



**Report of the  
Comptroller and Auditor General of India  
for the year ended March 2019**



**लोकहितार्थ सत्यनिष्ठा**  
**Dedicated to Truth in Public Interest**

**Union Government (Railways)**  
**Railways Finances**  
**No. 8 of 2020**



# **Report of the Comptroller and Auditor General of India**

For the year ended March 2019

Laid in Lok Sabha/Rajya Sabha on \_\_\_\_\_

**Union Government (Railways)  
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## ***PREFACE***

This Report has been prepared for submission to the President of India under Article 151 of Constitution of India.

**Chapter 1** of the Report contains audit observations on matters arising from examination of Finance Accounts of Indian Railways for the year ended 31 March 2019. It focuses on the financial health of the Railways based on various parameters.

**Chapter 2** of the Report contains audit observations on the efficiency of the Indian Railways in application of funds raised from Extra Budgetary Resources and timely completion of projects.



**EXECUTIVE SUMMARY**

*Background*

Indian Railways (IR) is a departmental commercial undertaking of the Government of India. Due to merger of Railway Budget with the Union Budget, the summary and comments on the Appropriation Accounts of IR are now included in the Report of the Comptroller and Auditor General of India on Union Government –Accounts of the Union Government (Financial Audit).

The report focuses on financial performance of Indian Railways with reference to the previous year, as well as the overall trends. It also contains audit observations on the efficiency of the Indian Railways in application of funds raised from Extra Budgetary Resources and timely completion of Projects.

*Summary of conclusions*

Audit observed that during 2018-19, the Total Receipts increased by 6.47 *per cent* as compared to 8.19 *per cent* increase in 2017-18. The lower growth rate during 2018-19 was mainly on account of shortfall in Sundry Earnings and shortfall in growth rate of Freight Earnings as compared to 2017-18. There was heavy dependence on transportation of Coal which constituted 46.47 *per cent* of Freight Earnings. Any shift in bulk commodities transport pattern could affect the freight earnings significantly.

**[Para -1.1,1.2.3 (a)]**

Against the Budget Estimate (BE) of ₹ 12,990 crore, the ‘Net Surplus’ was ₹ 3,773.86 crore in 2018-19. It was lower than the BE by ₹ 9,216.14 crore (70.95 *per cent*). However, the net surplus increased from ₹ 1,665.61 crore in 2017-18 to ₹ 3,773.86 crore in 2018-19. During the year, IR received advance freight of ₹ 8,351 crore from NTPC and CONCOR for transportation of goods in 2019-20. IR would have ended with a negative balance of ₹ 7,334.85 crore instead of surplus of ₹ 3,773.86 crore but for receipt of advance freight and less appropriation to DRF and Pension Fund.

**[Para -1.5,1.2.3 (a)]**

During 2017-18, the profit from freight traffic (₹ 45,923.33 crore) was utilized to compensate the loss of ₹ 46,024.74 crore on operation of passenger and other coaching services. The loss of ₹ 101.41 crore in Passenger operations was left uncovered during 2017-18.

**[Para -1.3]**

Against the target of 92.8 *per cent* in the BE, the Operating Ratio (OR) of Railways was 97.29 *per cent* in 2018-19. There was marginal improvement in 2018-19 as compared to the OR of 98.44 *per cent* during the previous year. However, if advance freight of ₹ 8,351 crore (pertaining to 2019-20) from NTPC and CONCOR was not included in the earnings of 2018-19, the OR would have been 101.77 *per cent* instead of 97.29 *per cent*. IR resorted to window dressing in order to project better operating ratio.

**[Para -1.6.1]**

During 2018-19, appropriation to Depreciation Reserve Fund (DRF) decreased significantly as compared to the previous years (from ₹ 7,975 crore in 2014-15 to ₹ 500 crore in 2018-19). Under provisioning for depreciation resulted in piling up of throw forward works estimated at ₹ 96,403 crore.

**[Para -1.7.1]**

Ministry of Railways (MoR) resorted to Extra Budgetary Resources (EBR) from 2015-16 onwards for financing its projects like construction of new lines, doubling, electrification of lines, gauge conversion etc. A sum of ₹ 1.5 lakh crore was to be raised from LIC through Indian Railway Finance Corporation (IRFC) and utilized during the five year period 2015-20. Audit observed that the financing arrangement with LIC materialized only partially due to Regulation of Investment<sup>1</sup>, 2013 of Insurance Regulatory Development Authority (IRDA). During 2015-19, only ₹ 16,200 crore could be raised from LIC. MoR recouped the shortfall of ₹ 49,164 crore by raising funds through short term market borrowings.

**[Para -2.1 & 2.2]**

Railway Board violated their own guidelines for identification and sanction of projects for funding from EBR. During the period 2015-19, an expenditure to the tune of ₹ 15,922 crore was incurred from EBR for funding 79 unremunerative projects. MoR also incurred an expenditure of ₹ 11,117 crore from EBR on 111 projects involving land acquisition, forest and environmental clearance. There were several instances of irregular utilization to the tune of ₹ 1,495 crore from EBR funds.

**[Para -2.3.1,2.3.3 & 2.3.5]**

Projects were to be completed during 2015-20. However, due to inefficiency of Zonal Railways and weak monitoring at the Railway Board level, the progress of projects was slow. 268 out of 395 projects were still in progress as on 31 March 2019. This had resulted in blockade of ₹ 48,536 crore EBR funds besides defeating the intended objective of generation of revenue for debt servicing.

**[Para -2.3.6]**

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<sup>1</sup> Under Insurance Act 1938

*Summary of Recommendations*

- i. Ministry of Railways needs to take steps to diversify their freight basket to enhance their freight earnings.*
- ii. In order to present realistic picture of surplus and operating ratio, Ministry of Railways needs to take steps for pragmatic treatment of freight advance.*
- iii. Ministry of Railways needs to revisit the passenger and other coaching tariffs so as to recover the cost of operations in a phased manner and reduce its losses in its core activities.*
- iv. The huge backlog of renewal and replacement of overaged assets in railways needs to be addressed for safe running of trains.*
- v. Ministry of Railways needs to take steps to augment their internal revenues.*
- vi. Ministry of Railways needs to strengthen monitoring mechanism both at the Railway Board and Zonal Headquarters level for efficient execution of projects.*
- vii. Ministry of Railways needs to ensure assessment of requirement of funds based on realistic and timely projections from Zonal Railways.*
- viii. Ministry of Railways needs to ensure optimal and judicious utilisation of EBR funds.*



## Chapter 1 State of Finances

This chapter provides a broad perspective on the finances of the Indian Railways during 2018-19. It analyses critical changes in the major financial indicators with reference to the previous year, as well as the overall trends. The base data for this analysis is the Finance Accounts of the Indian Railways (IR). The Finance Accounts is compiled by IR annually for incorporation in the Union Government Finance Accounts. In addition, data from government documents and reports<sup>1</sup> have also been used to analyse performance of Indian Railways during 2018-19. IR is financed through (i) its own internal resources, (ii) budgetary support from Central Government and (iii) Extra Budgetary Resources.

### 1.1 Summary of Current Year's Fiscal Transactions

The following Table presents the summary of Indian Railways fiscal transactions during 2017-18 and 2018-19. The figures in brackets in the Table represent the increase/ decrease in percentage over previous year.

<b>Table 1.1 – Summary of receipt and expenditure during 2018-19 (₹ in crore)</b>					
<b>Summary of Capital and Revenue expenditure</b>					
<b>S. No.</b>	<b>Details</b>	<b>Actual 2017-18</b>	<b>Budget Estimates 2018-19</b>	<b>Revised Estimates 2018-19</b>	<b>Actual 2018-19</b>
1.	Capital Expenditure <sup>2</sup>	1,01,985.47	1,46,500.00	1,38,857.52	1,33,376.66
2.	Revenue Expenditure	1,77,264.03	1,88,100.00	1,91,200.00	1,86,733.51
<b>Summary of Revenue Receipts and Revenue Expenditure</b>					
1	Passenger Earnings	48,643.14 (5.11)	52,000.00	52,000.00	51,066.65 (4.98)
2	Other Coaching Earnings <sup>3</sup>	4,314.43 (0.06)	6,000.00	5,000.00	4,474.46 (3.71)
3	Freight Earnings	1,17,055.40 (12.19)	1,21,950.00	1,29,750.00	1,27,432.72 (8.87)
4	Sundry Earnings <sup>4</sup>	8,688.18 (-16.20)	20,790.00	9,864.00	6,996.23 (-19.47)
<b>5</b>	<b>Total Traffic Earnings</b>	<b>1,78,701.15</b>	<b>2,00,740.00</b>	<b>1,96,614.00</b>	<b>1,89,970.06</b>
6	Clearance from Traffic Outstanding (Suspense)	24.16	100.00	100.00	(-) 63.48
<b>7</b>	<b>Gross Traffic Receipts<sup>5</sup> (Item No.5+6)</b>	<b>1,78,725.31</b> (8.13)	<b>2,00,840.00</b>	<b>1,96,714.00</b>	<b>1,89,906.58</b> (6.26)

<sup>1</sup> Budget documents, Annual Statistical Statements of Indian Railways

<sup>2</sup> Gross Budgetary Support, Internal Resources and Extra Budgetary Resources

<sup>3</sup> Earnings from transportation of parcels, luggage and post office mail etc.

<sup>4</sup> Earnings from renting, leasing of building, catering services, advertisements, maintenance of sidings and level crossing, re-imburement of loss on strategic lines etc.

<sup>5</sup> Operational receipts from freight, passenger, other coaching traffic and sundry earnings of IR.

<b>Table 1.1 – Summary of receipt and expenditure during 2018-19 (₹ in crore)</b>					
<b>S. No.</b>	<b>Details</b>	<b>Actual 2017-18</b>	<b>Budget Estimates 2018-19</b>	<b>Revised Estimates 2018-19</b>	<b>Actual 2018-19</b>
8	Miscellaneous Receipts <sup>6</sup>	204.33 (126.31)	250.00	500.00	600.79 (194.03)
<b>9</b>	<b>Total Receipts (Item No.7 + 8)</b>	<b>1,78,929.64</b> (8.19)	<b>2,01,090.00</b>	<b>1,97,214.00</b>	<b>1,90,507.37</b> (6.47)
10	Net Ordinary Working Expenses <sup>7</sup>	1,28,496.51 (8.14)	1,38,000.00	1,41,000.00	1,40,200.30 (9.11)
11	Appropriation to				
	Pension Fund	45,797.71 (30.85)	47,500.00	47,300.00	44,280.00 (-3.31)
	Depreciation Reserve Fund (DRF)	1,540.00 (-70.38)	500.00	500.00	300.00 (-80.52)
<b>12</b>	<b>Total Working Expenses<sup>8</sup> (Item No.10+ 11)</b>	<b>1,75,834.22</b> (10.57)	<b>1,86,000.00</b>	<b>1,88,800.00</b>	<b>1,84,780.30</b> (5.09)
13	Miscellaneous Expenditure <sup>9</sup>	1,429.81 (0.70)	2,100.00	2,400.00	1,953.21 (36.61)
<b>14</b>	<b>Total Expenditure (Item No.12 + 13)</b>	<b>1,77,264.03</b> (10.47)	<b>1,88,100.00</b>	<b>1,91,200.00</b>	<b>1,86,733.51</b> (5.34)
15	Net Surplus (Item No.9(-) 14)	1,665.61 (-66.10)	12,990.00	6,014.00	3,773.86 (126.58)
16	Surplus available for appropriation to				
	Development Fund (DF)	1,505.61 (59.87)	1,000.00	1,000.00	750.00 (50.19)
	Capital Fund (CF)	0	6,990.00	14.00	0
	Debt Service Fund (DSF)	0	0	0	0
	Rashtriya Rail Sanraksha Kosh (RRSK)	0	5,000.00	5,000.00	3,023.86
	Railway Safety Fund (RSF)	160.00	0	0	0

Source: Railway Budget for 2017-18 and 2018-19 and Accounts for 2018-19

Note: Figures in brackets represent the increase/decrease in percentage over previous year.

As can be seen from the Table 1.1

1. Total Receipts increased by 6.47 per cent during 2018-19 as compared to 8.19 per cent increase in 2017-18. The lower growth rate during 2018-19 was

<sup>6</sup> Miscellaneous Receipts comprise of sale of tender documents, liquidated damages and receipts by Railway Recruitment Board etc.

<sup>7</sup> Operating expenses of IR (Staff salary, repairs & maintenance of assets, fuel etc.).

<sup>8</sup> Operating expenses and appropriation to DRF and Pension Fund

<sup>9</sup> Miscellaneous Expenditure comprise of expenditure on Railway Board, Surveys, Research, Designs and Standards Organization, Other Miscellaneous Establishments of IR, Statutory Audit etc.

mainly due to shortfall in Sundry Earnings and shortfall in growth rate of Freight Earnings as compared to 2017-18.

2. Net Ordinary Working Expenses increased by 9.11 *per cent* in 2018-19 as compared to growth rate of 8.14 *per cent* in 2017-18. However, 'Net Surplus' generated after meeting all revenue liabilities, was ₹ 3,773.86 crore in 2018-19 as compared to ₹ 1,665.61 crore in 2017-18. The Railways could show more surplus during the year 2018-19, by making less appropriation to DRF (by ₹ 1,240 crore) and to Pension Fund (by ₹ 1,518 crore) as compared to the previous year.
3. The 'Net Surplus' was lower than the Budget Estimates (BE) by ₹ 9,216.14 crore (70.95 *per cent*). This was due to shortfall in 'Sundry Earnings' by ₹ 13,793.77 crore, 'Other Coaching Earnings' by ₹ 1,525.54 crore and increase in 'Net Ordinary Working Expenses' by ₹ 2,200.30 crore as compared to the BE.
4. The Net Surplus of ₹ 3,773.86 crore was appropriated to Development Fund (₹ 750 crore) and Rashtriya Rail Sanraksha Kosh (RRSK) (₹ 3,023.86 crore). No funds were appropriated to Capital Fund though an amount of ₹ 6,990.00 crore and ₹ 14.00 crore were envisaged in the BE and RE respectively.

