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IRFAI

INDIAN RAILWAY FREIGHT ACTIVITY INDEX

Q3 2023

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Introducing...

Indian Railway Freight Activity (IRFA) Index

At a time when the government aims to boost the railway freight modal share; adopting an index-based approach that captures factual data and user's opinion to monitor Indian railway freight activity can be useful for the various stakeholders in the railway freight supply chain.

It is in this context that Dun & Bradstreet in association with Jupiter Wagons created the Indian Railway Freight Activity (IRFA) Index to monitor rail freight activity pan-India at a quarterly frequency. The IRFA Index combines the data from the Ministry of Railways and survey responses from railway freight users. The index provides a comprehensive assessment of the Indian railway freight activity during the quarter and expectation of users for the upcoming quarter.

The IRFA Index is composite of two sub-indices: Activity sub-index (based on activity data released by Indian Railways) and Experience sub-index created from the survey of railway freight users. The Activity sub-index acts as a crucial metric to monitor freight & wagon activity and supply environment. The Experience sub-index reflects freight user's current (current quarter) experience and Optimism sub-index reflects future expectation (for the next quarter) for freight demand, supply, and operational efficiency.

The index reflects real-world experience of those relying on railways for freight transportation. This approach ensures a thorough assessment, a first of its kind, to monitor the dynamics of Indian Railway freight activity.

A ready reckoner for policymakers and users alike the IRFA Index can be a pivotal tool for monitoring and leveraging Indian railway freight activity. We hope that the Railway authorities, policymakers, and stakeholders will find the IRFA Index report useful in their discussions and deliberations to address challenges across the supply chain, enabling stakeholders to make data-driven timely decisions.

We trust that the insights presented in the report prove to be valuable for your understanding and decision-making process. Should you need further clarification or specific details from the report, please contact us. We believe that the comprehensive nature of the findings will serve as a valuable tool in guiding your future endeavors and initiatives.



Highlights



The Indian Railway Freight Activity (IRFA) Index for Q3 2023 stands at 48.2 (a near neutral level of activity compared to the same quarter in the previous year). In Q3 2023, railway freight user's Experience sub-index was at 56, whereas the Activity sub-index was at 40.4.



The Optimism sub-index for Q4 2023 stands at 60.



The Experience sub-index for medium size businesses is the highest in Q3 2023 but Optimism sub-index for them for Q4 2023 drops the most compared to their small and large businesses counterparts.



Indian railway freight users expect demand and supply of containers and cargo handling machinery to increase in Q4 2023.



Experience sub-index in Q3 2023 was the lowest for transit time and highest for the network availability.



Railway freight users experienced better availability and reduced turnaround time for containers in Q3 2023 and are optimistic of further improvement in Q4 2023.



Only 9% of respondents reported significant delays in transit time in Q3 2023.



75% respondents rated Indian railway operations to be efficient and only 4% rated it inefficient.



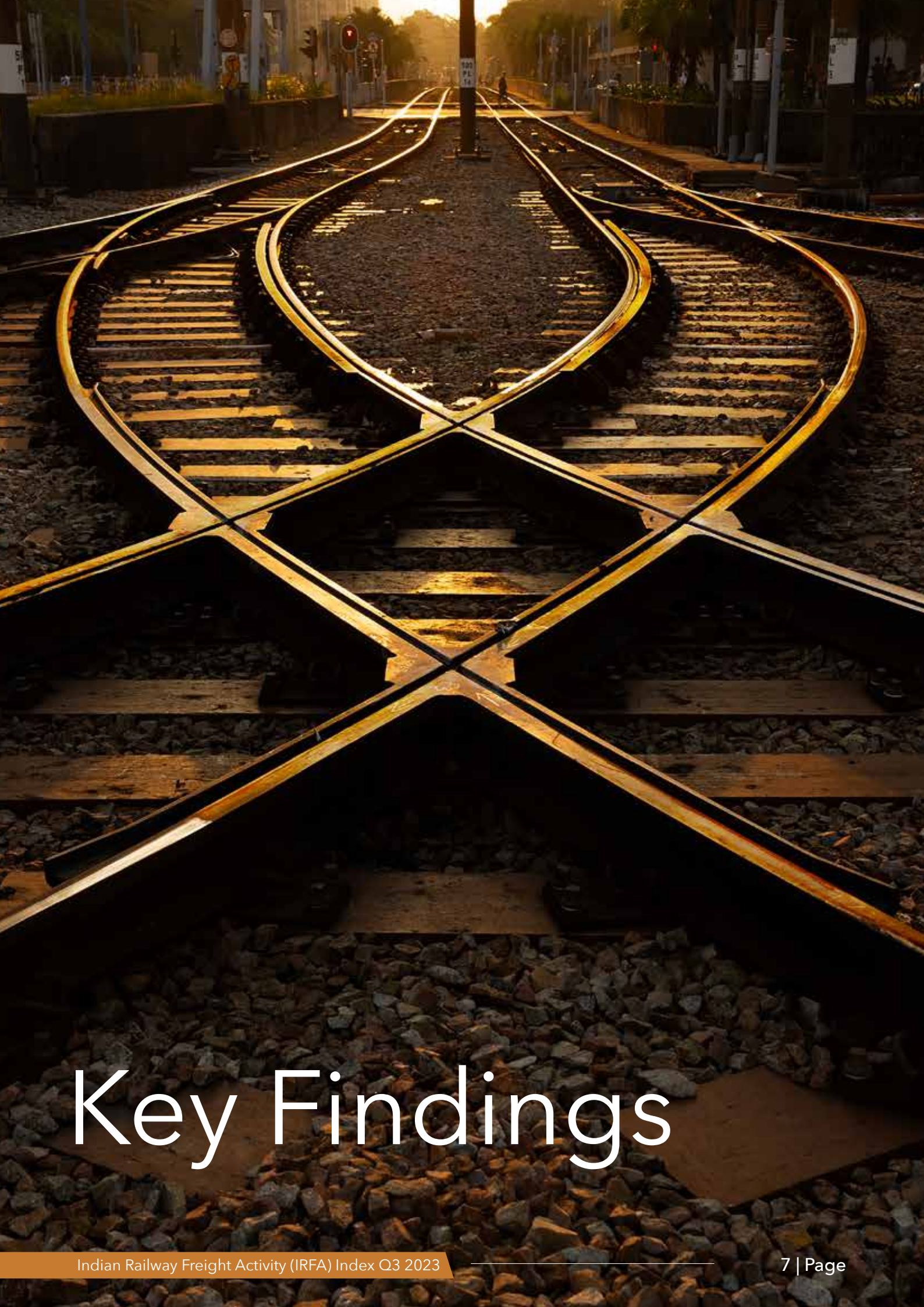
While road transport retains the largest share, 16% of respondents transport more than 50% of their freight through railways.



