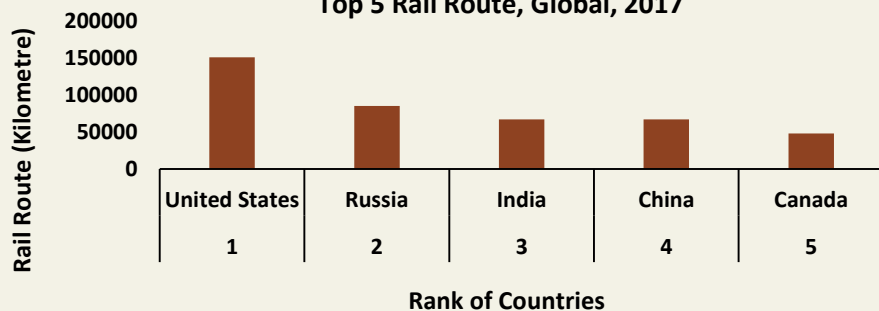


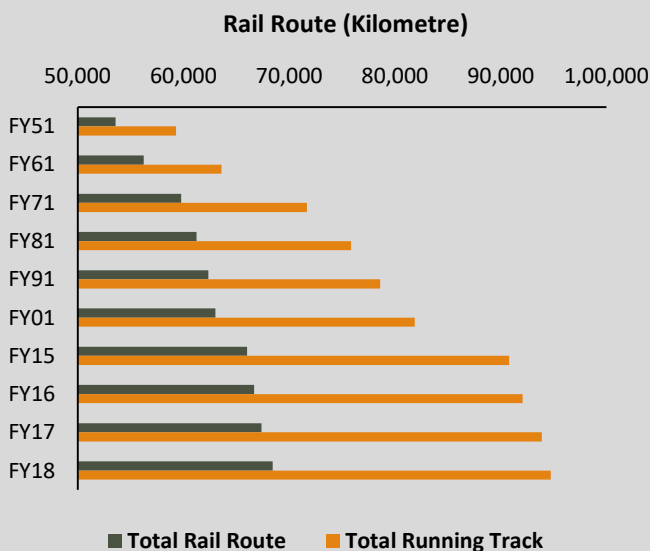
# The Overview of Indian Railway Sector

- The Indian Railways, started in the year **1853** is one of the key sources for infrastructural development in India.
- The **3<sup>rd</sup>** largest network in the world based on its rail route is controlled by the Ministry of Railways in India. As of April'19 the size of its route is **69,182-kilometre**, where the contribution of Broad Gauge, Meter Gauge and Route Gauge are **64298 Kilometre**, **3200 Kilometre** and **1684 Kilometre** respectively.
- Till FY18, the total numbers of stations in the Indian Railway network were **7,318** and the total numbers of Locomotives were **11,764** where the share of Steam, Diesel and Electric Locomotives were **39, 6086** and **5639** units respectively.
- The total numbers of wagons increased to **2,79,308** and the numbers of coaches also grew to **71,825** in FY18. The share of Passenger coaches(**78%**) among the different types of train coaches is the highest.
- The Indian Railway had carried **769 Million** travellers and **396 Million** Freights throughout the whole FY18.