## 1.2 Resources of IR

The main sources of receipts of IR during the year 2018-19 are as follows:

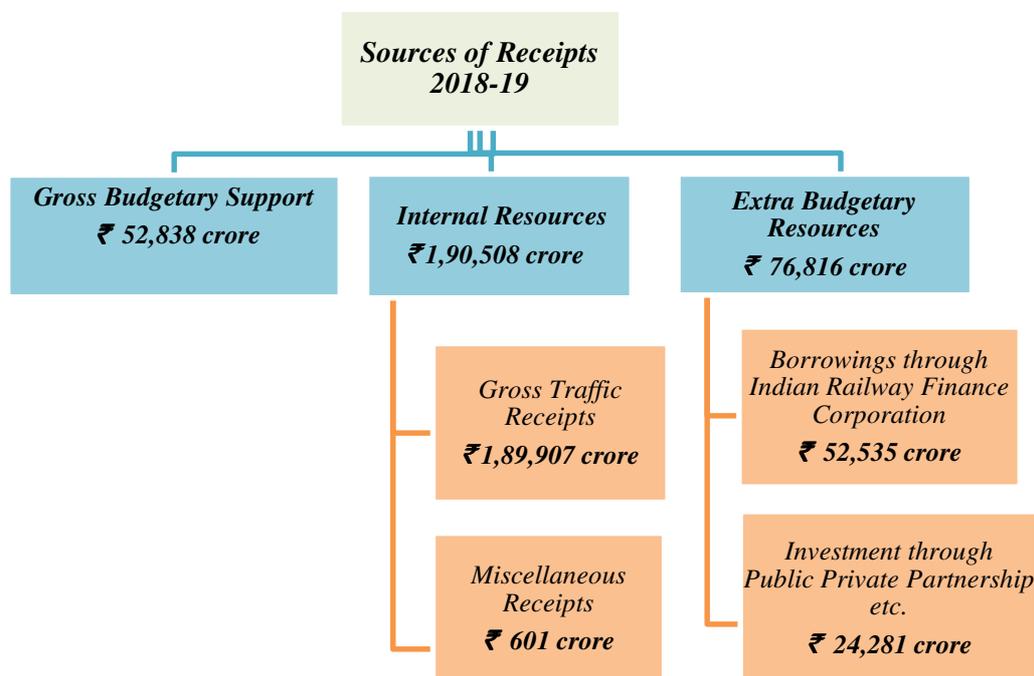
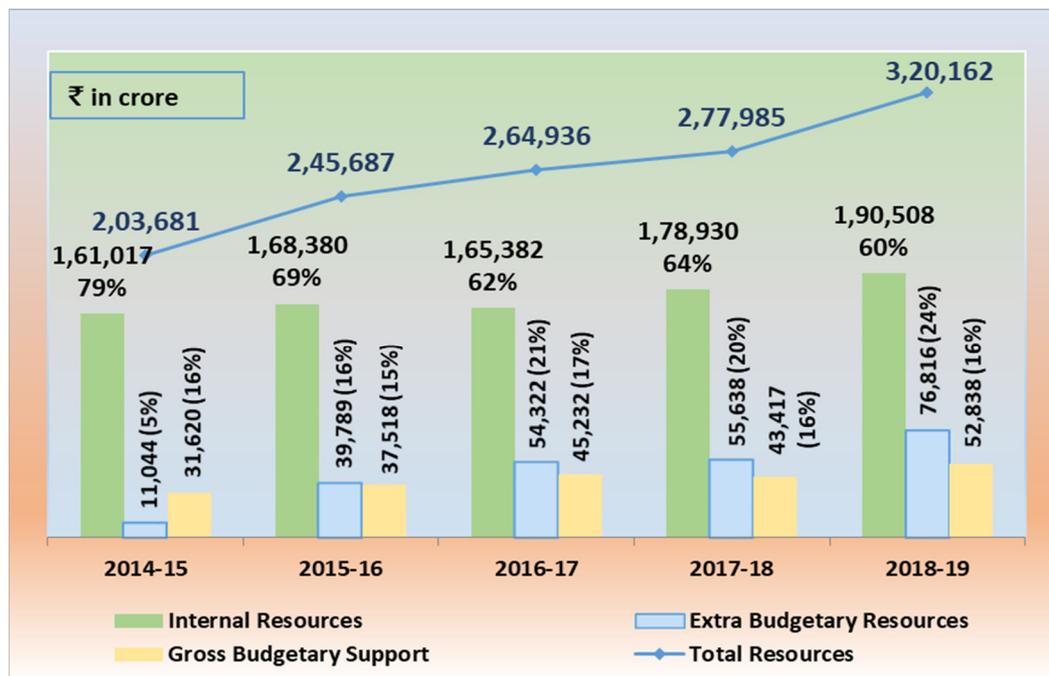


Figure 1.1: Sources of receipts

The share of various resources available for IR during the last five years is shown in the following Graph:



**Figure 1.2: Share of various resources of IR during last five years.**

The above shows that the largest resource of IR are the internal resources followed by extra budgetary resources (EBR) and GBS. The Railways have been raising EBR through Indian Railway Finance Corporation (IRFC), since its inception in 1987, for procurement of rolling stock. From 2015-16 onwards, MoR also resorted to EBR for project financing.

### 1.2.1 Extra Budgetary Resources

EBR includes funds raised through IRFC for procurement of rolling stock and for execution of projects of IR. Institutional Finance (EBR-IF) from Life Insurance Corporation of India (LIC) for funding capital projects and funds raised through implementing projects in PPP mode also form a part of EBR. During 2018-19, IR raised an amount of ₹ 76,816.32 crore through extra-budgetary resources against ₹ 55,638.25 crore raised during 2017-18 (increase of 38 per cent). This included ₹ 52,535.18 crore raised through IRFC for procurement of rolling stock and for execution of projects of IR through institutional finance/other market borrowings and ₹ 24,281.14 crore through PPP mode.

Efficiency in application of EBR funds assumes greater significance for Railways Finances due to interest liability. In view of greater dependence on EBR and rising debt burden of MoR a detailed analysis on financing of projects from EBR, has been carried out. The findings are given in Chapter 2 of the Report.

### 1.2.2 Gross Budgetary Support

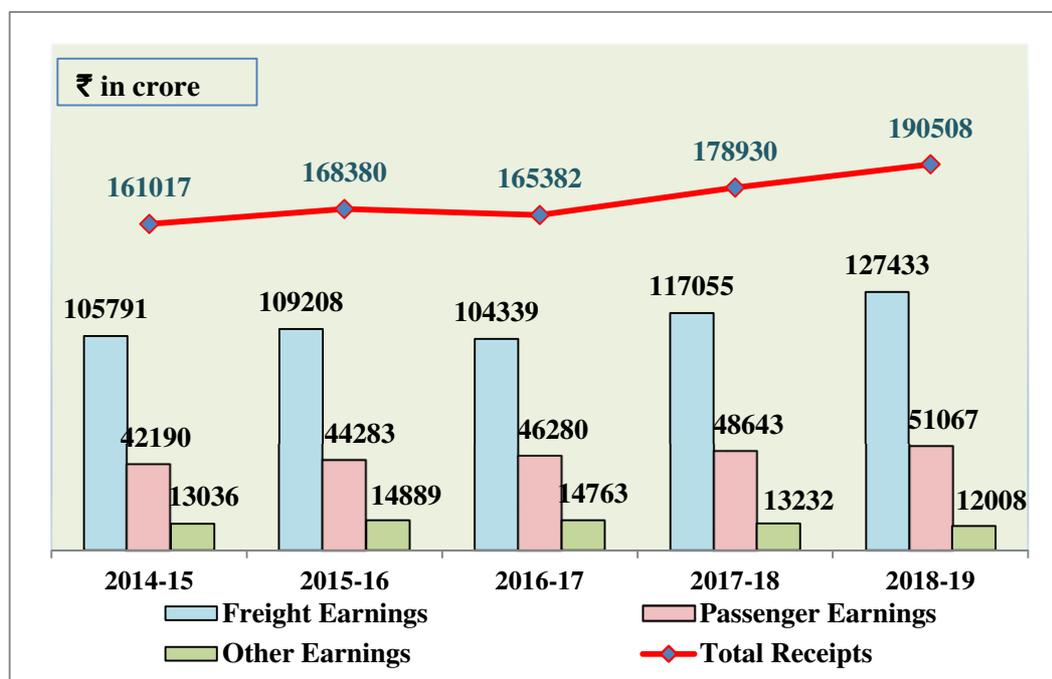
During the year 2018-19, Railways received ₹ 52,837.67 crore as Gross Budgetary Support (GBS) from Government of India against ₹ 43,417.55 crore received during 2017-18. It was 21.70 *per cent* more than the amount of GBS received during the previous year. GBS also included ₹ 13,000 crore received from Central Road Fund (out of diesel cess) during the year 2018-19.

### 1.2.3 Internally generated resources of Indian Railways

Railways internal resources include earnings from freight and passenger business, sundry earnings, other coaching and miscellaneous earnings. During 2018-19, railways generated total internal resources of ₹ 1,90,507.37 crore against ₹ 2,01,090 crore envisaged in the BE. The Railways could not achieve even RE target of ₹ 1,97,214 crore.

The internal resources are utilized for revenue expenditure and expenditure on replacement and renewal of fixed assets through Depreciation Reserve Fund (DRF).

The trend of total revenue receipts for the last five years is shown in the following Graph:



**Figure 1.3: Revenue receipts during 2014-15 to 2018-19**

The trend of total revenue receipts for the last five years showed that while there has been an increase in passenger and freight earnings, other earnings are on declining trend during the last three years.

The trend of growth rates of different segments of revenue receipts are discussed in the succeeding paragraphs.

**a) Freight Earnings**

As against the budget estimates of ₹1,21,950 crore during 2018-19, the actual freight earnings were ₹1,27,432.72 crore. The statistics regarding various parameters of freight services during the past five years were as follows:

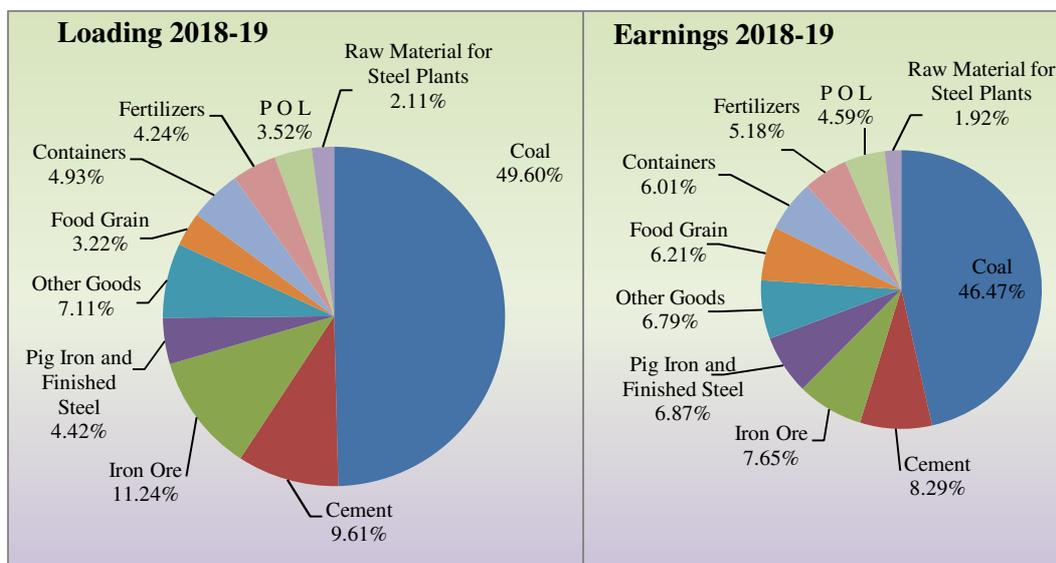
<b>Table 1.2 - Freight Services Statistics</b>					
<b>Year</b>	<b>Loading (Million Tonne)</b>	<b>NTKM<sup>10</sup> (in million) (Revenue Freight Traffic only)</b>	<b>Earnings (₹in crore)</b>	<b>Average lead in km (Average haul of a ton of freight)</b>	<b>Average earnings per tonne per km (in paise)</b>
2014-15	1095.26 (4.15)	681696 (2.39)	1,05,791.34 (12.66)	622	155.19 (10.03)
2015-16	1101.51 (0.57)	654481 (-3.99)	1,09,207.66 (3.23)	594	166.86 (7.52)
2016-17	1106.15 (0.42)	620175 (-5.24)	1,04,338.54 (-4.46)	561	168.24 (0.83)
2017-18	1159.55 (4.83)	692916 (11.73)	1,17,055.40 (12.19)	598	168.93 (0.41)
2018-19	1221.48 (5.34)	738523 (6.58)	1,27,432.72 (8.87)	605	172.55 (2.14)

*Note: Figures in bracket represent percentage increase over previous year.*

During 2018-19, freight loading was 1221.48 Million Tonnes (MT) as compared to the loading of 1159.55 MT during 2017-18. The freight loading increased by 5.34 per cent during 2018-19 over the previous year. This was the highest growth registered in the last six years. However, the growth in freight earnings was 8.87 per cent as compared to previous years' growth rate of 12.19 per cent. Shortfall in growth rate of freight earnings was due to reduction in growth rate of NTKM from 11.73 per cent in 2017-18 to 6.58 per cent in 2018-19.