Cost effectiveness is the biggest demand driver for railway freight demand than the speed of delivery.



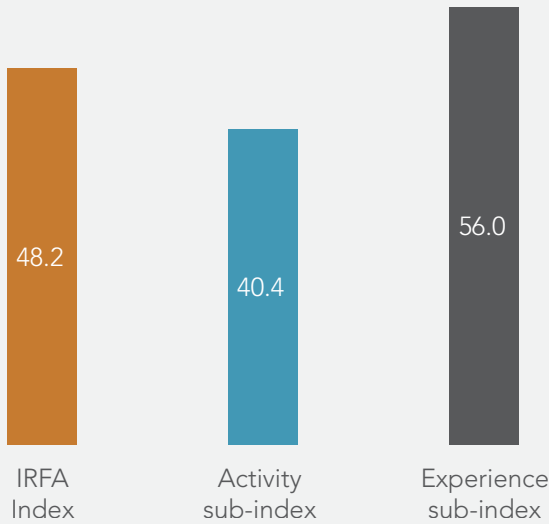
Connectivity challenges and cost are not major constraints for transporting freight through railways.



Key Findings

Indian Railway Freight Activity Index (IRFA)

IRFA Index (Q 3 2023)



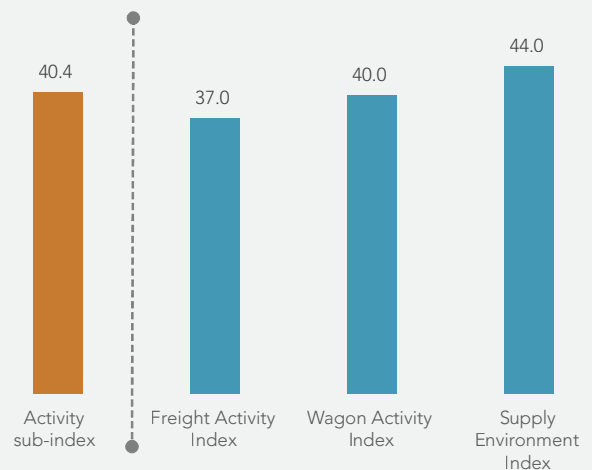
Source: Ministry of Railways; Dun & Bradstreet

- The Indian Railway Freight Activity (IRFA) Index for Q3 2023 stands at 48.2 (near neutral level of activity compared with the same quarter previous year).
- In Q3 2023, railway freight users experience was higher at 56 and the activity indicated by the Activity sub-index was at 40.4, measured by freight activity, wagon activity and supply environment from the data released by the Ministry of Railways.

Activity sub-index

- The Activity sub-index for Q3 2023 at 40.4 witnessed improvement in Q3 2023 compared to the previous quarter.
- Freight activity and wagon activity moderated a bit, while supply environment improved in Q3 2023 compared to the previous quarter.

