

SectorVector

Reading the topical trends

September 2024

Fast-tracking into tomorrow

A decade of progress gives Indian Railways a strong foundation and momentum for growth

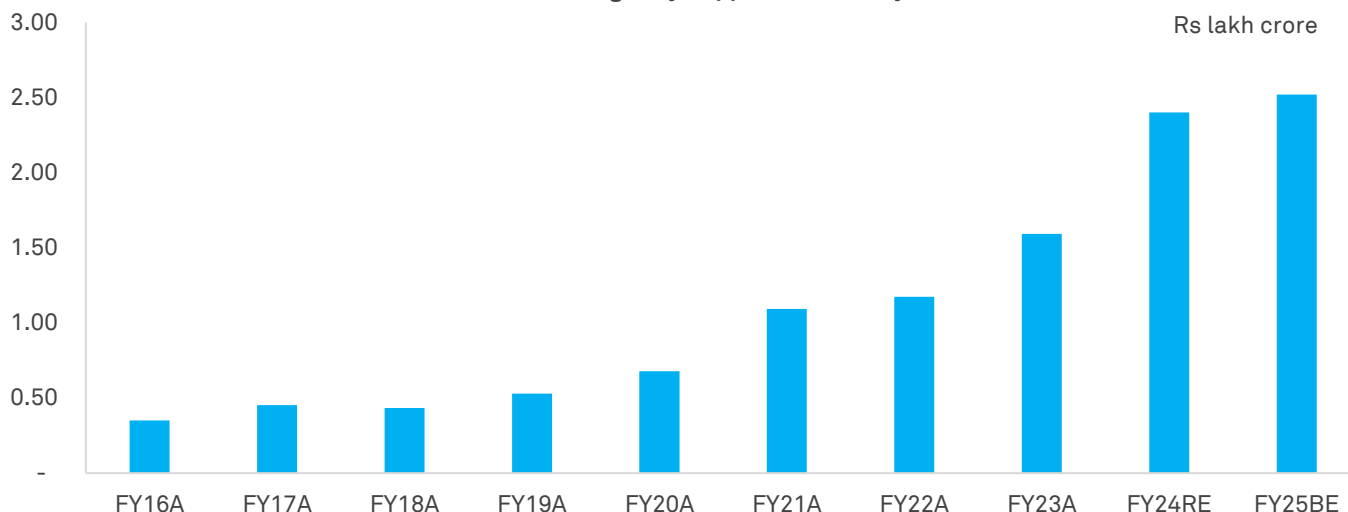
Indian Railways has had a transformative journey over the past decade, marked by infrastructure development, technological advancement and a focus on enhancing operational efficiency. From high-speed rail projects to widespread electrification, investments totalling Rs 17.4 lakh crore between fiscals 2016 and 2025 are helping modernise the railways and reinforce it as a key driver of India's progress to a high-income economy. Indeed, railway capex for the period has clocked a compound annual growth rate of 12%.

The government has committed to advancing each of the core elements of a rail system — tracks, trains and

the extensive land to support it all. Initiatives such as expanding tracks, enhancing safety and high-speed rail, among others, will enable the railways to meet the demands of efficiency and competitiveness.

Indian Railways has already made notable progress in each of these areas. In track development, efforts at doubling and electrification have increased network capacity and efficiency. Train modernisation has introduced advanced locomotives and elevated passenger services. Station redevelopment and the optimised use of railway land have enhanced infrastructure and unlocked revenue opportunities.

Gross Budgetary Support for Railways



Note: 'A' is actual; 'RE' is revised estimate; 'BE' is budget estimate
Source - Union Budget, CRISIL MI&A

Highlights of progress in key investment areas



Track upgradation



High-Speed Rail Corridor is under construction, at an estimated cost of Rs 1.08 lakh crore; it will reduce travel time to just two hours from Mumbai to Ahmedabad at speeds of 320 km/h



Dedicated freight corridors spanning over 3,300 km to enhance freight efficiency and decongest passenger lines



Over 94% of the total broad-gauge network electrified as of fiscal 2024



Some 5,269 km of metre gauge converted to broad gauge since fiscal 2016



15,861 km of track doubling completed between fiscal 2016 and 2024



1,465 route km deployed with Kavach, an indigenous automatic train protection technology