<sup>10</sup> NTKM-Net TonneKilometre-Unit of measure of freight traffic which represent the transport of one tonne goods over a distance of one kilometre.

The Railways freight basket is limited to certain bulk commodities. The commodity wise share in loading and earnings are given in the following Graph:



**Figure 1.4: Major Commodity- wise share of loading and earnings**

The above major commodities contributed to 96 per cent of the total freight earnings (excluding Miscellaneous Goods Earnings). Coal was the major component both in loading (49.60 per cent) and earnings (46.47 per cent), followed by Cement and Iron Ore. The highest growth in loading was in Coal and Containers which are on an increasing trend over the last four years.

As compared to 2017-18, the major shortfall in freight loading during 2018-19 was in commodities: Food grains (by 4.48 MT), Iron Ore (by 2.46 MT), Pig Iron and Finished Steel (by 0.38 MT) and POL (by 0.10 MT). There was a declining trend in loading of Food grains during the last five years.

As can be seen from the above, there is heavy dependence on Coal transportation. Any shift in the bulk commodities transport pattern could affect the Railways freight earnings significantly. Railways have not been able to diversify their freight basket despite running various incentive schemes for long time.

#### **Freight advance received from National Thermal Power Corporation (NTPC) and CONCOR**

Audit observed that IR had received freight advance of ₹ 10,000 crore during the financial year 2018-19 from NTPC in three installments of ₹ 2,000 crore, ₹ 2,000 crore and ₹ 6,000 crore in October 2018, January 2019 and March 2019 respectively. Further, freight advance of ₹ 3,000 crore was also received from CONCOR in March 2019. Out of total freight advance of ₹ 13,000 crore, ₹ 8,351 crore (excluding GST) was towards transportation of goods to be carried in the ensuing financial year 2019-20.

IR treated the freight advance of ₹ 8,351 crore pertaining to 2019-20 as freight earnings for the year 2018-19, thereby increasing the earnings to that extent.

During 2017-18 also, IR had received freight advance of ₹ 4,761.90 crore (March 2018) from NTPC. This was towards transport of coal during the financial year 2018-19. IR treated it as freight earnings for the year 2017-18.

The raising of freight advance in a financial year towards traffic of ensuing year enables IR to project better operating ratio. This will result in booking of working expenses without corresponding earnings in subsequent years. This may become a vicious cycle to keep seeking increasing advances so as to maintain the operating ratio at a desired level.

From 2017-18 onwards, Ministry of Railways resorted to taking freight advance from customers offering bulk traffic. Audit had already highlighted the issue of advance freight in Report No. 10 of 2019. MoR needs to address this issue so as to stop its recurrence.

### b) Passenger Earnings

As against the budget estimates of ₹ 52,000 crore for passenger earnings during 2018-19, the actual passenger earnings were ₹ 51,066.65 crore. The growth rate for number of passengers originating and passenger earnings during the past five years is shown below:

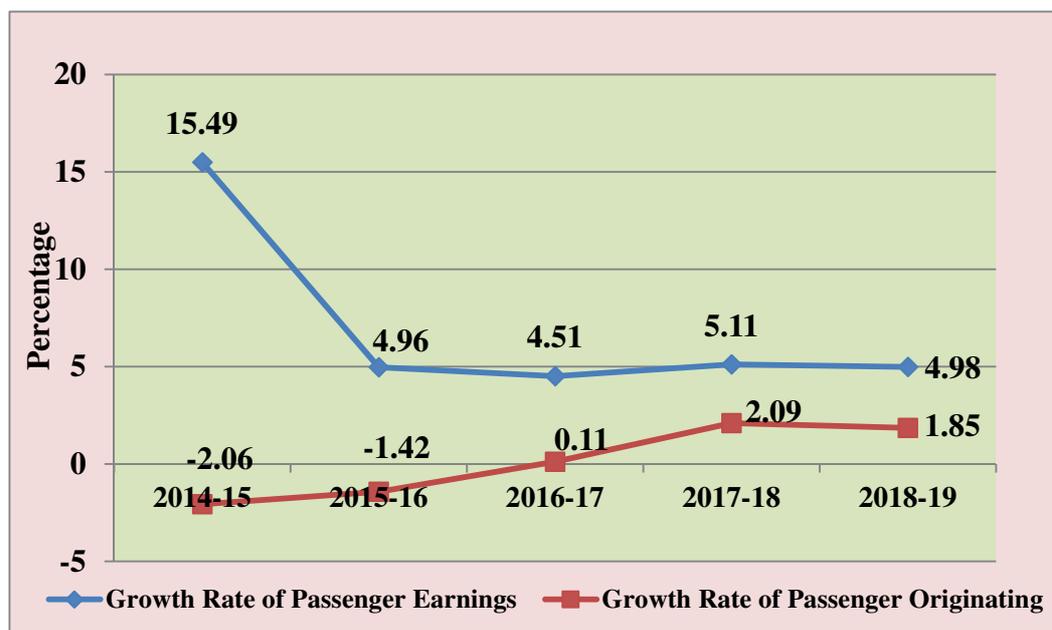


Figure 1.5: Growth rate of number of passengers and earnings

During 2018-19, the growth rate of passenger originating was 1.85 *per cent* as compared to 2.09 *per cent* during the previous year. Key performance indicators of passenger services are as follows:

Table 1.3 – Key passenger indicators					
Year	Number of Passenger (in millions)	Passenger Kilometre (in million)	Earnings (₹ in crore)	Average lead (in kilometre)	Average earnings per passenger per kilometre (in paise)
<b>Suburban Passenger Traffic</b>					
2014-15	4505.03 (-1.04)	151775 (1.01)	2,493.22 (10.29)	33.69	16.43 (9.19)
2015-16	4458.86 (-1.02)	145253 (-4.30)	2,575.22 (3.29)	32.58	17.73 (7.93)
2016-17	4566.43 (2.41)	145417 (0.11)	2,689.44 (4.44)	31.84	18.49 (4.32)
2017-18	4665.34 (2.17)	149464 (2.78)	2,803.79 (4.25)	32.04	18.76 (1.43)
2018-19	4784.31 (2.55)	146678 (-1.86)	2,812.75 (0.32)	30.66	19.18 (2.23)
<b>Non Suburban Passenger Traffic</b>					
2014-15	3719.09 (-3.27)	995415 (0.53)	39,696.39 (15.83)	267.65	39.88 (15.22)
2015-16	3648.47 (-1.90)	997786 (0.24)	41,708.04 (5.07)	273.48	41.80 (4.82)
2016-17	3549.67 (-2.71)	1004418 (0.66)	43,591.02 (4.51)	282.96	43.40 (3.82)
2017-18	3620.43 (1.99)	1028235 (2.37)	45,839.35 (5.16)	284.01	44.58 (2.72)
2018-19	3654.75 (0.95)	1010496 (-1.73)	48,253.90 (5.27)	276.49	47.75 (7.12)

Source-Indian Railways Annual Statistical Statements

Note: Figures in bracket represent percentage increase over previous year.

Passenger traffic is broadly classified into two categories: Suburban and Non Suburban traffic. Suburban trains are passenger trains that cover short distances of up to 150 km, and help move passengers within cities and suburbs. Majority of the passenger revenue (94 per cent) comes from Non Suburban traffic (long-distance trains). As compared to the previous year, the growth rate of passengers originating was 2.55 per cent for Suburban segment and 0.95 per cent for Non Suburban segment. Despite such small increase in number of passengers in Non Suburban segment, the passenger earnings increased by 5.27 per cent. The average earnings per passenger per kilometre increased by 2.23 per cent from i.e. 18.76 paise in 2017-18 to 19.18 paise in 2018-19 in Suburban sections. For Non Suburban sections the increase was 7.12 per cent i.e. from 44.58 paise in 2017-18 to 47.75 paise in 2018-19.

### c) Sundry Earnings and Other Coaching Earnings

As against the budget estimates of ₹ 26,790 crore for 'Sundry and other coaching earnings' during 2018-19, the actual earnings were only ₹ 11,470.69 crore. Sundry and other coaching earnings constituted only 6.04 per cent of the Gross Traffic Receipts in the current year. It decreased by 11.78 per cent, from ₹ 13,002.61 crore in 2017-18 to ₹ 11,470.69 crore in 2018-19.

Audit analysis showed that the decrease was due to shortfall in earnings from property development of land/air space, less receipts on account of one-time recovery under retired Railway employees Liberalised Health Scheme, right of way for OFC laid by/for Rail Tel etc. However, there was increase in receipts from catering department, reimbursement of operating loss on strategic lines, right of way leave facilities for others, residential building/rest houses, interest and maintenance charges of saloons & level crossings, advertisements, other sundry receipts etc. The 'Sundry Earnings' also included an amount of ₹ 1,940 crore on account of reimbursement of operating loss on strategic lines. Increase/decrease of various components of Sundry Earnings in 2018-19 as compared to the previous year 2017-18 is shown in *Annexure-I*.

#### d) Unrealized Earnings

Unrealized earnings on account of movement of traffic is classified as 'Traffic Suspense'. Unrealized earnings on account of rent/lease of building/land and maintenance charges of sidings etc. is 'Demand Recoverable'. The outstanding under unrealized earnings increased from ₹ 1,664.59 crore in 2017-18 to ₹ 1,728.08 crore at the end of 2018-19. Of this, an amount of ₹ 1,389.72 crore was outstanding under Traffic Suspense and ₹338.36 crore under 'Demand Recoverable'. The major portion of outstanding under Traffic Suspense was on account of un-recovered freight and other charges from Power Houses and State Electricity Boards (SEBs). This amounted to ₹ 616.01 crore, and constituted 44.33 per cent of the total Traffic Suspense. Major defaulters are as follows:

**Table 1.4-Outstanding dues against State Electricity Board**

(₹ in crore)

Sl. No.	State Electricity Board/Power House	Outstanding dues as of 31 March 2019
1.	Punjab State Electricity Board (PSEB)	444.62
2.	Delhi Vidyut Board (DVB)	114.28
3.	Rajasthan State Electricity Board (RSEB)	31.86
4.	Maharashtra State Electricity Board (MSEB)	7.29
5.	Uttar Pradesh State Electricity Board (UPSEB)	12.84
6.	West Bengal State Electricity Board (WBSEB)	1.11
7.	NTPC	2.24

*Source-Statement of dues recoverable from State Electricity Board/Power Houses*

The outstanding dues in respect of PSEB, DVB and RSEB are continuing over ten years. The Ministry of Railways needs to enhance its efforts to realize the old outstanding dues from SEB's.

### 1.3 Cross-Subsidization of Passenger and other Coaching Services

IR was unable to meet its operational cost of passenger services and other coaching services. The data available in the latest Report<sup>11</sup> published by the IR has been analysed. It indicates that there was cross subsidization from freight earnings to passenger and other coaching earnings. Loss incurred by passenger and other coaching services increased from ₹ 31,727.44 crore in 2013-14 to ₹ 46,024.74 crore in 2017-18. The losses on passenger and other coaching services vis-à-vis the profit on freight services during 2013-14 to 2017-18 is shown in the following Graph:

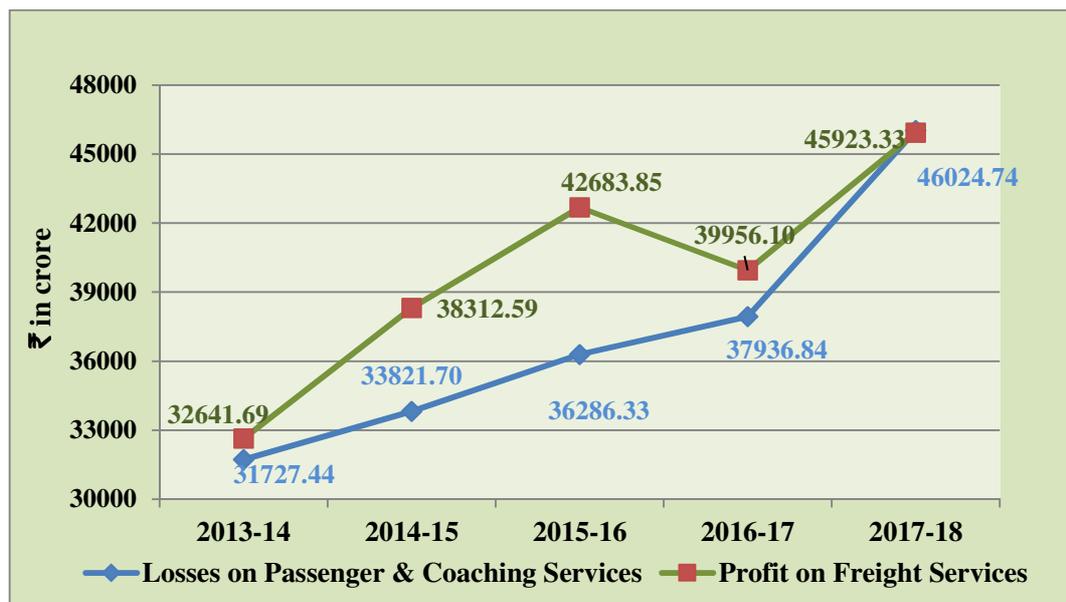


Figure 1.6: Losses on Passenger and Other Coaching Services vis-à-vis Profit on Freight Services

As can be seen from the above, the loss on passenger and other coaching services has been steadily increasing over the years. On the other hand, the profit earned on freight operations during 2017-18 was ₹ 45,923.33 crore. The entire profit from freight traffic was utilized to compensate the loss on operation of passenger and other coaching services of IR. The loss of ₹ 101.41 crore from Passenger operations was left uncovered during 2017-18. During the year 2016-17 the Railways were able to retain five *per cent* of the profit on freight earnings after subsidizing the loss on passenger services.