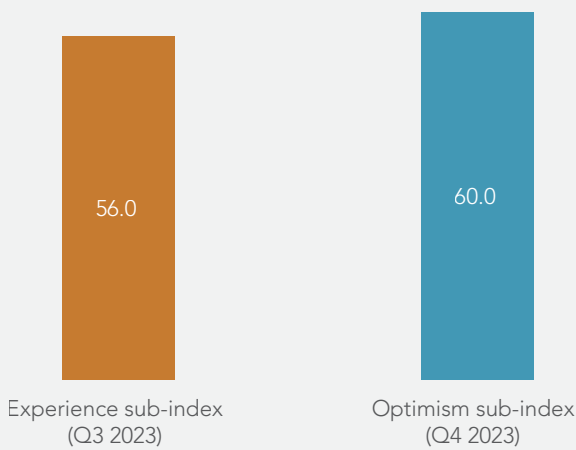
Activity sub-index and its components



Source: Ministry of Railways; Dun & Bradstreet

Optimism for freight transport is even higher in Q4 2023

Experience in the current quarter and optimism for the next quarter

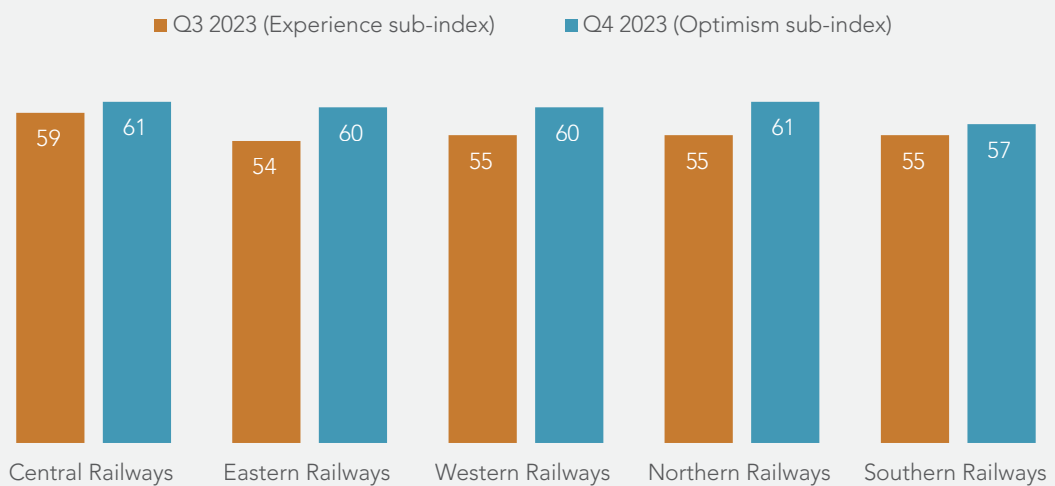


Source: Dun & Bradstreet

- High level of optimism sub-index indicates respondents are expecting further improvement in their railway freight transport experience in Q4 2023.
- Small and large firms reported higher optimism for freight activity in Q4 2023 compared to medium sized firms.
- Respondents transporting on the Central and Northern Railways show higher optimism compared with other regions.

Experience sub-index across regions in Q3 2023

Regional experience and optimism sub-indices

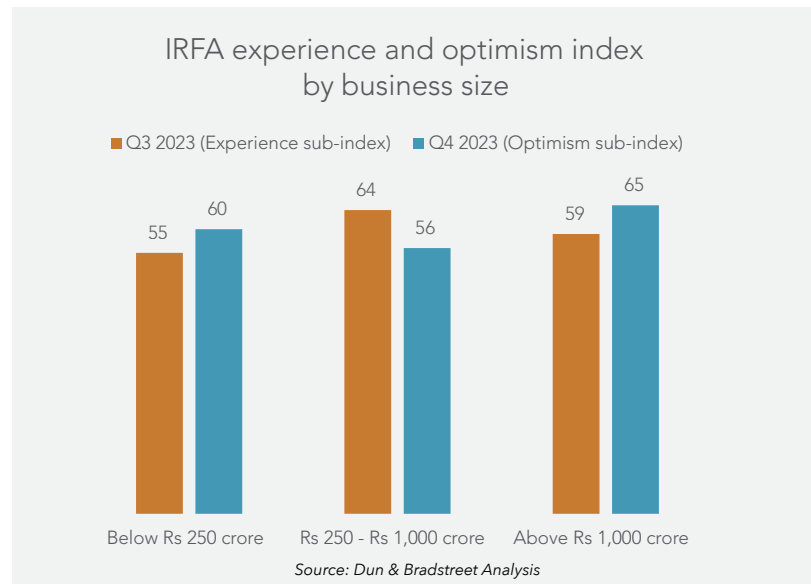


Source: Ministry of Railways; Dun & Bradstreet

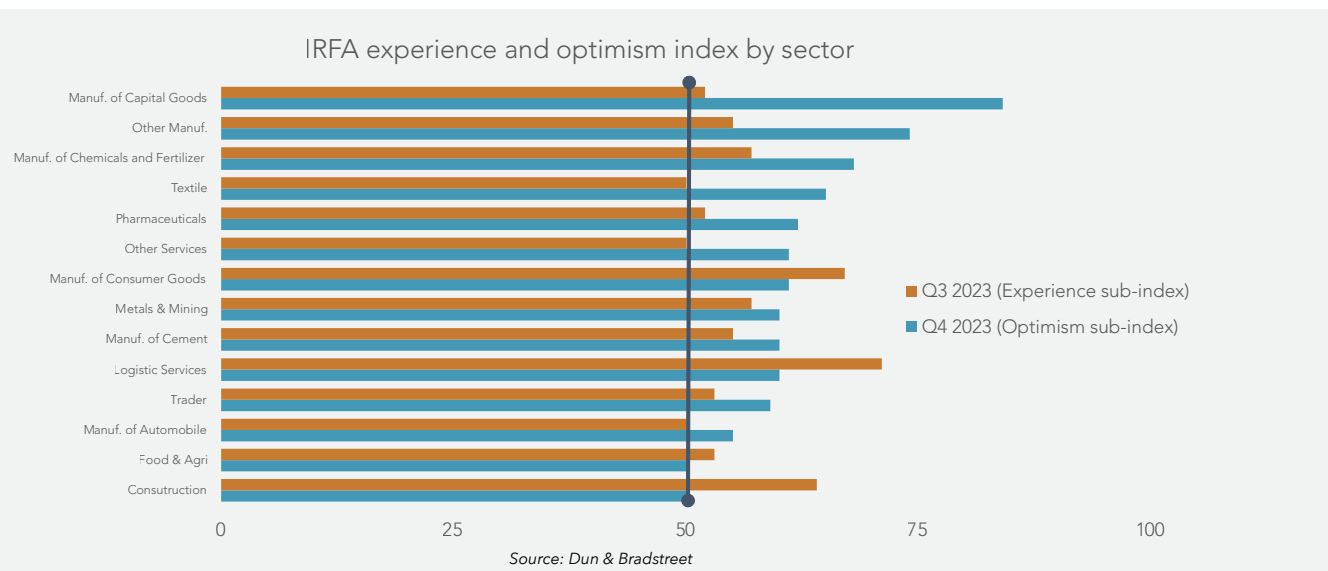
- The Optimism sub-index for all the regions shows improvement for Q4 2023 over the Experience sub-index in Q3 2023.
- Improvement in optimism is the most for northern and eastern region and least for the Southern region.