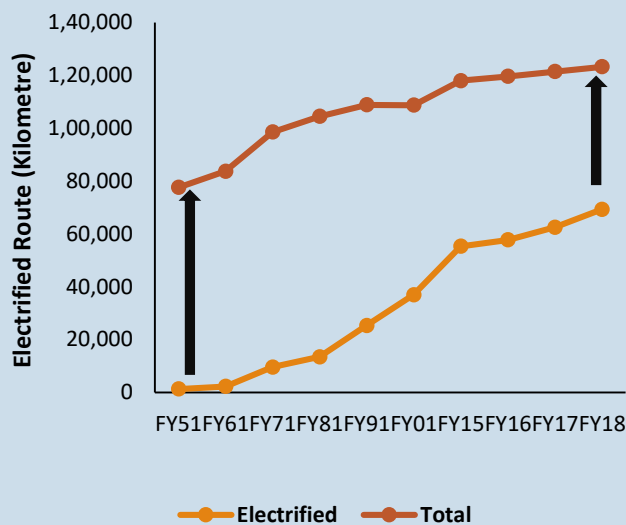
**Top 5 Rail Route, Global, 2017**



**Expansion of Railways, India, FY51 to FY18**



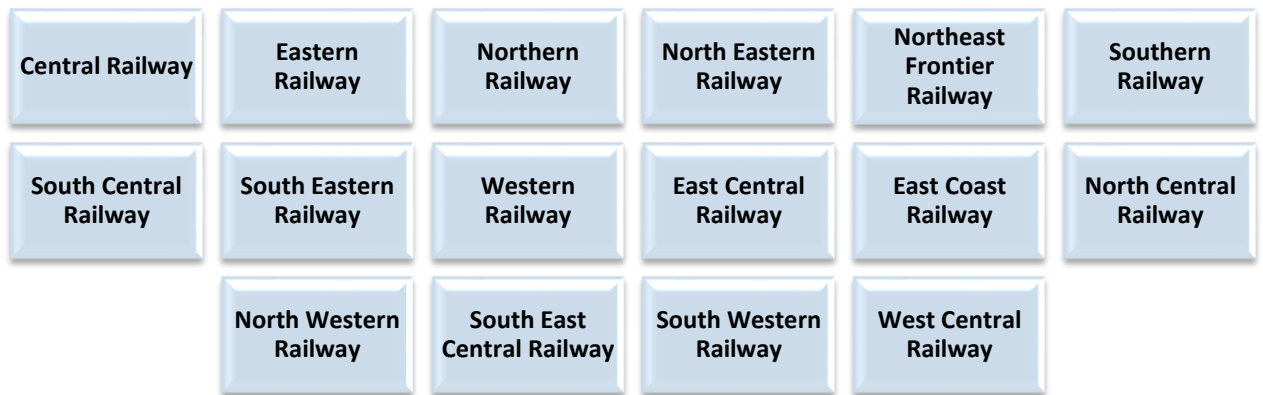
**Rate Of Electrification, India, FY51 to FY18**



- Between 1951 to 2018, the Rail Route has increased at a CAGR of **0.37%** and the Running track has increased at a CAGR of **0.7%**.
- *Rail Route* is the distance between two points on the Railway irrespective of the number of lines connecting them, whether single line, double line etc. and *Running track* is the length of all running tracks excluding tracks in sidings, yards and crossings.
- Uttar Pradesh has the maximum length of rail route and running track which are **10,324 Kilometres** and **12,169 Kilometres** respectively.
- Increasing level of electrification actually helps to increase the efficiency of engine. In India, the rate of electrification of the railways has increased at a CAGR of **6.17%** between FY51 to FY18.

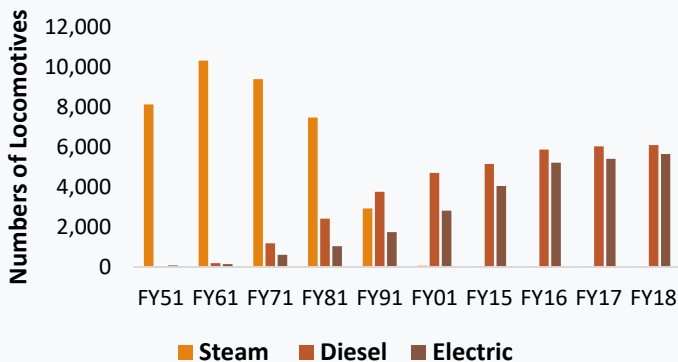
# The Expansion of Indian Railways

Just as the size of India, the railway sector has also been spread over a huge area for connecting different corners of the country. The overall Indian Railways can be divided into 16 zones as follows:



- Infrastructural development has led to the expansion of Indian Railways across the whole country.
- A glimpse of that can be visible in the following charts:

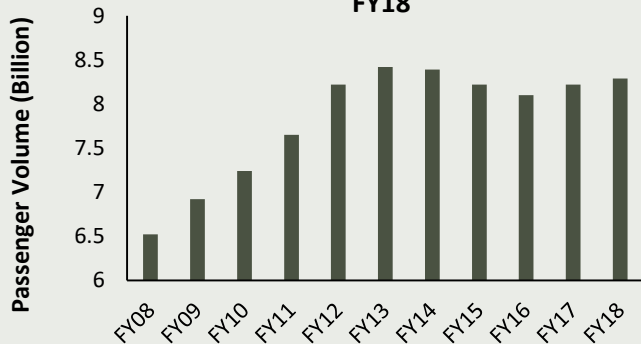
**Types of Locomotives, Indian Railways, FY51 to FY18**



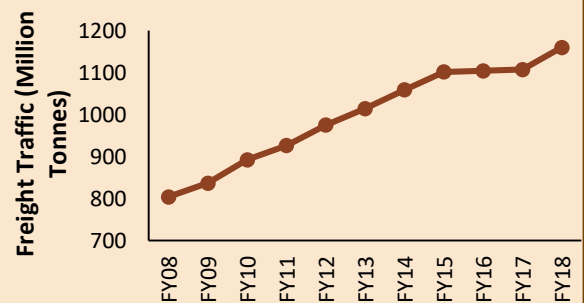
- The numbers of locomotives have risen at a CAGR of **0.54%** from FY51 to FY18.
- During the time of FY51, the **share** of steam locomotives used to be greater than the other ones. However, the whole pattern changed with time. The transition can be seen in the following table:

Type	Share in FY51	Share in FY18
Steam	98.92%	0.33%
Diesel	0.21%	51.73%
Electric	0.88%	47.93%

**Passenger Volume, Indian Railway, FY08 to FY18**



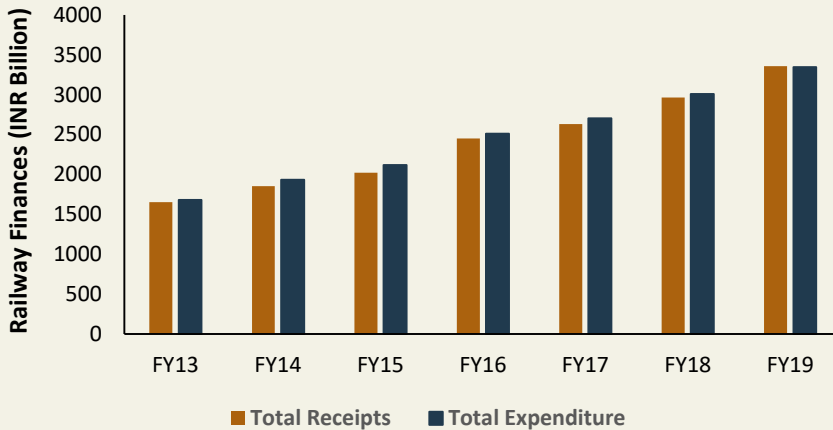
**Freight Traffic, Indian Railways, FY08 to FY18**



- The passenger volume has increased at a CAGR of **2.43%** between **FY08 to FY18** in Indian Railways. Increasing urbanisation, improved income standards, major emergence of technical advancement in the tier 2 and tier 3 cities are the reasons behind such hike.
- The rate of freight traffic has increased at a CAGR of **3.73%** between **FY08 to FY18**. Rising participation of private and foreign investors along with Indian Government have increased the funding towards rail infrastructure and freight business.

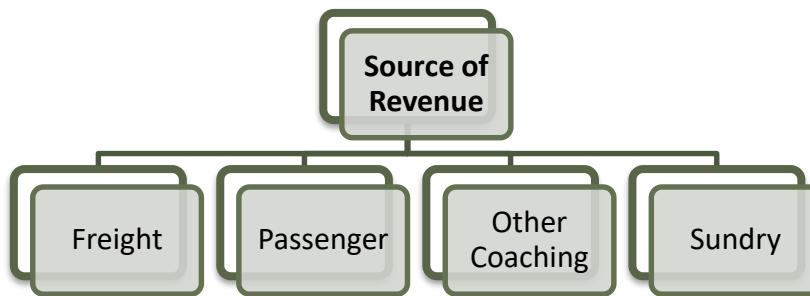
# Revenue Earning

**Railway Finances, India, FY13 to FY19**

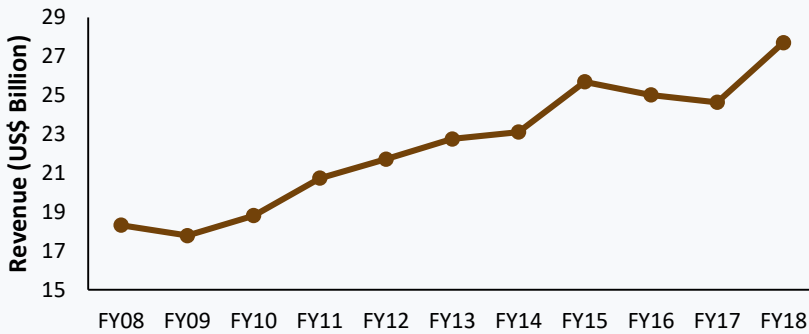


Indian Railways is financed through:

- I. Its own internal resources (freight and passenger revenue, and leasing of railway land),
- II. Budgetary support from the central government, and
- III. Extra budgetary resources (primarily borrowings but also includes institutional financing, public private partnerships, and foreign direct investment).



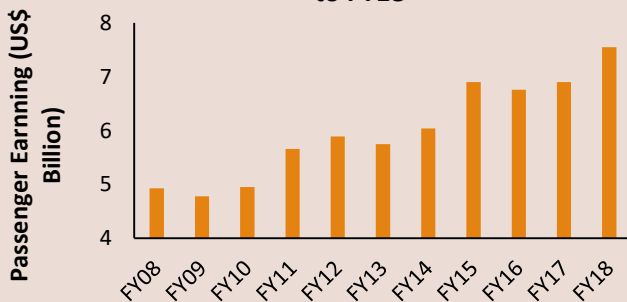
**Gross Revenue, Indian Railways, FY08 to FY18**



- The gross revenue of Indian Railway sector has increased at a CAGR of **4.22%** between FY08 to FY18.
- Revenue of this sector is estimated to be around **US\$ 30 Billion** by FY22.