The operational losses of various classes of passenger services during 2013-14 to 2017-18 are given in the following table:

<sup>11</sup> Summary of End Results-Freight Services Unit Costs and Coaching Services Profitability/Unit Costs for the year 2017-18

Class	2013-14	2014-15	2015-16	2016-17	2017-18
AC-Ist class	(-) 47.39	(-) 127.49	(-) 175.79	(-) 139.39	(-) 164.95
Ist class	(-) 92.06	(-) 69.50	(-) 58.00	(-) 53.31	(-) 34.67
AC 2 Tier	(-) 497.28	(-) 495.59	(-) 463.11	(-) 559.27	(-) 604.49
AC 3 Tier	<b>410.67</b>	<b>881.52</b>	<b>898.06</b>	<b>1,040.52</b>	<b>738.75</b>
AC Chair car	(-) 148.47	(-) 142.26	(-) 5.58	<b>117.83</b>	<b>98.39</b>
Sleeper Class	(-) 8,407.85	(-) 8,510.06	(-) 8,301.15	(-) 9,313.27	(-) 11,003.06
Second class	(-) 7,134.42	(-) 7,642.13	(-) 8,569.77	(-) 10,024.88	(-) 11,523.87
Ordinary Class	(-) 11,105.24	(-) 11,673.80	(-) 13,237.74	(-) 14,647.64	(-) 16,568.07
EMU suburban services	(-) 4,027.14	(-) 4,679.11	(-) 5,124.74	(-) 5,323.62	(-) 6,184.46

*Source-Summary of the End Results Coaching Services Profitability/Unit Costs.*

*Note: Negative figures denote losses and positive figures denote profits on passenger services.*

As can be seen from the data above, all classes of train services have incurred losses during 2017-18 except AC 3 Tier and AC Chair Car which could recover its operational cost and made profit. The cross-subsidisation in respect of both ordinary class and suburban services increased almost continuously in the last five years with subsidy on Ordinary Class being the maximum. The loss in various classes of passenger services ranged from ₹ 16,568.07 crore (Ordinary Class) to ₹ 34.67 crore (First Class).

One of the contributing factors for non-recovering full cost from these classes is free and concessional fare passes/tickets to various beneficiaries in good numbers. The revenue forgone in passenger earnings due to concessions to various categories of passengers (viz. physically challenged persons, patients, senior citizens, Izzat monthly season tickets, press correspondents, sport persons, war widows, etc.) was ₹ 1,670.05 crore during 2016-17 and ₹ 1,809.64 crore in 2017-18. A detailed analysis on concessions given by the Railways was done in CAG's Report on Union Government (Railways) – Railways Finances - No.10 of 2019.

#### **1.4 Application of Resources**

The two main components of expenditure in IR are 'Revenue Expenditure' and 'Capital Expenditure'. Revenue expenditure includes ordinary working expenditure and miscellaneous expenditure.

The total expenditure of IR grew from ₹ 2,79,249.50 crore in 2017-18 to ₹ 3,20,110.17 crore in 2018-19, registering an increase of 14.63 per cent. While capital expenditure increased by 30.78 per cent, revenue<sup>12</sup> expenditure increased by 5.34 per cent during the same period. The share of Capital expenditure to total

<sup>12</sup> Excluding amount of surplus appropriated to DF, CF, DSF and RRSK (2014-15 ₹ 7,664.94 crore, 2015-16 ₹ 10,505.97 crore, 2016-17 ₹ 4,913.00 crore, 2017-18 ₹ 1,665.61 crore and 2018-19 ₹ 3,773.86 crore).

expenditure increased from 36.5 per cent in 2017-18 to 41.7 per cent in 2018-19. The share of Revenue expenditure decreased from 63.5 per cent in 2017-18 to 58.3 per cent in 2018-19. The details of Revenue and Capital Expenditure during the last five years are shown in the following Graph:

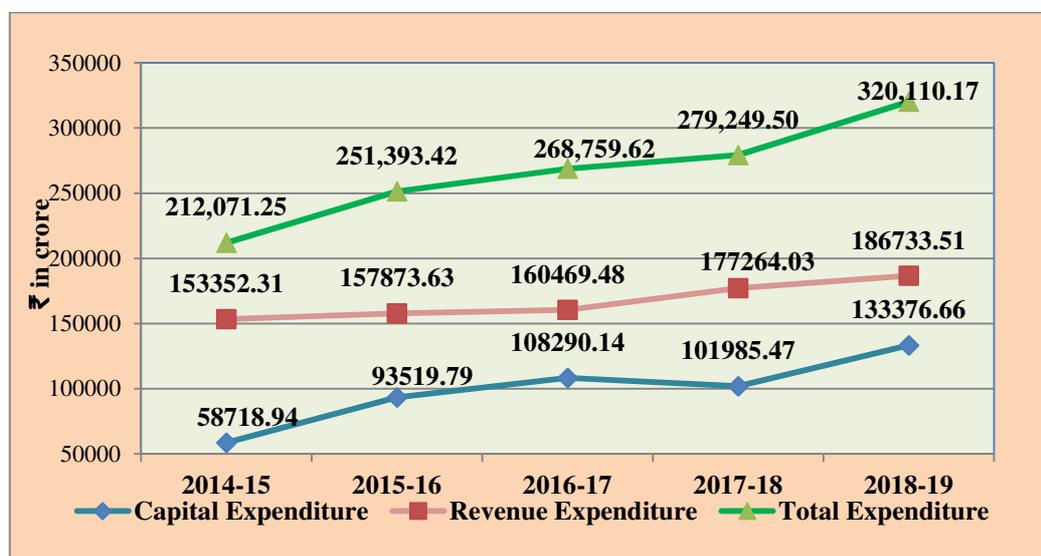


Figure 1.7: Capital and Revenue Expenditure in the last five years

#### 1.4.1 Revenue Expenditure

Comparison of Share of Revenue Expenditure during 2018-19 against the Average Share of Revenue Expenditure during 2013-14 to 2017-18 is shown below:

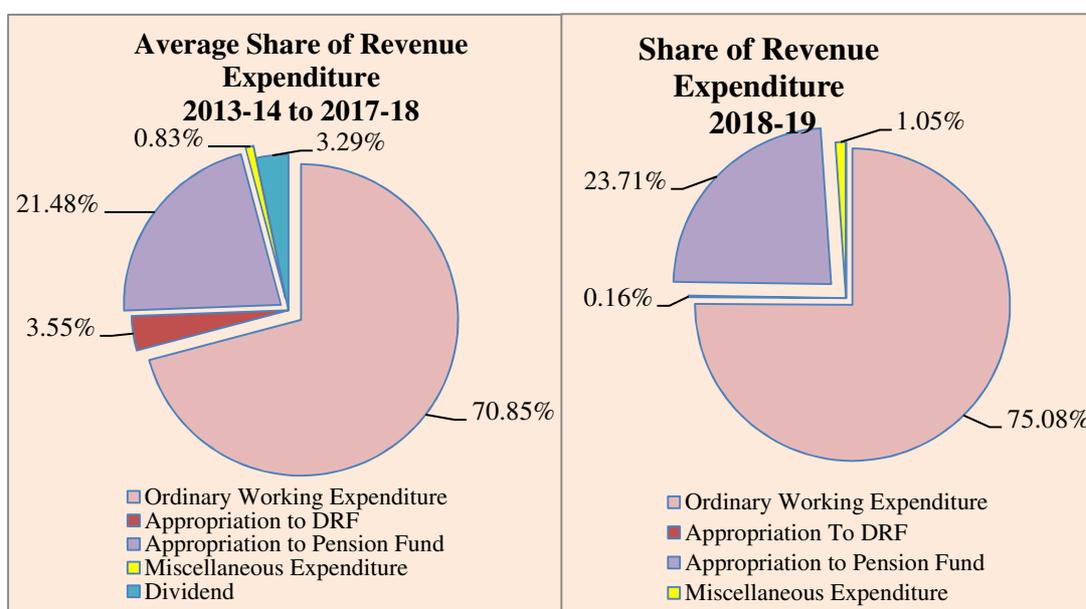


Figure 1.8: Share of Revenue Expenditure in the last five years

Ordinary Working Expenditure (OWE) comprises expenditure on day-to-day maintenance and operations of IR. This includes expenditure on office administration, repairs and maintenance of track and bridges, locomotives, carriage and wagons, plant and equipment, operating expenses on crew, fuel, miscellaneous

expenditure, payment of interest component of lease charges, pension liabilities<sup>13</sup> etc. During 2018-19, OWE increased to 75.08 per cent of the total revenue expenditure as compared to the average of 70.85 per cent during the past five years.

### Component-wise Revenue Expenditure

The break-up of working expenditure of IR under staff, fuel, lease charges, stores, others and pension outgo for the last five years is shown in Graph below:

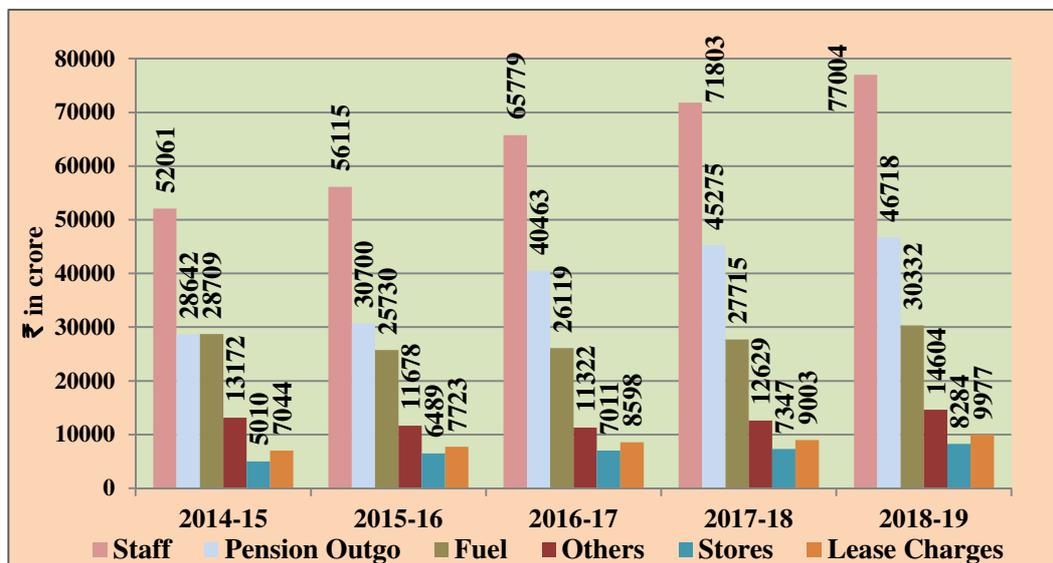


Figure 1.9: Component wise expenditure

As can be seen from the above, Staff cost (including pension outgo) constituted about 66 per cent of the working expenses during the current year. It increased by 5.67 per cent during 2018-19 as compared to the previous year.

The committed expenditure of the IR consisting of staff cost, pension payments and lease hire charges on rolling stock, was 71.5 per cent of the total working expenditure in 2018-19.

#### a) Appropriation to Pension Fund

Appropriation to Pension Fund is the second largest component of revenue expenditure. Railways appropriated ₹ 44,280.00 crore to the Pension Fund in 2018-19, against ₹ 45,797.71 crore appropriated last year. The actual expenditure on pension was ₹ 46,194.81 crore (for Zonal Railways) against this appropriated amount in 2018-19. The actual expenditure during 2018-19 was more by ₹ 1,437.66 crore than the previous year.

Para No 339 of Indian Railway Financial Code Volume-I, *interalia* provides that estimate amount of appropriation to the Pension Fund is based on actuarial calculations to provide for liability arising from pensionable service rendered by railway employees for varying periods. Where such actuarial calculations are not completed, the appropriation is made on an adhoc basis to be suitably re-assessed subsequently.

<sup>13</sup> Excluding pension payments in respect of Railway Production Units and Miscellaneous Organisations

Audit observed that neither the estimation of pension liability was based on actuarial calculations nor was it re-assessed subsequently.

### b) Appropriation to Depreciation Reserve Fund

Appropriation to DRF decreased significantly in 2018-19 as compared to the average appropriation during 2013-18. Against the budgeted amount of ₹ 500 crore for 2018-19, only ₹ 300 crore was appropriated to DRF. As pointed out last year by Audit, under provisioning for depreciation is resulting in piling up of 'throw forward' of works relating to renewal of over aged assets.

Detailed analysis of various Railways Funds is given in Paragraph 1.7.

## 1.4.2 Capital Expenditure

IR is required to augment infrastructure for sustainable economic growth. To keep pace with the transport sector in general and to respond to the pressures of a buoyant economy, it is essential that its resources are used effectively. Creation of new assets, timely replacement and renewal of depleted assets etc. are carried out through capital expenditure.