Experience index for medium sized businesses is the highest in Q3 2023

- The optimism level of mid-sized business drops the most compared to small and large businesses for Q4 2023.
- The Optimism sub-index of small and large businesses shows improvement for Q4 2023 over the Experience sub-index in Q3 2023.
- Experience of medium sized businesses was the highest in Q3 2023, followed by large and small businesses.



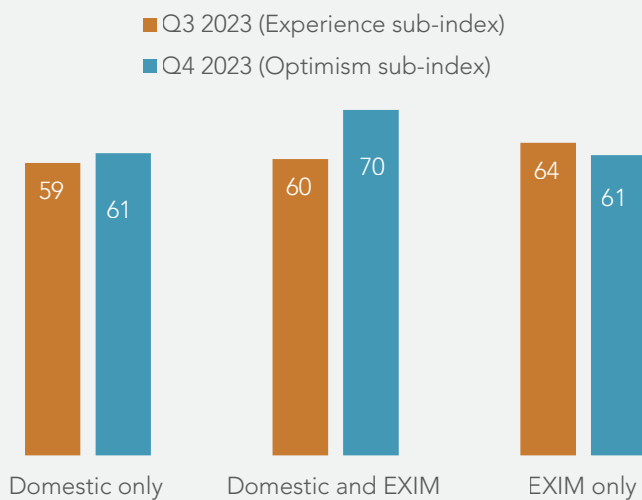
Experience index (for Q3 2023) for logistic and consumer goods sectors were the highestlikely driven by the festive fervor



- The capital goods sector is overly optimistic for Q4 2023, indicating traction in investment activity. This is followed by the Chemicals & Fertilizer, Other Manufacturing, and the Textile sector.
- The largest decline in the Optimism sub-index is seen for Construction, Logistic services, and Consumer Goods manufacturers for Q4 2023 from Q3 2023 levels.

Railway freights users transporting for both domestic and EXIM purposes are most optimistic for Q4 2023

IRFA experience and optimism sub-index by segment



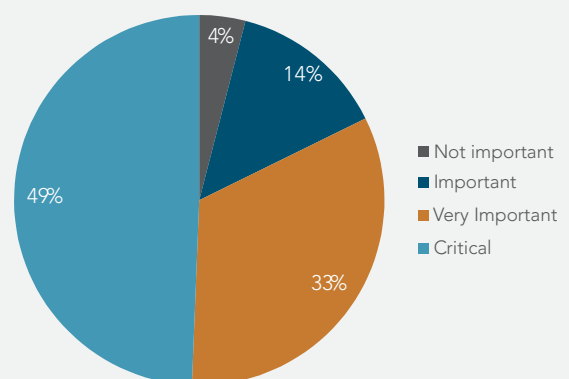
Source: Dun & Bradstreet

- Optimism for domestic trade volume shows improvement, while it deteriorated for EXIM for Q4 2023, reflecting the railway freight user's anticipation of weakening of external demand.
- Composite users (transporting for both domestic and EXIM purposes) show the largest increase in optimism to 70, due to leveraging of trade shift from EXIM to domestic and vice versa.
- Domestic only users are more optimistic for Q4 2023 compared to experience at Q3 2023, but at the same level as EXIM users with a sub-index at 61.

49% of respondents consider transportation of freight through railways is especially important or critical

- Only 4% of respondents claim freight transportation through railways is not important.
- In terms of modal share split, 16% of respondents transported more than 50% of their freight through railways.

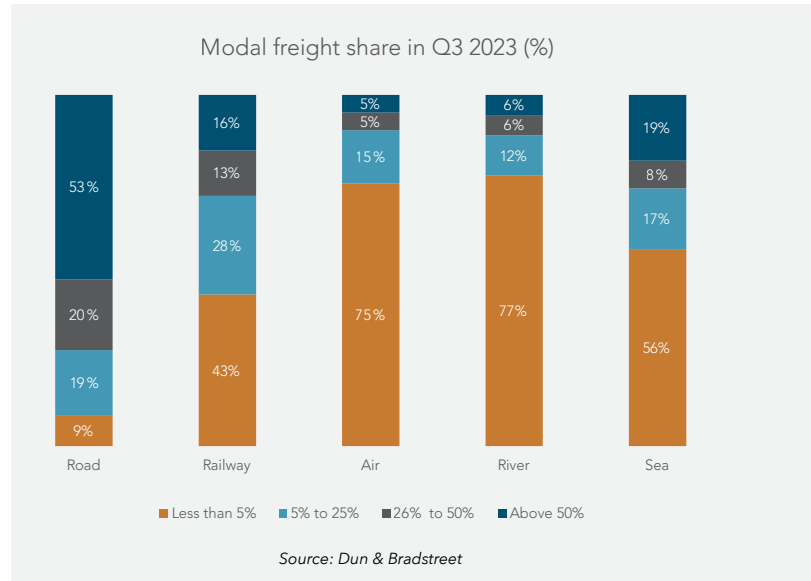
Criticality of railway in transportation strategy



