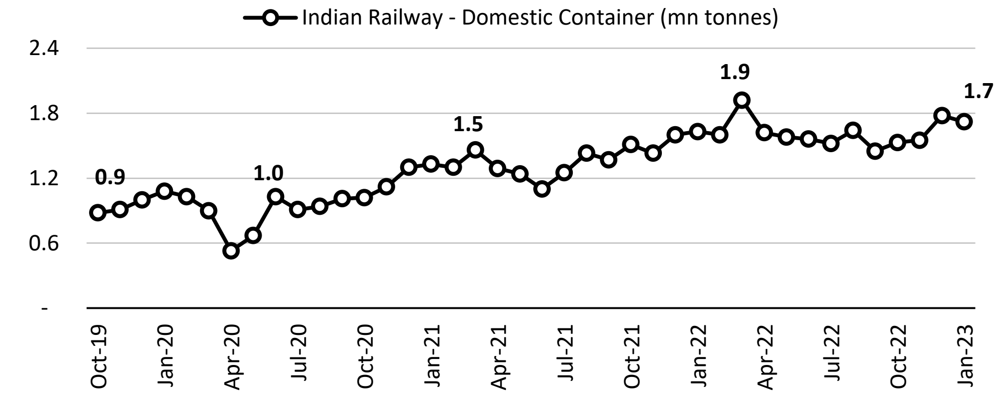
High Operating Expenses make road transit less feasible than railways

	2018	2022
Price of Diesel	INR 65/litre	INR 95/litre
Toll Charges (Trucks > two axle)	1,170	1,570
Average Selling Price (MHCV – INR m)	1.7	2.3

- Fuel Cost constitutes ~60% of operating expenses for fleet operators. From 2018 to 2022, diesel price has witnessed a CAGR of 10%, severally impacting the margins.
- Toll charges on State and National highways have been linked to Wholesale Price Index (WPI) and are subject to increase every year. In an inflationary environment, road transporters are paying higher toll charges for the same distance travelled.
- Hike in price of commodities, including steel and aluminum, have increased the costs of trucks (MHCV and LCV) for fleet operators.

The impact of DFC (partial commissioning) is already visible with a sharp increase in domestic container volumes via rail. Container Corporation of India (CONCOR) indicated that it moved ~50,000 tons of bulk cement in specialized tank containers through rail in 9MFY23. As DFC becomes fully commissioned, several other commodities are expected to shift their mode of transport to rail from road.

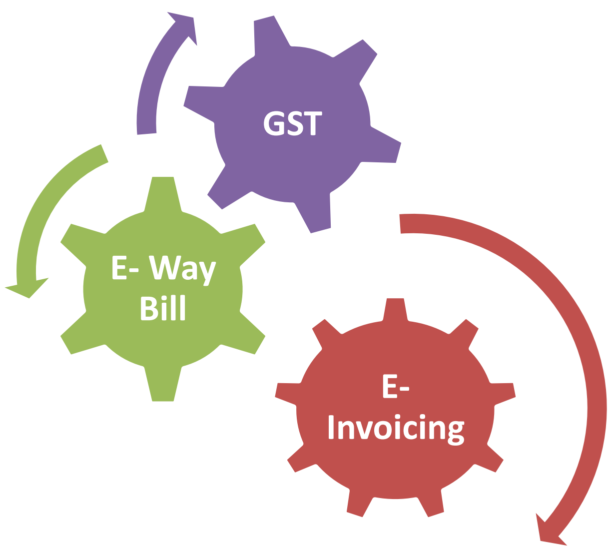
Exhibit 8: Indian railway domestic Container Volumes on an uptrend



Source: Indian Railways, MOFSL

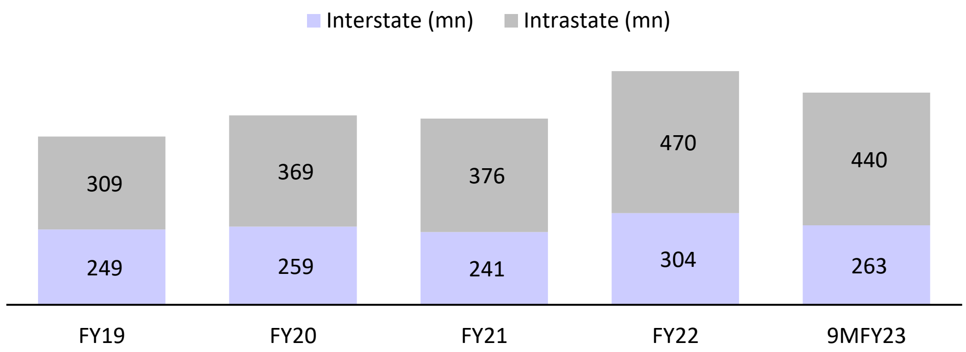
Formalization of the sector, led by policy reforms

- Over the last few years, the government has undertaken several major reforms (GST and e-way bill), leading to higher formalization of the sector, greater transparency, and faster turnaround time.
- With the abolishment of state-level taxation through GST, the industry is heading toward consolidation. Transportation is now much faster and smaller inefficient warehouses have made way for larger centralized warehouses.
- E-way bill has improved transparency in the Road Freight industry, which has been traditionally dominated by the unorganized segment.



- These reforms are propelling higher growth, formalization of the sector, and are targeting to reduce logistics cost to GDP to less than 10% (~14% currently).
- E-way bill generation has seen strong growth since its implementation in FY19. Implementation of E-way bill (single bill for Pan-India transportation) has led to better transparency and compliance, aiding the organized sector.