### a) Source-wise Capital Expenditure

The capital expenditure of IR is financed from three sources viz. GBS, internal resources<sup>14</sup> and extra budgetary resources<sup>15</sup>. During the past five years, the contribution from various sources towards capital expenditure can be seen from the following table:

Source	2014-15	2015-16	2016-17	2017-18	2018-19	
	Actual	Actual	Actual	Actual	Budget Estimates	Actual
Gross Budgetary Support <sup>16</sup>	32,327.60 (55.05)	37,608.47 (40.22)	45,231.64 (41.77)	43,417.55 (42.57)	53,060 (36.22)	52,837.67 (39.61)
Internal Resources (From Railways Funds)	15,347.24 (26.14)	16,845.31 (18.01)	10,479.84 (9.68)	3,069.77 (3.01)	11,500 (7.85)	4,663.18 (3.50)
<b>Total (GBS and Internal Resources)</b>	<b>47,674.84 (81.19)</b>	<b>54,453.78 (58.23)</b>	<b>55,711.48 (51.45)</b>	<b>46,487.32 (45.58)</b>	<b>64,560 (44.07)</b>	<b>57,500.85 (43.11)</b>
Extra Budgetary Resources (IRFC and PPP)	11,044.10 (18.81)	39,066.01 (41.77)	52,578.66 (48.55)	55,498.15 (54.42)	81,940 (55.93)	75,875.81 (56.89)
<b>Grand Total</b>	<b>58,718.94</b>	<b>93,519.79</b>	<b>1,08,290.14</b>	<b>1,01,985.47</b>	<b>146,500</b>	<b>1,33,376.66</b>

*Note: Figures in brackets represent percentage share of overall expenditure*

During the year 2018-19, the overall Capital expenditure of IR increased substantially by 31 per cent as compared to the previous year. The share of GBS

<sup>14</sup> Reserve Funds such as Depreciation Reserve Fund, Capital Fund, Development Fund

<sup>15</sup> Market borrowing through IRFC Limited and PPP

<sup>16</sup> Includes expenditure from Railway Safety Fund

to the total capital expenditure decreased from 42.57 per cent in 2017-18 to 39.62 per cent in 2018-19. However, the share of internal resources in total capital expenditure, which was as high as 26.14 per cent in 2014-15, decreased to 3.50 per cent in 2018-19. Inadequate generation of internal resources resulted in greater dependence on GBS and EBR.

The share of EBR increased from 54.42 per cent in 2017-18 to 56.89 per cent in current year. During 2018-19, Ministry of Railways spent ₹ 23,735.88 crore on procurement of Rolling Stock from funds raised through market borrowings by IRFC. An amount of ₹ 27,858.79 crore was incurred on projects funded through EBR on New Lines (Construction), Gauge Conversion, Doubling, Railway Electrification Projects and Traffic Facilities. Further, ₹ 24,281.14 crore through Public Private Partnership (PPP) mainly for expenditure on New Line Projects, Traffic Facilities and Road Safety Works etc.

**b) Expenditure under various Plan Heads**

Indian Railways undertakes capital expenditure under the following Plan heads:

Table 1.7 - Category-wise Capital Expenditure (₹ in crore)					
Plan Heads	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Doubling</b>	4,132.32	10,472.35	9,093.23	11,240.34	15,168.33
<b>New Lines (Construction)</b>	8,401.45	15,789.74	15,969.89	9,183.82	11,275.40
<b>Track Renewal</b>	3,734.39	4,367.59	5,076.33	7,727.71	8,241.66
<b>Gauge Conversion</b>	3,520.12	3,615.65	3,769.92	2880.11	4,055.00
<b>Signaling and Telecommunication</b>	1,002.49	892.89	951.56	1,255.64	1,537.02
<b>Traffic Facilities &amp; Yard Remodelling</b>	780.74	983.00	910.67	1,224.84	1,146.70
<b>Bridge Work</b>	413.11	517.20	474.52	448.73	528.27
<b>Rolling Stock and Payment of Capital Component of Lease charges</b>	21,723.98	24,240.71	26,610.98	28,119.11	37,219.68
<b>Investment in PSUs, JVs, SPVs,</b>	4,865.31	7,349.71	7,184.13	4,887.99	12,678.36
<b>Workshop and Production Units and Plant &amp; Machinery</b>	2,129.02	1,921.14	1,965.00	1,753.57	2,442.94
<b>Others</b>	8,016.01	8,288.81	9,449.82	11,147.61	14,802.16
<b>Total<sup>17</sup></b>	<b>58,718.94</b>	<b>78,438.79</b>	<b>81,456.05</b>	<b>79,869.47</b>	<b>109,095.52</b>

Source-Indian Railways Appropriation Accounts-Grant No.80 and Statement No.10-Statement of Expenditure on Capital Account.

Note 1: 'Others' include Road Safety Works, Electrification Projects, Computerization, other Electric Works, Railway Research, Other Specified Works, Stores Suspense, Manufacturing Suspense, Miscellaneous Advance, Staff Quarters, Passenger Amenities, Metropolitan Projects.

Doubling, New Lines (Construction), Track Renewal and Gauge Conversion are the major components of Capital Expenditure. IR also undertook new line, traffic facility works, Rolling stock, Road Safety Works (Road Over/Under Bridge) etc. through PPP mode.

<sup>17</sup> Excludes expenditure on PPP

As compared to the previous year, the expenditure on Gauge Conversion, New Lines, Doubling, Track Renewal, Bridge Work, Signalling and Telecommunication works increased during 2018-19 in the range of 6 per cent to 41 per cent. The expenditure on 'Rolling Stock and Capital Component of Lease charges' increased by 33 per cent in 2018-19 as compared the previous year.

### 1.5 Revenue surplus

The 'Net revenue surplus' is the surplus available with the railways after meeting all expenditure of revenue nature such as staff cost including pension, operational expenses, repair and maintenance cost and appropriation to DRF and Pension Fund. This surplus is further allocated to various Railway Funds such as DF, CF, DSF, RSF and RRSK. The net revenue surplus during the years 2009-10 to 2018-19 can be seen in the Graph below:

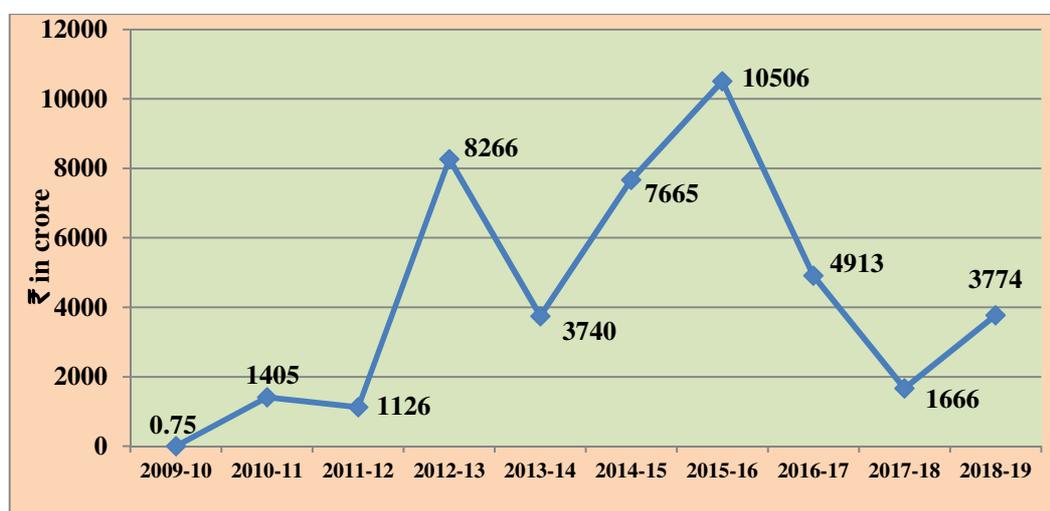


Figure 1.10 Revenue Surplus

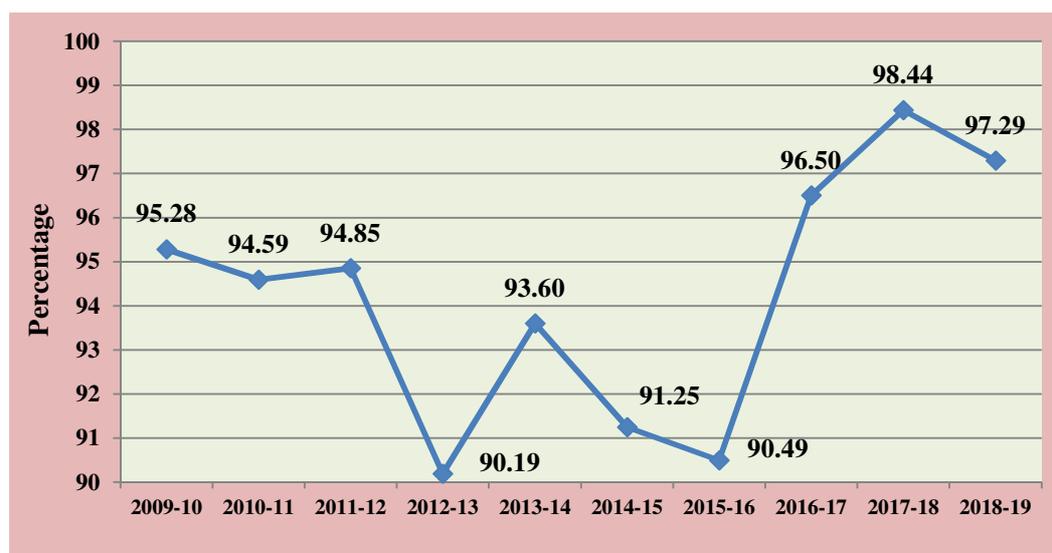
Against the BE of ₹12,990 crore, the 'Net Surplus' was ₹ 3,773.86 crore in 2018-19. It was lower than the BE by ₹ 9,216.14 crore (70.95 per cent). However, the net surplus increased from ₹ 1,665.61 crore in 2017-18 to ₹ 3,773.86 crore in 2018-19. Audit analysis revealed that the Railways could show more surplus during 2018-19 by appropriating lesser amount to Pension Fund and DRF by ₹ 1,517.71 crore and ₹ 1,240 crore respectively as compared to the previous year. The actual surplus during the year 2018-19 would have been ₹ 1,016.15 crore had the Railways appropriated similar amount like last year. Further, IR would have ended with a negative balance of ₹ 7,334.85 crore but for receipt of advance freight of ₹ 8,351 crore and less appropriation to DRF and Pension Fund.

## 1.6 Efficiency Indices

The financial performance and efficiency in operations of an enterprise can best be measured from its financial and performance ratios. The relevant ratios in this regard for IR are ‘Operating Ratio’, ‘Capital-Output Ratio’ and ‘Staff Productivity’, which are discussed below:

### 1.6.1 Operating Ratio – Window Dressing

Operating Ratio (OR) represents the ratio of working expenses to traffic earnings. A higher ratio indicates poorer ability to generate surplus. Against the target of 92.8 *per cent* in the BE, the OR of Railways was 97.29 *per cent* in 2018-19. This meant that railways spent ₹ 97.29 to earn ₹ 100. As compared to the OR of 98.44 *per cent* during the previous year, there was marginal improvement in 2018-19. This was primarily due to the reason that working expenses grew at lower rate (5.09 *per cent*) as compared to previous year (10.57 *per cent*). The OR of IR during the past ten years is as follows:



**Figure 1.11 Operating Ratio of Indian Railways**

As can be seen from the Graph above, the OR of Indian Railways reached an all-time high of 98.4 in 2017-18, which marginally came down to 97.29 *per cent* in 2018-19. Further, if advance freight of ₹ 8,351 crore (pertaining to 2019-20) from NTPC and CONCOR was not included in the earnings of 2018-19, the OR would have been 101.77 *per cent* instead of 97.29 *per cent*. IR resorted to window dressing in order to project better operating ratio.

OR of zonal railways during the last five years ended on 31 March 2019 is shown in the following Table:

Table 1.8 Operating Ratio of Zonal Railways

(In per cent)

S. No.	Zonal Railway	2014-15	2015-16	2016-17	2017-18	2018-19
1.	Metro Railway/Kolkata	253.69	237.80	260.06	278.29	247.94
2.	North Eastern	193.47	196.52	197.01	201.78	204.54
3.	Eastern	177.27	180.56	165.27	181.15	185.98
4.	Northeast Frontier	187.08	185.71	130.45	169.29	160.58
5.	Southern	128.98	134.89	147.83	161.14	152.61
6.	South Western	98.72	102.60	119.56	129.49	132.64
7.	Northern	117.65	114.97	118.85	117.09	131.95
8.	North Western	90.18	91.15	95.17	107.90	105.75
9.	Central	101.85	98.13	105.00	111.12	105.44
10.	Western	86.51	88.72	103.00	107.86	102.11
11.	East Central	95.24	90.28	101.83	97.50	98.46
12.	South Central	76.03	78.71	86.24	82.94	79.53
13.	South Eastern	73.62	71.15	73.46	75.90	73.08
14.	North Central	64.13	61.98	70.50	66.89	68.39
15.	West Central	63.56	64.38	73.90	74.91	67.83
16.	South East Central	50.83	50.52	56.24	55.82	56.24
17.	East Coast	51.25	50.56	53.78	51.98	52.39
<b>Overall IR</b>		<b>90.19</b>	<b>91.25</b>	<b>90.49</b>	<b>98.44</b>	<b>97.29</b>

Source-Indian Railways Appropriation Accounts 2018-19

OR of seven Zonal Railways (East Central, South Central, South Eastern, North Central, West Central, South East Central and East Coast Railways) ranged between 99 per cent and 52 per cent. OR of ten Zonal Railways (Metro Railway/Kolkata, North Eastern, Eastern, Northeast Frontier, Southern, South Western, Northern, North Western, Central and Western Railways) was more than 100 per cent during 2018-19 implying that their working expenditure was more than their traffic earnings. OR of six Zonal Railways (East, Northern, North Eastern, Northeast Frontier, Southern Railways and Metro Railway/Kolkata) had continued to be more than 100 per cent in the last five years.