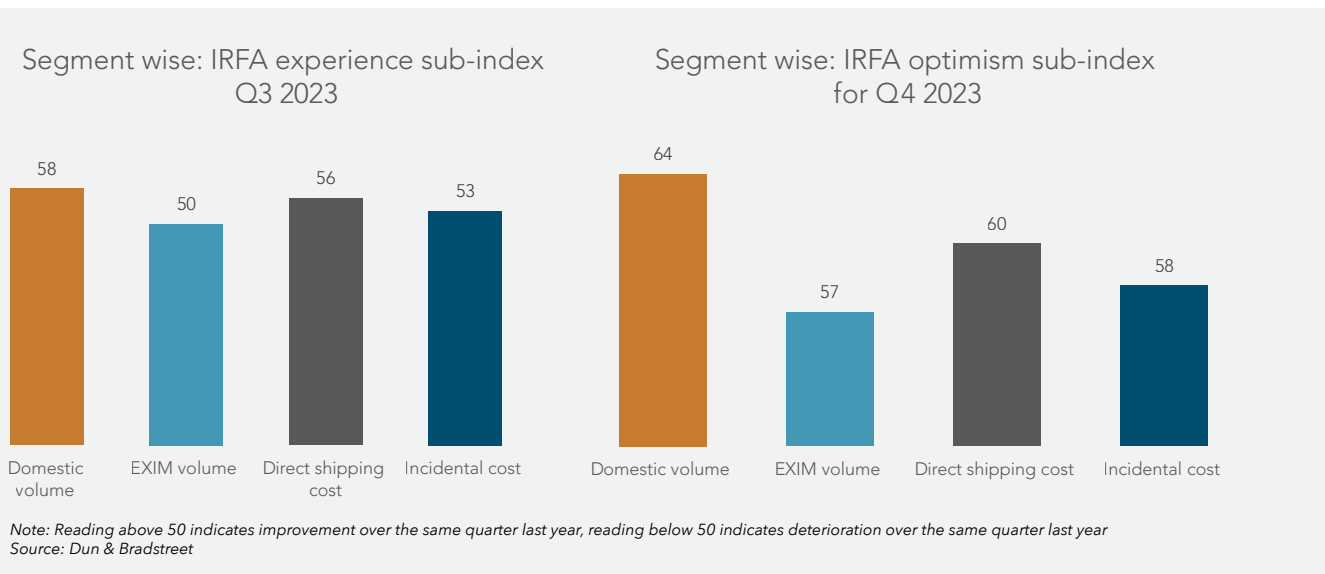
Source: Dun & Bradstreet

53% of freight transporters use road to transport 50% of freight, while 16% use railways

- Road transport still retains the largest share for most respondents; with 53% of respondents claiming more than 50% of freight transport via road, which is only 16% for railways.
- 28% of respondents use railways for transporting 5% to 25% of freight, and another 43% transport less than 5% via railways.
- More than 75% of respondents use air for transporting less than 5% of their freight, a tad lower than that for inland-water transport (77%).

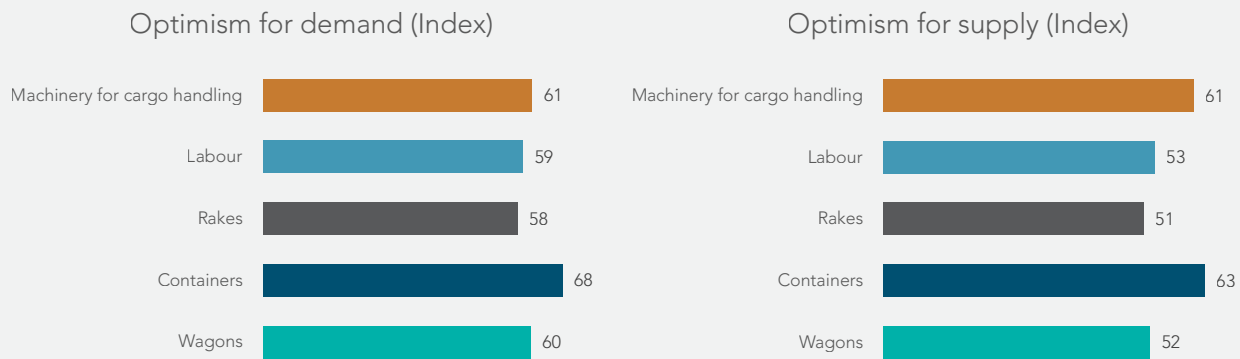


Optimism for transporting goods through railways increased for Q4 2023



- In Q3 2023, the Experience sub-index for domestic volume of trade was 58 and at neutral level (50) for EXIM.
- Optimism for domestic volume increased the most for Q4 2023 compared to last year.
- The increase in optimism for shipping and incidental cost for Q4 2023 indicates respondents expect cost to decrease.