- Between FY08 to FY18, the passenger earning and freight earning have increased at a CAGR of **4.35%** and **4.41%** respectively.
- Growth in the earning of these two revenue sources of Indian Railways are as follows:

**Passenger Earning, Indian Railways, FY08 to FY18**

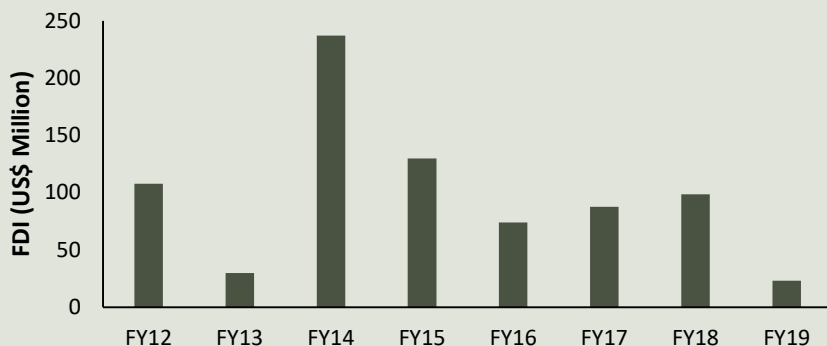


**Freight Earning, Indian Railways, FY08 to FY18**



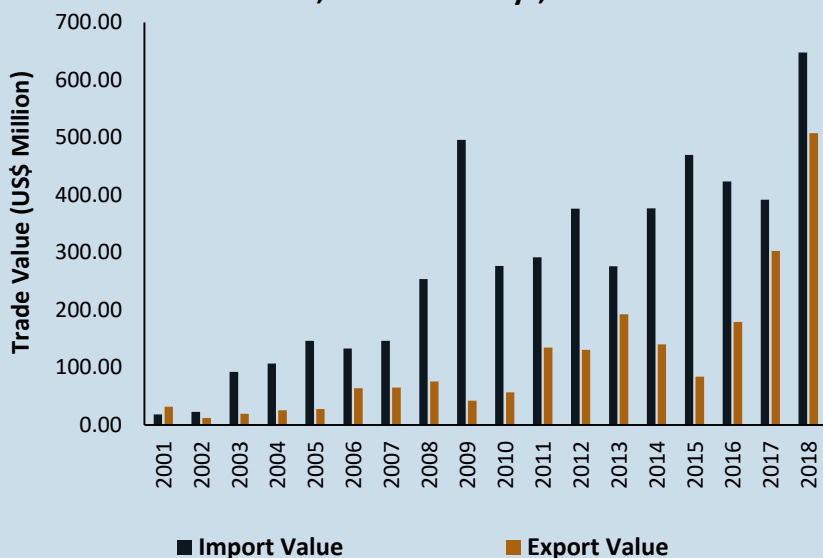
# Investment and Initiatives towards the Railway Sector

**FDI, Indian Railways, FY12 to FY19**



- The FDI inflow in the Railway sector has decreased a bit compared to the previous years. Between FY12 to FY19, it has fallen at a CAGR of **19.7%**.
- The recent protectionist policy of Indian government for securing the domestic industries might be the reason for this.

**Trade Value, Indian Railways, 2001 to 2018**



- The import and export value have increased at a CAGR of **23.4%** and **17.7%** respectively between 2001 to 2018.
- The share of import is still greater than the export leading to the increasing trade deficit.
- Railway or tramway locomotives, rolling stock and parts; railway or tramway track fixtures and fittings and parts etc. are the things which are mainly traded.

Under the Union Budget FY19- 20 (Interim), the Indian Government has allocated **INR 1.59 trillion** for Indian Railways. Indian Government has multiple broader plans for the Railway sector. The programmes are expected to be executed with the help of this budget and other sources of revenue. Some of the initiatives are as follows:

- Mobile Charging in the general class coaches, increased quota for senior citizens, online customer complaint portal are some steps to make the railway experience useful to the passengers.
- On board housekeeping services, integrated policies on cleanliness for covering stations, platforms and trains are the efforts for achieving higher level of hygiene.
- Setting up an accommodation for more than 11 lakh passengers, permanent and temporary coach enhancements are the part of expansion of rail services.
- Services like Real time service helpline number or women Security 24x7 helpline numbers, availability of braille signage on train etc. have also started to make the system more accessible to the customers.

Source: Ministry of Railways, IBEF, Intracen, PRS Legislative Research, LSI Research