### 1.6.2 Capital Output Ratio

Capital Output Ratio (COR) indicates the amount of capital employed to produce one unit of output. Total Traffic in terms of NTKMs (for both Goods and Passenger Traffic) is considered as the output in the case of IR. Higher COR indicates lower performance. COR of IR during the last five years ended on 31 March 2019 was as follows:

As on	Total Capital including investment from Capital Fund (₹ in Million)	Goods Traffic (Million NTKM) (Revenue Traffic only)	Passenger Traffic (Million NTKMs)	Total Traffic (in Million NTKMs) [Col. (3) + Col. (4)]	Capital at charge (in Paise) per NTKM (COR) [Col. (2)/ Col. (5) x100]
(1)	(2)	(3)	(4)	(5)	(6)
31.03.2015	2,421,170	681,696	81,450	763,146	317
31.03.2016	2,751,353	654,481	81,566	736,047	374
31.03.2017	3,024,578	620,175	81,638	701,813	431
31.03.2018	3,247,256	692,916	83,617	776,533	418
31.03.2019	3,482,121	738,523	82,159	820,682	424

Source-Indian Railways Annual Statistical Statements

COR had increased from 317 paise in 2014-15 to 424 paise in 2018-19 indicating decrease in physical performance of the IR as compared to capital employed. Higher cost overruns due to non-completion of projects in time coupled with investment in financially unviable projects contributed to higher COR.

### 1.6.3 Staff Productivity

In IR, the Staff productivity<sup>18</sup> is measured in terms of volume of traffic handled per thousand employees. A higher ratio indicates efficient transport of freight/passenger. The staff productivity increased by 16 per cent from 2014-15 (617) to 2018-19 (714) of Open Line staff of all Zonal Railways. Improvement in staff productivity in the last five years was due to increase in freight carried (tonnage) and passenger originating (total distance carried/travelled).

During 2018-19, highest Staff Productivity of 1790.71 Million NTKM was achieved by East Coast Railway. Staff Productivity of 252.51 Million NTKM of Eastern Railway was the lowest during the same period.

### 1.7 Railway Funds

The following funds are operated by Indian Railways for specific purposes. These funds (except RSF and RRSK) also accrue interest at the rate fixed by the Ministry of Finance. The details of the funds are given in the following table:

<sup>18</sup> Annual Statistical Statements of Indian Railways

Name of Fund	Opening Balance as on 01 April 2018	Accretion during the year	Withdrawal during the year	Closing Balance as on 31 March 2019
Depreciation Reserve Fund (DRF)	712.09	539.97	534.03	718.03
Pension Fund	1973.69	44940.64	46718.22	196.11
Development Fund (DF)	583.09	773.27	1108.00	248.36
Capital Fund (CF)	359.87	20.69	0.00	380.56
Railway Safety Fund (RSF)	146.83	12999.98	13005.82	140.99
Debt Service Fund (DSF)	193.01	11.10	0.00	204.11
RRSK	9.25	18023.86	18015.33	17.78
<b>Total</b>	<b>3977.83</b>	<b>77309.51</b>	<b>79381.40</b>	<b>1905.94</b>

- Note- 1. Accretion includes financial adjustments, appropriation to fund and interest received on fund balances during the year.  
 2. Accretion under DF and RSF includes financial adjustments of ₹ 0.04 crore and ₹ (-) 0.02 crore respectively.

The overall fund balances which showed an increasing trend up to 2015-16 has decreased significantly in 2018-19 as can be seen from the following Graph:

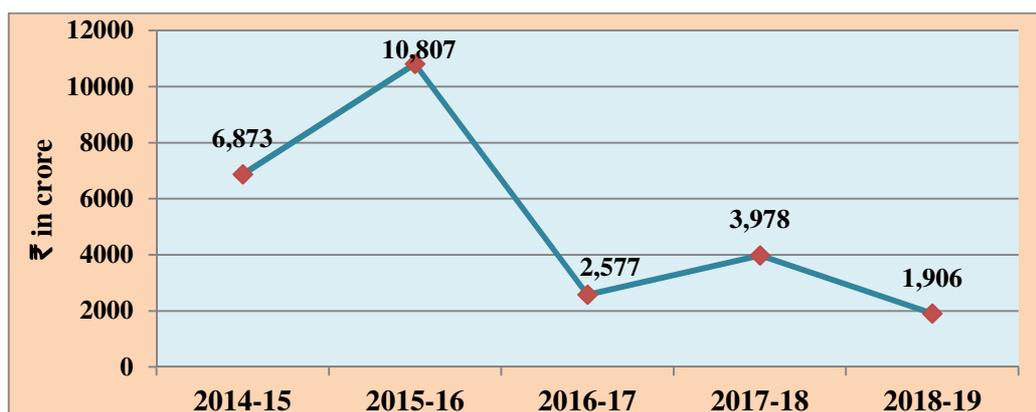


Figure 1.12: Trend of Railways Fund Balances (2014-15 to 2018-19)

### 1.7.1 Depreciation Reserve Fund

For replacement and renewal of assets, the Railways maintain DRF. During 2018-19, ₹ 500 crore<sup>19</sup> was appropriated against the BE of ₹ 700 crore and ₹ 534.03 crore spent from the fund. The amount is insignificant as compared to the 'throw forward' for works to be done under DRF.

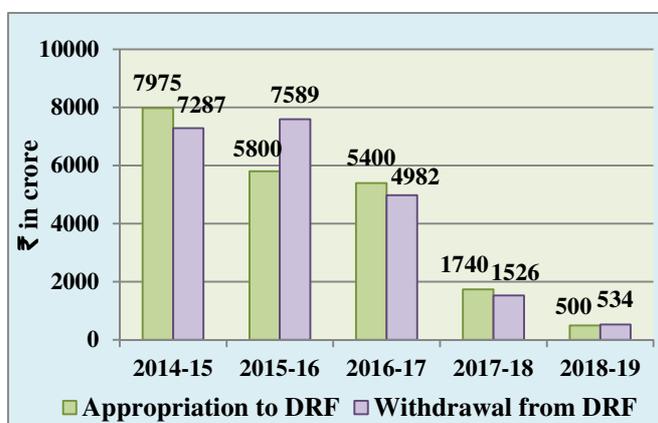


Figure 1.13: Appropriation to and withdrawal from DRF

<sup>19</sup> ₹ 300 crore from revenue and ₹ 200 crore from Capital

The ‘throw forward’ value of assets to be replaced from DRF (up to 2018-19) was estimated at ₹ 96,403 crore. This mainly included ₹ 61,245 crore on track renewals, ₹ 27,892 crore on rolling stock, ₹ 1,733 crore on signaling and telecommunication works, ₹ 1,211 crore on bridge works and ₹ 678 crore on machinery and plant. Thus, there is huge backlog of renewal and replacement of over aged assets, which needs to be replaced timely, for safe running of trains.

The provision made to the fund for replacement and renewal of assets is inadequate. It is dependent on the amount which the working expenses can bear, as is seen from the appropriation to DRF during the past five years. This has steadily decreased during this time and was insufficient to meet the requirements. Audit had flagged this issue in its earlier Report<sup>20</sup>. There is every possibility and especially in the background of depleting surplus, that replacement and renewal of over aged assets could become a burden for the Government of India.

### 1.7.2 Pension Fund

The fund was created to cover the current pension payments as also to meet the accumulated liability on account of pension benefits earned in each year of service. The fund is financed by transfer from revenue in case of Zonal Railways and by transfer from Workshop Manufacture Suspense (WMS) in case of Production Units. During 2018-19, ₹ 44,880 crore was appropriated and ₹ 46,718.22 crore spent. The gap between the appropriation to the fund and expenditure was met from the balance available in the Pension Fund Account. Thus the balance in the Pension Fund has come down from ₹ 1,974 crore as on 31 March 2018 to ₹ 196 crore at the end of 31 March 2019. The expenditure of Railways on account of Pension payments during the last five years is shown in the following Graph:

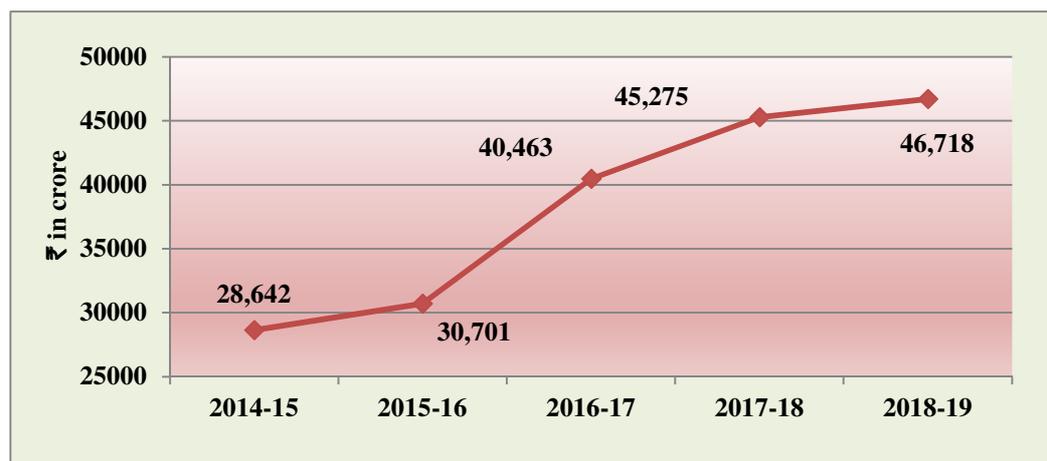


Figure 1.14: Expenditure on Pension Payments of Railways

<sup>20</sup> Audit Report of Railways Finances (No 10 of 2019)

As can be seen from the Graph, the expenditure on pension which was ₹ 28,642.88 crore in 2014-15, has increased to ₹ 46,718.22 crore in 2018-19 (63 per cent increase). The expenditure on pension constituted 25 per cent of the total working expenses.

### 1.7.3 Capital Fund

The fund has been created (from 1992-93) with the express purpose of financing part of the requirement for works of capital nature. The fund remained operative till 2001-02. Thereafter, Railways were not able to generate enough revenue surplus for being appropriated to this fund. Hence, the fund was not operative from 2002-03 to 2004-05 and was made operative from 2005-06.

During 2018-19 no appropriation was made to the fund though an amount of ₹ 6,990.00 crore and ₹ 14.00 crore were envisaged in the BE and RE respectively. Audit has been pointing out about defective budgeting in IR and had observed in Report No.12 of 2013 that, the basis adopted for projecting growth and variation in earnings as well as expenditure were not adequately assessed and documented.

Accurate forecast of budget is of paramount importance for efficient financial and operational performance of an organization. It assumes greater significance in view of COVID 19 pandemic. MoR needs to take timely steps towards realistic assessment of estimates in order to have prudent financial management of its receipts and expenditure.

During 2018-19, IR spent ₹ 9,111.51 crore towards capital component of IRFC lease charges from GBS, as no appropriation was made to CF. Audit observed that for the last two years, the entire lease charges (Principal component) were being paid from the Budgetary Support. Ideally the repayment of lease charges to IRFC should have been made from Capital Fund (which is sourced from revenue surplus). However, due to inadequate surplus and insufficient funds available in CF, the repayment of lease charges to IRFC was made from GBS. This arrangement of repayment to IRFC from GBS is not a healthy trend and would deprive the railways of additional investments that could have been made on capital works. Thus GBS was ultimately being used to repay the loan. Audit had commented in Report No.10 of 2019 that, if IRFC obligations have to be met by GoI, then the Government might as well borrow directly from the market, as the cost of borrowings would be lower.

### 1.7.4 Development Fund

The fund is financed by appropriation from 'Revenue Surplus'. It is utilised to meet expenditure for works relating to amenities for users of railway transport, labour welfare works, unremunerative operational improvement works and safety labour

welfare works. During 2018-19, 750 crore was appropriated against the BE of ₹ 1,000 crore and ₹ 1,108 crore spent.

#### **1.7.5 Debt Service Fund**

The fund has been created (from 2013-14) for future debt service obligations in respect of loans taken from Japan International Cooperation Agency (JICA), World Bank and for future implementation of Pay Commissions. The fund is financed by appropriation from 'Surplus' after meeting the requirement of CF and DF. In 2018-19, neither any amount was budgeted nor appropriated in DSF. The fund is being operated since 2013-14, but opening of head of account is yet to be done.

Audit observed that the fund account is being operated by MoR under Major Head 8116-101 pertaining to Railway Revenue Reserve Fund which ceased to exist with effect from 01.04.1993. However, no formal concurrence for opening of Major Head and methodology for operating the head has yet been obtained.