Optimism for Container & Cargo handling machinery is high for Q4 2023

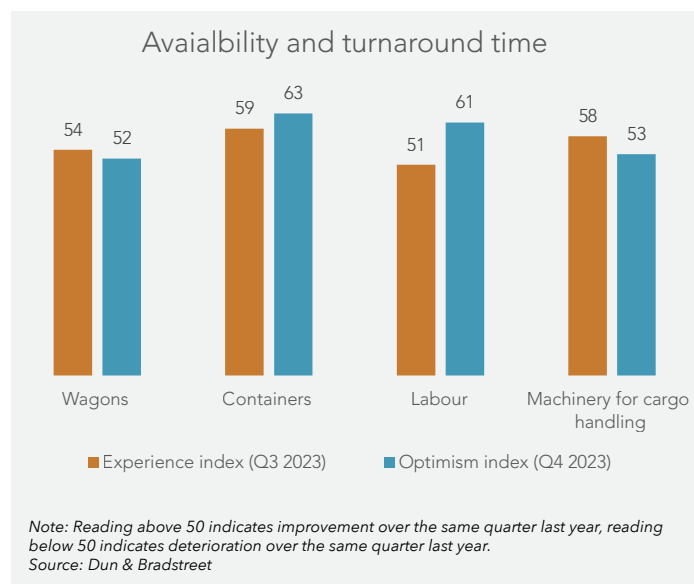


Note: Reading above 50 indicates improvement over the same quarter last year, reading below 50 indicates deterioration over the same quarter last year
 Source: Dun & Bradstreet

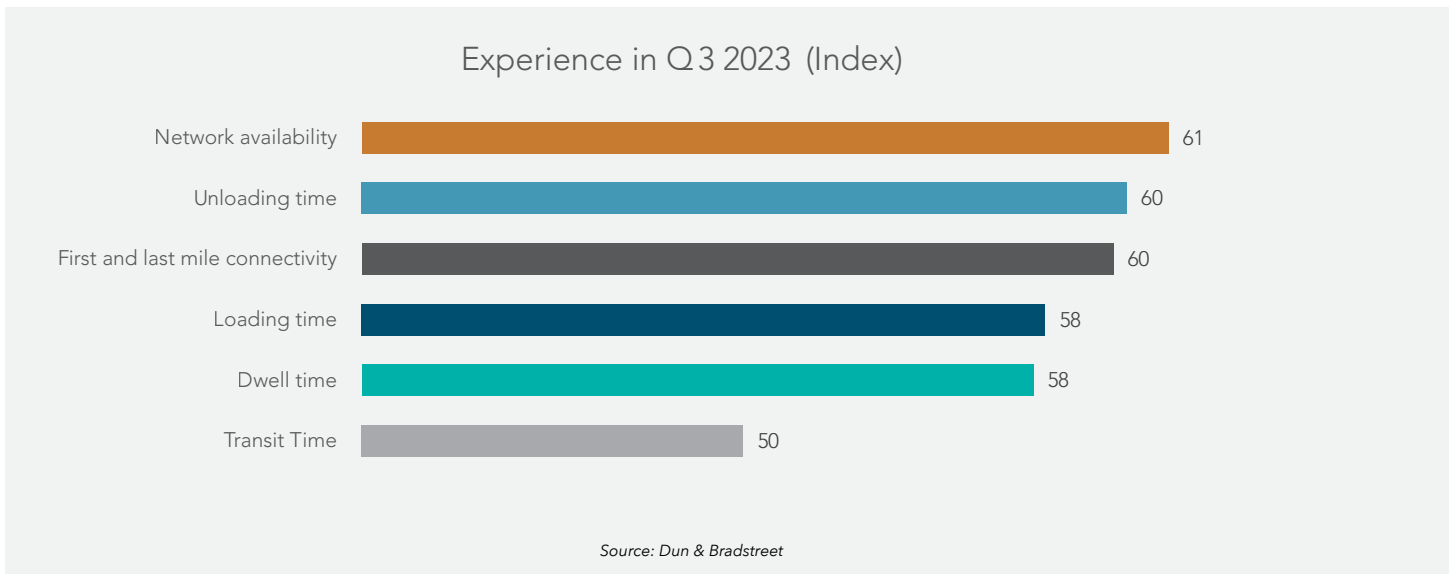
- Respondents are optimistic for containers, wagons and machinery for cargo handling demand in Q4 2023, suggesting improving railway freight logistics activities.
- On the other hand, expectation of supply remains downbeat, especially for availability of rakes, followed by wagons and labour.

Higher optimism for availability and turnaround time for containers and labours

- Railway freight users experienced higher availability and reduced turnaround time for containers in Q3 2023 and are more optimistic of further improvement in Q4 2023.
- For wagons, the optimism index for availability and turnaround time dips a bit for Q4 2023, still in optimistic zone.
- Optimism for higher availability and turnaround time for labor shows the largest increase in Q4 2023 from near neutral level in Q3 2023 (51).

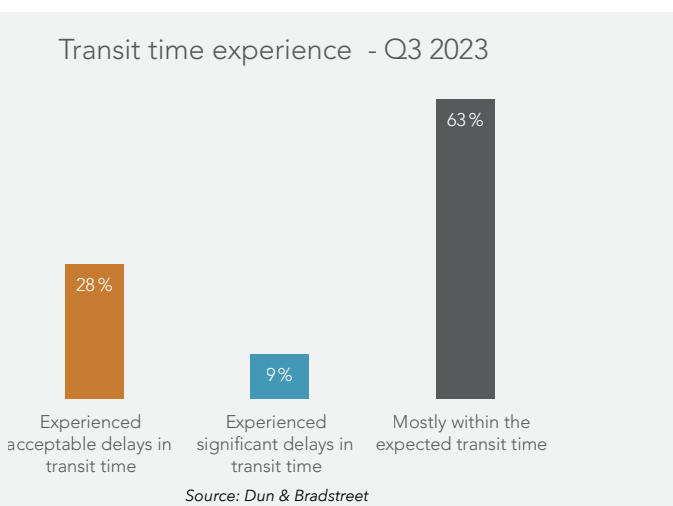


Experience sub-index in Q3 2023 was the lowest for transit time and highest for network availability