Rolling stock advancement



82 Vande Bharat and 8 Tejas Express trains operational as of January 2024



Delivery of 300 WAG-12B e-locomotives with 12,000 horsepower and load capacity of up to 6,000 ton at speeds of 120 km/h, as of 2023



23,000 conventional coaches upgraded to Linke-Hofmann-Busch (LHB), which is safer and allows for speeds of up to 180 km/h



144 locomotives (including electric multiple unit rakes) deployed with Kavach



Consequential train accidents dropped 64% from fiscal 2014 to 2022 with advanced safety systems



Introduced Vistadome coaches with observation lounge, panoramic views, electrically controlled opalescence glass windows, reclining seats featuring 180-degree rotation and CCTV systems



Revamp of railway stations



Redevelopment of 553 stations initiated under the Amrit Bharat Station scheme



Rs 1 lakh crore allocated for station modernisation, featuring enhanced waiting areas, digital ticketing kiosks and green buildings



Free wi-fi available at over 6,000 railway stations across India



Next-gen e-ticketing system capable of processing 26,000 tickets per minute



E-catering service has handled 3.6 crore orders since fiscal 2021



The Rail Madad platform has addressed over 6 lakh grievances since fiscal 2021



Over 2,000-foot overbridges constructed to improve accessibility, enhance safety and reduce stations overcrowding

Source: PIB, CRISIL MI&A

The decades ahead

Indian Railways needs to diversify its revenue sources to sustain the pace of development and bring its future expansion plans to fruition.

Plans to construct 100,000 km of new railway tracks over the next 20 years, expand the Kavach safety system to cover 44,000 km within five years and equip 50,000 locomotives with this technology are within reach. However, these ambitious initiatives, including the production of 400 new Vande Bharat trains in

the next three years, necessitate additional revenue sources. Budgetary allocation growth has been a muted 2.8% this fiscal over the previous one.

To support expansion and address funding demands, Indian Railways can adopt several strategies to diversify revenue streams, including leveraging real-time data for operational efficiency, introducing premium services and focusing on commercial development around railway stations.

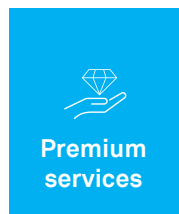
Potential strategies to enhance revenue growth



Concept: Transforming the surroundings of railway stations into office space, shopping centres, retail stores, residential societies, etc. This could be implemented around tier 2 cities stations. The mixed bag of hospitality, entertainment and other services could act as a catalyst for developing these areas even as it provides revenue to the Railways.

Global practice: In Japan, JR East has redeveloped its stations into multi-use facilities that include shopping malls, hotels and offices. Not only do these redeveloped stations enhance passenger experience, but they also generate substantial non-fare revenue.

Impact: The development could increase footfalls for railway, enhance passenger experience convenience, boost local economic growth, and attract private investment while optimising land use. This will also increase the value of surrounding land and create additional sources of revenue.



Concept: Introducing premium services such as business lounges, door-to-door baggage delivery and exclusive seating options on long-distance. All these services could be linked to a loyalty programme that rewards travellers with discounts, upgrades and exclusive services.

Global practice: In Spain, the national railway operator (Renfe) offers premium services such as business lounges, door-to-door baggage delivery and exclusive seating options. It also has a loyalty programme that rewards frequent travellers.



Concept: Indian Railways can drive growth by leveraging its passenger and train operation data. It can sell the data to various companies that are into logistics, technology and advertisements. The Railways could partner with e-commerce / quick commerce and service platforms to integrate the same for in-train services, commerce or shopping.

Global practice: In Germany and France, which have stringent privacy laws, their national railway operators generate substantial revenue through sale of data. They successfully offer personalised travel services such as real-time tracking, tailored travel plans, travel insurance, hotel bookings, in-train shopping, etc. The data is targeted for marketing and partnerships with retail and service providers.

Impact: This strategy could optimise supply chains and improve targeted advertising, thus significantly enhancing operational efficiency. It can also enhance the overall travel experience, leading to increased customer reach. With improved advertisement targeting, the Railways could further monetise its extensive user base data.

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