#### **1.7.6 Railway Safety Fund**

This fund has been created (from April 2001) for financing works relating to conversion of unmanned level crossings and for construction of road over/under bridges. However, the scope of this fund has been enlarged in 2016-17 to include New Lines, Gauge Conversion, Electrification and Safety works. The fund is financed through transfer of fund by the Central Government from the Central Road Fund (CRF) (out of diesel cess). Apart from this, amount can also be appropriated out of revenue surplus. During 2018-19, Railways received ₹ 13,000 crore as transfer from CRF. An amount of ₹ 3,005.82 crore spent on works under RSF and ₹ 10,000 crore was transferred from RSF to RRSK for financing critical safety works.

#### **1.7.7 Rashtriya Rail Sanraksha Kosh**

This fund was created with effect from 2017-18 for financing critical safety related works. This included Track Renewals, Bridge Works, Signalling and Telecommunication Works, Road Safety Works of Level Crossings and Road Over/Under Bridges, Rolling Stock, Traffic Facilities, Electrical Works, Machinery and Plant, Workshops, Passenger Amenities and Training/HRD. The fund would receive credits from GBS, RSF, DRF and Revenue Surplus. The Fund has a corpus of ₹1 lakh crore over a period of five years. The assured annual outlay is ₹ 20,000 crore with ₹ 15,000 crore as contribution from GBS and ₹ 5,000 crore from internal resources of Railways.

As against an amount of ₹ 5,000 crore, railways could appropriate only ₹ 3,023.86 crore from its internal resources to RRSK due to inadequate revenue surplus. An amount of ₹ 10,000 crore was transferred from RSF and ₹ 5,000 crore from GBS and an expenditure of ₹ 18,015.33 crore was incurred. Audit observed that this Fund has been created by simply transferring funds from three existing sources. It is pertinent to mention that the works of renewal, replacement and upgradation of critical safety assets are already being undertaken through the existing Funds namely DRF and RSF. Audit observed that by funding replacement and renewal of assets through RRSK instead of DRF, railways have reduced the appropriation to DRF, thereby presenting the working expenses and operating ratio in a better light.

### 1.8 Conclusion

The total expenditure of Indian Railways grew from ₹ 2,79,249.50 crore in 2017-18 to ₹3,20,110.17 crore in 2018-19, registering an increase of 14.63 *per cent*. While the capital expenditure increased by 30.78 *per cent*, the revenue expenditure increased by 5.34 *per cent* during the year. The committed expenditure of staff cost, pension payments and lease hire charges on rolling stock, was 71.5 *per cent* of the total working expenditure in 2018-19.

During 2018-19, the Total Receipts increased by 6.47 *per cent* as compared to 8.19 *per cent* increase in 2017-18. The lower growth rate during 2018-19 was mainly on account of shortfall in Sundry Earnings and shortfall in growth rate of Freight Earnings as compared to 2017-18. There was heavy dependence on transportation of Coal which constituted 46.47 *per cent* of Freight Earnings. Any shift in bulk commodities transport pattern could affect the freight earnings significantly.

Net surplus was ₹ 3,773.86 crore in 2018-19, as compared to ₹ 1,665.61 crore in 2017-18. Railways would in fact, have ended up with a negative balance of ₹ 7,334.85 crore instead of surplus of ₹ 3,773.86 crore but for accounting of advance received from NTPC and CONCOR and less appropriation to DRF and Pension Fund.

The Net Surplus of ₹ 3,773.86 crore was appropriated to Development Fund (₹750 crore) and Rashtriya Rail Sanraksha Kosh (RRSK) (₹ 3,023.86 crore); no appropriation was made to Capital Fund though budgeted.

As per the Summary of End Results prepared by IR for 2017-18. The profit from freight traffic (₹ 45,923.33 crore) was utilized to compensate the loss of ₹ 46,024.74 crore on operation of passenger and other coaching services. The loss of ₹ 101.41 crore in Passenger operations was left uncovered during 2017-18.

The overall fund balances which showed an increasing trend up to 2015-16 (₹ 10,806.68 crore) had decreased significantly to ₹ 1905.94 crore at the end of the year 2018-19.

During the year, IR spent ₹ 9,111.51 crore towards capital component of IRFC lease charges from GBS. Audit observed that for the last two years, the entire lease charges (Principal component) were being paid from the Budgetary Support. Ideally the repayment of lease charges to IRFC should have been made from Capital Fund (which is sourced from revenue surplus). However, due to inadequate surplus and insufficient funds available in CF, the repayment of lease charges to IRFC was made from GBS. This arrangement of repayment to IRFC from GBS is not a healthy trend and would deprive the railways of additional investments that could have been made on capital works.

During 2018-19, appropriation to DRF decreased significantly as compared to the previous years (from ₹ 7,975 crore in 2014-15 to ₹ 500 crore in 2018-19 crore). Under provisioning for depreciation resulted in piling up of 'throw forward' works estimated at ₹ 96,403 crore (up to 2018-19).

During the year 2018-19, Railways appropriated an amount of ₹ 3,023.86 crore from its internal resources to RRSK. Further, ₹10,000 crore was transferred from RSF and ₹ 5,000 crore from GBS to RRSK. There was an expenditure of ₹ 18,015.33 crore from the fund. By funding replacement and renewal of assets through this Fund instead of DRF, railways have reduced the appropriation to DRF. MoR thus resorted to window dressing for presenting the working expenses and operating ratio in a better light.

### **1.9 Recommendations**

- 1. Ministry of Railways needs to take steps to diversify their freight basket to enhance their freight earnings.*
- 2. In order to present realistic picture of surplus and operating ratio, Ministry of Railways needs to take steps for pragmatic treatment of freight advance.*
- 3. Ministry of Railways needs to revisit the passenger and other coaching tariffs so as to recover the cost of operations in a phased manner and reduce its losses in its core activities.*
- 4. The huge backlog of renewal and replacement of over aged assets in railways needs to be addressed for safe running of trains.*
- 5. Ministry of Railways needs to take steps to augment their internal revenues.*

## **Chapter 2 - Financing of Projects from Extra Budgetary Resources (Project Finance)**

### **2.1 Introduction**

Over a period of time, Indian Railways (IR) has been facing acute congestion in its network. Decongesting the existing railway network requires introduction of new lines (NL), doubling (DL), electrification of lines (RE), conversion of meter gauge into broad gauge (GC), development of workshop (WS) and other traffic facilities (TF).

Indian Railways has traditionally been financed through Gross Budgetary Support (GBS) and internal Resources. In addition, Railways have been raising Extra Budgetary Resources<sup>21</sup> (EBR) through Indian Railway Finance Corporation (IRFC), since its inception in 1987, for procurement of rolling stock. As on 1 April 2015, IR needed ₹ 2,04,413 crore<sup>22</sup> for completion of 524<sup>23</sup> ongoing works.

Ministry of Railways (MoR), therefore, resorted to Extra Budgetary Resources (EBR) for project financing from 2015-16 onwards. MoR entered (March 2015) into a Memorandum of Understanding (MoU) with Life Insurance Corporation of India (LIC). As per the MoU, LIC agreed to make available to MoR, a non-renewable financial assistance with limit of ₹ 1,50,000 crore over a period of five years from 2015-16 to 2019-20.

As per Railway Board's procedure order (October 2015), LIC funds shall be drawn initially by IRFC by issuing bonds to which LIC will subscribe. The funds thus raised shall be provided to MoR for execution of identified projects.

### **2.2 Sources and Application of funds**

(a) During 2015-19, MoR utilized EBR funds to the tune of ₹ 59,337 crore for financing projects like DL, NL, GC, RE etc. MoR also spent ₹ 5,079 crore from

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<sup>21</sup> *As per Railway Board's letter No. 2014-B-104 Dated 24-05-2015, EBR means Extra Budgetary Resources and no expenditure can be booked unless the funds are specifically available against the work/project. EBR is not a part of the Budget Order which is the authority to book expenditure, including Vote on Account Budget Order.*

<sup>22</sup> *Report of the Committee for mobilisation of resources for major projects, Ministry of Railways (June 2015)*

<sup>23</sup> *NL-170, GC-67, DL-233, RE-54*

EBR for funding eight national projects<sup>24</sup> in Northeast and Jammu & Kashmir region. It was observed that the financial arrangement with LIC materialized only partially due to regulatory constraints<sup>25</sup>. As against the commitment of ₹ 1.50 lakh crore, IRFC raised ₹ 16,200 crore from LIC till 31 March 2019. MoR's requirement of balance funds was met from market borrowing through IRFC.

Source-wise drawal of funds during the four years period 2015-19 is shown in the **Table 2.1** below:

<b>Table 2.1: EBR Funds received by MoR during 2015-19 for project finance (₹ In crore)</b>			
<b>Year</b>	<b>Funds from LIC</b>	<b>Funds from Market Borrowing</b>	<b>Total</b>
<b>2015-17</b>	10000	13170	23170
<b>2017-18</b>	6200	8560	14760
<b>2018-19</b>	NIL	27434	27434
<b>TOTAL</b>	16200	49164	65364

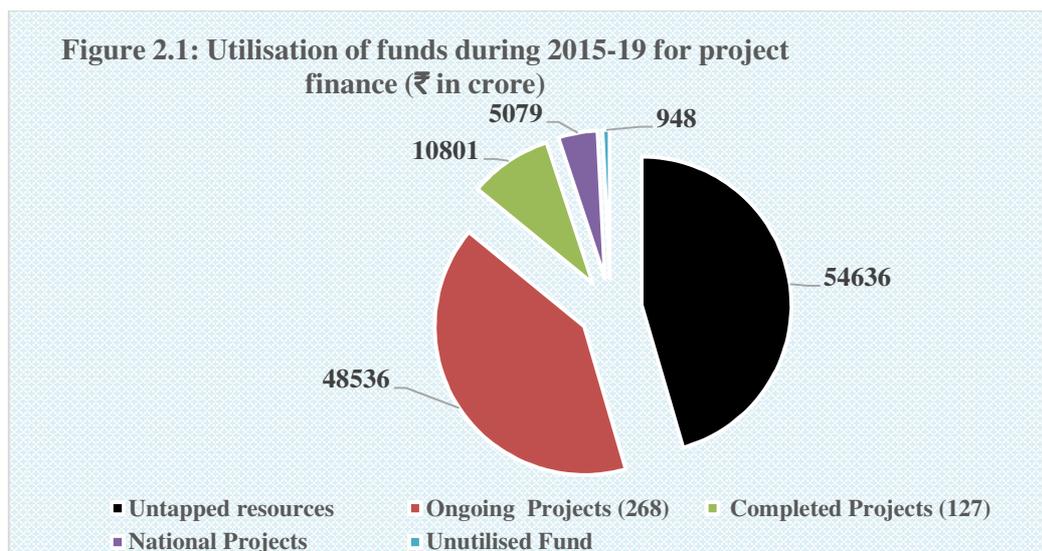
For LIC funds, interest is linked to 10-year benchmark (G-Sec). As per MoU between MoR and IRFC (May 2017), the tenure of the financing facility from LIC is 30 years. There is a moratorium of five years followed by payment of only interest from years 6 to 10. From the 11<sup>th</sup> to the 30<sup>th</sup> year, the loan will be repaid in equated instalments. Other than LIC borrowings by IRFC are mostly short term/medium term borrowings which carry higher rate of interest.

Thus, the objective of financing railway projects through LIC was not achieved. The terms and conditions for repayment by the MoR in respect of funds borrowed from the market are yet to be finalised with IRFC.

(b) Overall picture of MoR's plan of fast tracking the project execution over a period of five years through EBR, as it stands at the end of 4<sup>th</sup> year is shown in the **Figure 2.1**:

<sup>24</sup> *Projects important from strategic points of view in Jammu and Kashmir and North East Region or developmental projects which result in greater integration of these regions with the rest of India were categorized as "National Projects"*

<sup>25</sup> *The investment in IRFC bonds by LIC was subject to exposure norms laid down by Insurance Regulatory Development Authority (IRDA). In terms of the investment regulations 2013 of IRDA, Insurance companies can have the maximum exposure of 20 per cent of outstanding paid up capital, free reserves and surplus and bonds and debentures taken together at any given point of time. This limit can be enhanced by 5 per cent with the approval of the Board of Director of Insurance Company.*



₹ 1.20 lakh crore<sup>26</sup> was to be drawn and utilized by 31 March 2019. However, as seen above, ₹ 54,636 crore (45.53 per cent) could not be tapped due to slow progress of works. ₹ 48,536 crore has been spent on projects which are still not complete and are on-going.