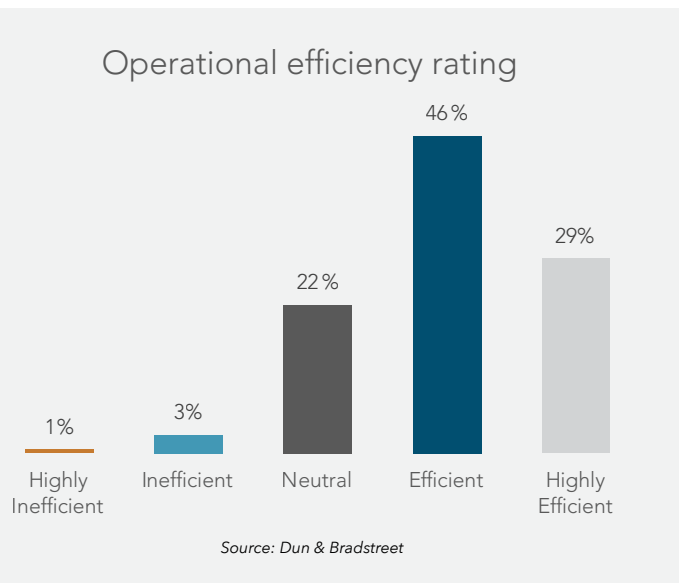
- Experience of respondents was higher for most of the categories be it dwell time, loading and unloading time and first and last file connectivity in Q3 2023 indicating improvement compared to the same quarter last year.
- There was no improvement seen in transit time while network availability improved the most in Q3 2023 compared to the same quarter last year.
- High optimism in first and last mile connectivity reflects efforts taken towards improving first and last mile connectivity.

Transit time optimism remains broadly unchanged in Q3 2023 only 9% reports experiencing significant delays



- 63% of respondents experienced freight transit within expected timelines in Q3 2023.
- 28% experienced acceptable delays and only 9% experienced significant delays.

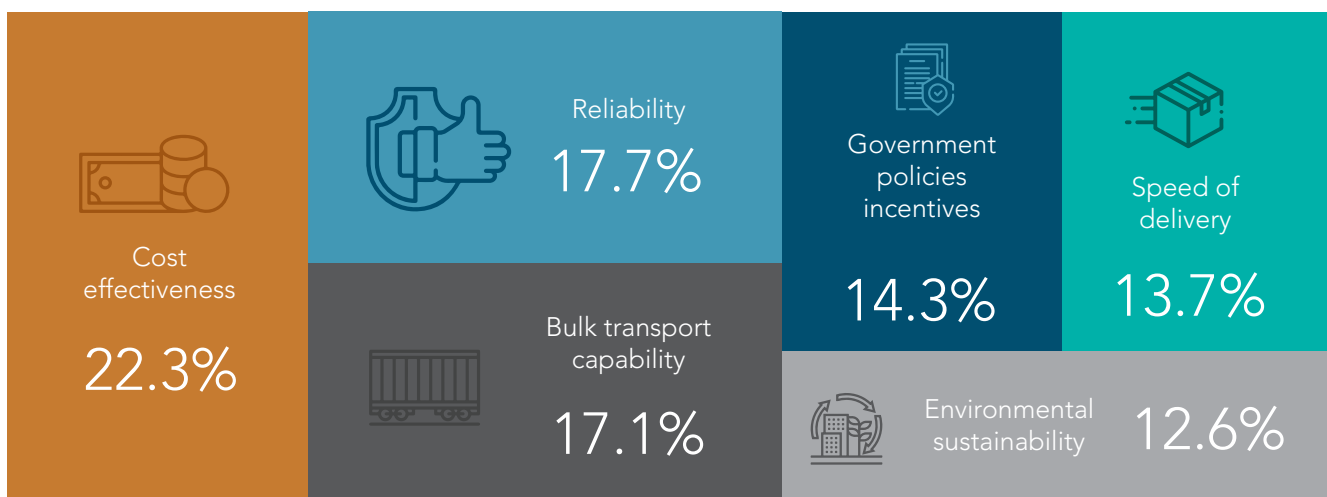
75% of respondents rate railway freight operations to be efficient



- 75% of respondents rated railway operations to be efficient and only 4% rated them to be inefficient.

Cost effectiveness is the biggest demand driver for railway freight demand ...much more than delivery speed