Exhibit 9: E-way bill generations since implementation



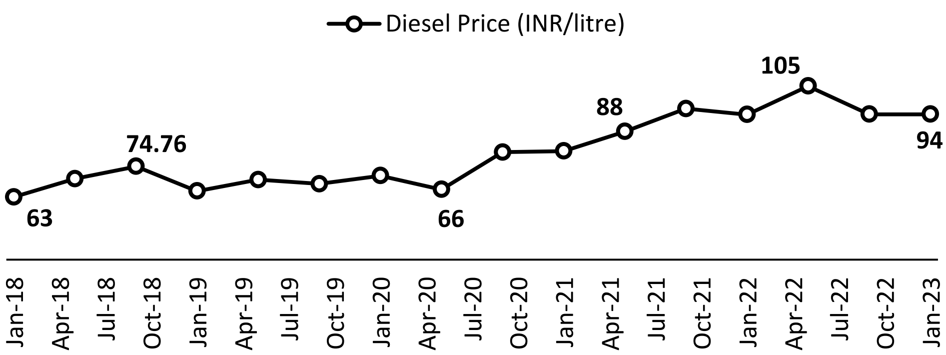
Source: GSTN, MOFSL

- With increased use of technology and higher share of other cheap and efficient modes of transportation such as railways and waterways, logistics costs are expected to fall further.

Rising cost of operations will stifle the unorganized sector; large players to gain market share

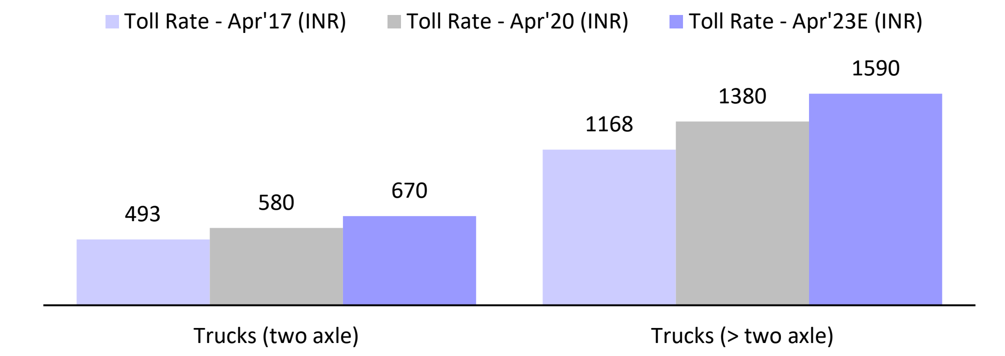
- Cost of operations for road fleet operators has increased in the past few years - price of diesel has increased to INR 95/litre in Jan'23 from INR 65/litre in Jan'18 and toll charges have increased in line with WPI inflation. Increasing price of several commodities such as steel and aluminum has driven up the Average Selling Price (ASP) of trucks (MHCV and LCV). Further, with the implementation of BS-VI, technology up-gradation has pushed cost of trucks even higher.
- Owing to the aforementioned reasons and higher compliance costs (GST and E-way bill), small fleet operators are struggling to compete with organized/large road fleet operators.
- Although the share of road transportation in the modal mix is expected to fall to ~60% by 2031 (currently 70%), the share of organized players in road transportation is expected to increase to ~20-25% (currently 10%).

Exhibit 10: Diesel Price remains elevated



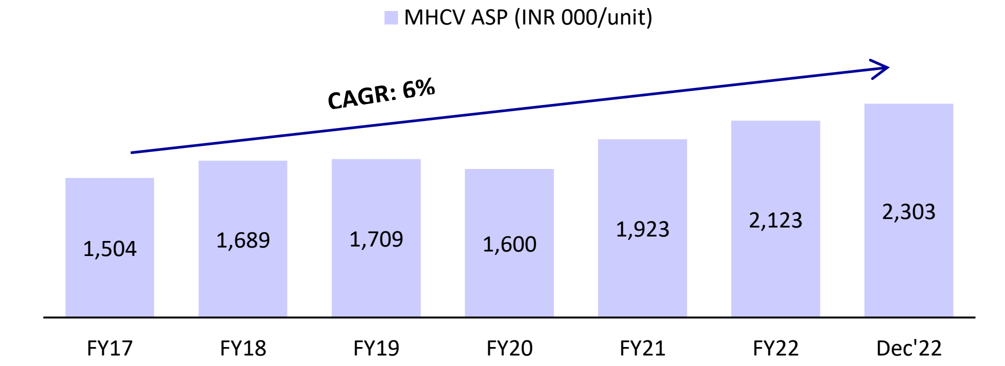
Source: Industry Reports, MOFSL

Exhibit 11: Toll charges on Mumbai-Pune Expressway



Source: Media Reports, MOFSL

Exhibit 12: Average Selling Price (ASP) for trucks in India



Source: Industry reports, MOFSL

Outlook

- Demand from manufacturing, retail, automotive, and pharmaceutical sectors have been strong, supported by favorable government policies such as Production Linked Incentive (PLI) scheme and Atmanirbhar Bharat.
- High growth in ecommerce in India and demands for specialized needs of online delivery (faster delivery, return management, and cash on delivery) are expected to sustain into the future.
- The overall Logistics industry is expected to register a 10-12% CAGR, driven by a higher share of railways in the overall modal mix and formalization of the sector.
- Revenue growth over the medium term would continue to be driven by demand from varied segments such as e-commerce, FMEG, pharmaceuticals, and industrial goods coupled with the industry’s paradigm shift toward organized logistics players, post the implementation of GST and e-way bill.

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