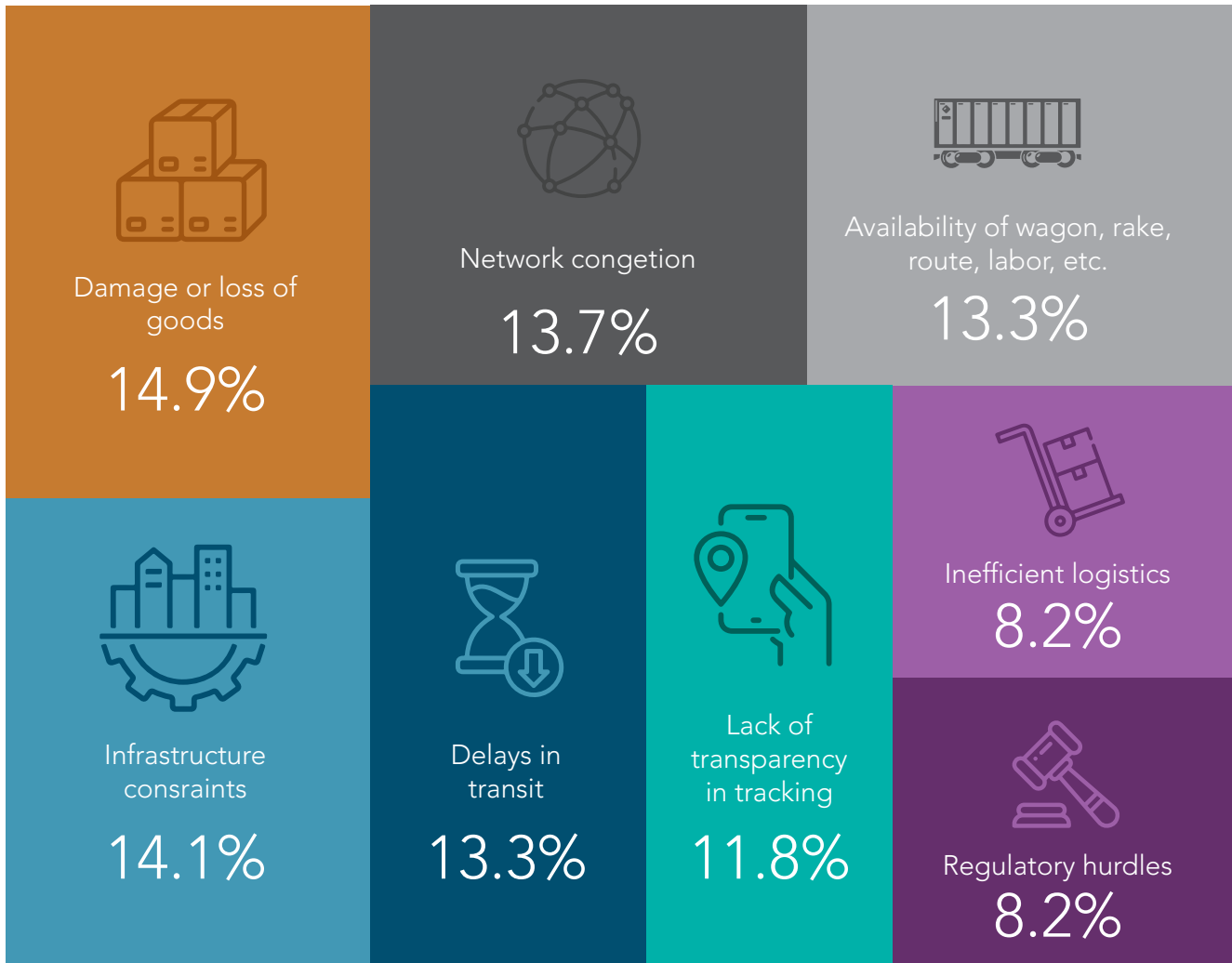
Major demand drivers for railway freight



- 22% of respondents consider railway to transport their freight owing to its cost effectiveness, while only 14% consider railways for speed of delivery.
- Only 17% use railways for bulk transport and for their reliability.
- The use of railways for environmental sustainability purposes is considered by 13% of respondents.
- Government incentives for using railways are the major driver for 14% of respondents.

Inefficient logistics or connectivity issues are some of the least constraints considered by the respondents

Major obstacles faced when transporting via railways



- Damage or loss of goods (15%), infrastructure constraints (14%), network congestion (14%), availability of wagons, rakes, route, and labor (13%) are the major obstacles for transporting freight through railways.
- Connectivity and cost rank lower in the list of major constraints for transporting freight through railways.

Index Methodology

The IRFA Index is composed of two sub-indices: Activity sub-index based on secondary information and Experience sub-index constructed from the survey of railway freight users. The Activity sub-index consists of railway freight activity, wagon activity, and supply environment. The Experience sub-index is composed of freight demand, supply infrastructure and operational efficiency parameters for the current quarter. The Optimism sub-index is composed of freight demand, supply infrastructure and operational efficiency parameters for the next quarter

Activity sub-index: Secondary parameters



Freight Activity



Wagon Activity



Supply Scenario

Experience sub-index: Survey data



Demand



Supply



Operational
efficiency

Dun and Bradstreet conducted survey of Indian Railway freight users, seeking respondent's experiences and optimism on parameters such as freight demand, supply factors, operational efficiencies in terms of an increase/improvement, decrease/deterioration or no change for current quarter and the upcoming quarter. A robust statistical process is followed to aggregate respondent level data in creating an Index (reflective of the overall railway freight environment). The derived index value can range between 0 to 100, with 50 being the neutral level of activity viz-a-viz the base period (same quarter previous year). An Index value above 50, indicates an increase in the level of activity from the base period and vice-versa.

About Jupiter Wagons and Dun & Bradstreet

About Jupiter Wagons

Jupiter Group is a premier manufacturer of railway wagons, components for passenger coaches, alloy steel casting for rolling stock and track. The group also manufactures application-based load bodies for commercial vehicles, other products include ISO marine containers, refrigerated containers etc.

Jupiter Electric Mobility Pvt. Ltd. is a wholly owned subsidiary for manufacturing Commercial Electric Vehicles.

Over the last decades, we have emerged as a one-stop solutions provider within our sector. We are respected for the highest standards of quality. Our robust technological foundation underpins our status as one of the fastest growing within our industry.

Our integrated facilities are engaged in the manufacture of railway wagons, high-speed bogies, and railway castings; we manufacture couplers, draft gears and railway turnouts for the Indian Railways and the North American railroads.

We are the most integrated Railway Engineering Company, catering to the clientele spread across Indian Railway, Private wagon aggregators, commercial vehicles OEMs, Indian defense, and logistic companies. It regularly exports to North American market as well.

About Dun & Bradstreet

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