The efficiency of the IR in application of funds raised from EBR and timely completion of projects is brought out in subsequent paragraphs. As per records of Zonal Railways, 521 projects were identified to be funded from EBR during 2015-19. No expenditure was, however, incurred in respect of 126 projects out of 521 due to various reasons like delay in sanction/non-sanction of Detailed Project Report/Detailed Estimate, non-completion of survey, land acquisition, changes in plan, proposed for shelving etc. Audit findings on scrutiny of records relating to 395 projects funded from EBR are discussed below:

### 2.3 Identification/Sanction of Projects for EBR Funding

The objective of IR was to decongest the IR network and ensure return on investment for debt servicing by timely completion of projects. In March 2016, RB constituted a five-member committee of Additional Members (AMs Committee) headed by AM (Works) to identify and sanction works to be funded from EBR. The physical and financial progress of EBR projects was to be monitored by AMs committee. RB periodically issued guidelines /instructions outlining the criteria to be adopted for identification/sanction of projects for funding from EBR. Only such projects which can be completed within the next five years (2015-20) should be considered for funding from EBR. The guidelines also specified that the projects, which have issues relating to land acquisition, forest and environmental clearance etc. should be considered after these issues are resolved. RB also from time to time specified the cut off rate of return (ROR) for

<sup>26</sup> Proportionate for four years 2015-19 as against the limit of ₹1.5 lakh crore to be drawn in five years 2015-20

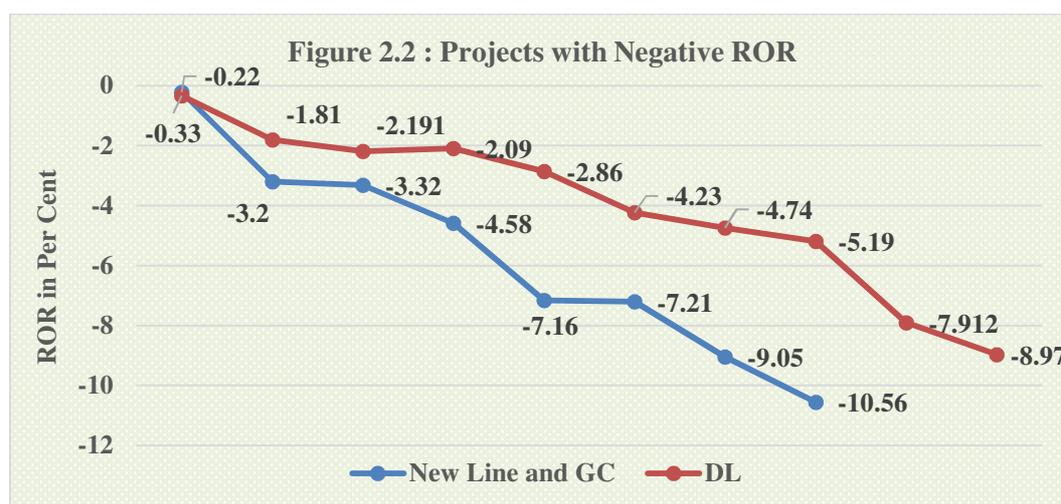
the projects and issued directions for EPC (Engineering, procurement and Construction) as the preferred mode of execution.

### **2.3.1 Selection of Unremunerative Projects**

As per RB's letter (October 2011), for projects to be funded from EBR, the cut off rate of return (ROR) determining the financial remunerativeness of investment was 14 per cent. This was relaxed subsequently. In June 2016, RB specified that works like Gauge Conversion and Traffic facilities, having ROR greater than 12 per cent could be considered for funding from EBR. The cut off rate was further reduced to 10 per cent in October 2017.

Scrutiny of records revealed that:

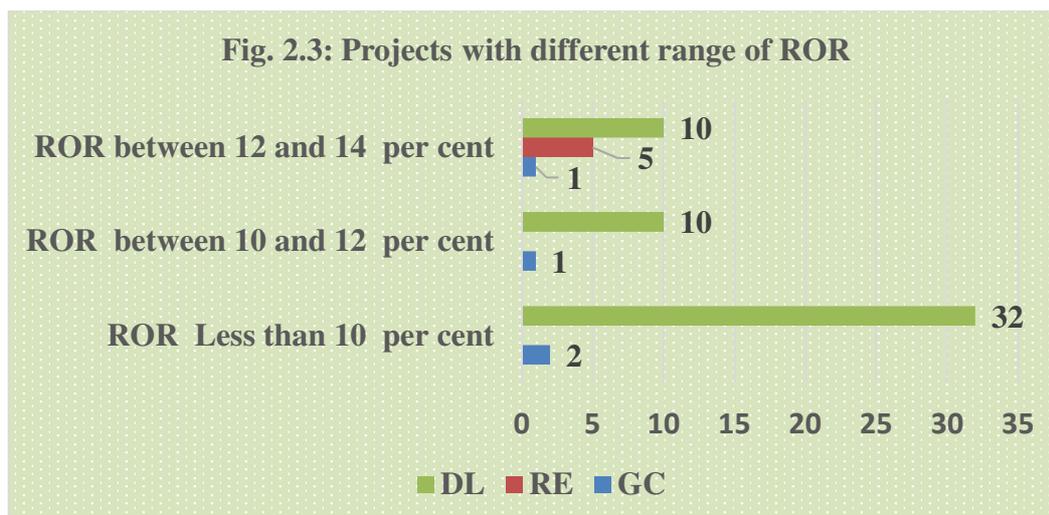
- Against their own criteria, RB sanctioned 18 projects<sup>27</sup> with negative ROR for funding from EBR. The ROR ranged between -10.56 and - 0.22 as shown in **Figure 2.2** below:



An amount of ₹ 6,053 crore has already been incurred from EBR on these 18 projects. During 2015-19, four projects were complete and ₹ 15,009 crore is further required for completion of 14 works in progress.

- Railway Board also sanctioned 61 projects for EBR funding where ROR though positive, was less than the periodically prescribed ROR as shown in the **Figure 2.3**:

<sup>27</sup> DL-10, NL-05 and GC-03



An expenditure of ₹ 9,869 crore was incurred from EBR on these 61 projects and 14 projects completed till March 2019. Further, an amount of ₹ 32,950 crore is required to complete 47 ongoing projects.

Thus, out of ₹ 64,416 crore, IR incurred an expenditure of ₹ 15,922 crore (24.72 per cent) from EBR on 79 projects having ROR less than the desired or negative.

### 2.3.2 Non-adoption of EPC mode of contracting

Engineering, Procurement and Construction (EPC) Contract carry out designs of project, procure equipment's and materials required as per the specifications and deliver the project within the specified period. Non-EPC projects are executed through more than one Lump-sum contracts. Unlike Lump-sum contract, EPC contract minimizes the owner's risks besides being more flexible and efficient delivery method. The client needs to deal with the single agency instead of multiple agencies as in Lump-sum contract projects.

In June 2016, RB instructed the ZRs that EPC mode of contracting is to be adopted for projects which are free of land acquisition issues, forest clearance etc. Scrutiny of records revealed the following:

- During 2016-17, out of 39 DL only eight projects pertaining to seven ZRs<sup>28</sup> and RVNL were sanctioned by RB for execution through EPC mode. However, none of the eight projects was executed on EPC mode. The status of awarding of contracts for these projects as on 31 March 2019 is indicated in the **Table - 2.2**:

<sup>28</sup> WCR,SECR,SER,NWR,ECOR,ECR and CR

**Table 2.2: Status of EPC tenders /Contracts**

<b>Sl. No.</b>	<b>Zonal Railways</b>	<b>Name of work</b>	<b>Status of Tender / Contract</b>	<b>Reasons for Discharge/Termination</b>
1.	WCR	Bina – Katni (278 Km) 3rd line	EPC tender is under finalisation.	Not Applicable
2.	SECR	Jharsuguda-Bilaspur (206 Km) 4th line	EPC Tender was Discharged in November 2018. Afterwards, six tenders were floated.	Tender Committee (TC) observed that in case of EPC contract, it is essential to take time bound decision/processing on various contractual issues. TC apprehended that Railway would have to pay damages to the EPC contractor and extension of time for delays on account of Railway during execution like providing site, approval of drawings, traffic blocks etc.
3.	SER	Bondamunda-Ranchi (Hatia) (159 Km) Doubling	Non-EPC contract awarded.	SER Administration stated that the EPC mode was not considered on account of technical difficulties since the terrain is the most complicated and critical involving lot of uncertainties for success through EPC.
4.	NWR	Phulera-Degana Doubling (108.75 Km)	EPC Contract (awarded in August 2017) was terminated and Non-EPC mode was adopted.	The contract was terminated in September 2018 due to slow progress of work.
5.	ECOR	Bhadrak-Nergundi 3rd line	The tender for execution through EPC mode was discharged in January 2019 and	EPC Tender was discharged as the rate quoted by lowest bidder was high.

			Non-EPC mode was adopted.	
6.	ECR	Karaila road - Shakti nagar	Non-EPC mode	Reasons for non adoption of EPC mode are not available.
7.	CR	Itarsi-Nagpur 3rd line (280 Km)	EPC tender was discharged.	Due to incomplete assessment of project cost, non revision of estimated cost, procedural lapses for not creating a platform for a fair competition etc.
8.	RVNL (ECoR Jurisdiction)	Vizanagaram-SBP, 3 <sup>rd</sup> LINE 255 Km/264.60 Km.	EPC Contract was Terminated. Non-EPC mode was adopted subsequently.	EPC Contract was terminated as the Contractor failed to submit Performance Security within the prescribed time limit. In the justification for adoption of Non-EPC mode of execution of works, Railway Administration recorded that EPC mode of contract is not congenial for Doubling /3 <sup>rd</sup> Line project due to dependence on Open Line on issues such as block permission, approval of drawings/plan etc. They further recorded that any departmental delay would lead to huge penalties to be paid to contractor.

Reasons for discharge/termination of tender/contracts such as payment of damages to the EPC contractor for extension of time for delays in approval of drawings and providing sites, incomplete assessment of project cost, non- revision of estimated cost *etc.* are indicative of the lack of preparedness of IR in handling EPC projects.

- During 2017-19, 27 projects were sanctioned for funding from EBR wherein land acquisition/forest clearance issues were not involved. These projects could have been taken up through EPC mode. IRs, however,

resorted to EPC mode of execution in respect of only three out of 27 projects<sup>29</sup>, which are being executed by CORE.

### **2.3.3 EBR Funding on projects pending Land Acquisition**

As per RB's guidelines, works involving land acquisition, forest and environmental clearance and related issues were to be funded from Capital (GBS<sup>30</sup>). These works may be funded from EBR once the land acquisition, forest and environmental clearance issues are resolved.

Audit observed that RB identified/sanctioned 111 such projects (DL-92, NL-12, GC-6, WS-1) for funding from EBR during 2015-19. The physical progress of 77 out of 111 projects was less than 50 *per cent*. MoR incurred expenditure of ₹ 11,117 crore on these 111 projects. Physical progress of 111, ongoing projects as on 31 March 2019 is shown in the **Table 2.3 below**:

<b>Table 2.3: Physical Progress of projects pending land acquisition</b>			
<b>Range of Physical Progress</b>	<b>Projects started during 2015-19</b>	<b>Projects Ongoing prior to 2015</b>	<b>Total Number of Projects</b>
<b>Up to 25 <i>per cent</i></b>	<b>45</b>	<b>15</b>	<b>60</b>
<b>26-50 <i>per cent</i></b>	<b>09</b>	<b>08</b>	<b>17</b>
<b>51-98 <i>per cent</i></b>	<b>02</b>	<b>32</b>	<b>34</b>
<b>TOTAL</b>	<b>56</b>	<b>55</b>	<b>111</b>

It may be seen that not a single project could be completed till March 2019. Out of 55 projects ongoing prior to EBR funding (2015-16), physical progress of 39<sup>31</sup> projects was less than 80 *per cent* as on 31 March 2019. Going by the physical progress of these projects it is highly unlikely that these projects would be completed before March 2020 to fetch returns for debt servicing. MoR estimated requirement of ₹ 93,982 crore more funds as on 31 March 2019 for completion of the balance works of these 111 projects.

### **2.3.4 Funding of National Projects from EBR**

Projects important from strategic points of view in Jammu and Kashmir and North East Region or developmental projects which result in greater integration of these regions with the rest of India were categorized as "National Projects".

During 2018-19, MoR projected additional requirement of ₹ 10,000 crore in the Revised Estimate. MoF, however, retained the GBS at Budget Estimate level of ₹53,060 crore. A proposal for funding of National Projects through market

<sup>29</sup> CORE-11, RVNL-5 and ZR-11

<sup>30</sup> GBS stands for 'Gross Budgetary Support'

<sup>31</sup> Out of 32 projects with physical progress ranging between 51 and 98 *per cent*, physical progress of 16 projects was between 51 and 80 *per cent*

borrowing and debt servicing through GBS was agreed to, in principle, by MoF and a Committee of officials from MoF and MoR was to work out the modalities for the same. In order to make good the shortfall, MoF allowed (**February 2019**) financing of national projects through EBR as a one-time measure in 2018-19. MoR raised and utilized ₹ 5,079 crore from market borrowings through IRFC for eight national projects. The modalities for debt servicing was, however, not finalized till March 2019. National Projects were out of the purview of funding from EBR as these projects were not financially remunerative. This had resulted in added burden on MoR on account of investment in these projects.

### **2.3.5 Irregular utilization of funds**

EBR funds are to be utilized for priority works namely DL and RE to enhance line capacity on congested corridors. Projects which have been completed and only residual payments were remaining to be made were to be excluded.

In March 2015, RB clarified that no expenditure can be booked unless the funds are specifically available against the work/project. RB further stated that ordinary establishment expenditure should not be booked against EBR without any specific instructions in this regard. As per RB's instructions (June 2016), cost of land acquisition and charged expenditure are to be excluded for funding from EBR. Incurring expenditure on items not permitted as per RB's guidelines on EBR funding was irregular.

Scrutiny of records of ZRs revealed instances of irregular utilization of EBR funds as mentioned in the **Table 2.4**:

<b>Zonal Railways</b>	<b>Nature of Expenditure</b>	<b>Amount (₹ in crore)</b>
<b>CR,SR,SER and NWR</b>	Cost of land acquisition	22.67
<b>NER</b>	Payment to Forest Department	0.45
<b>ER</b>	Decretal Payment	0.12
<b>CR,SR,ECR, SCR,NCR and NER</b>	Expenditure towards Residential Quarters/ Officers Rest House, Establishment Charges, Office Expenses etc.	349.80
<b>ER</b>	Residual works in respect of three projects, which were already commissioned between 2006 and 2012	114.50
<b>NWR</b>	Improvement to Alwar station and its various infrastructure, salary of DSC/Jaipur, extension of Officers Rest House etc. were booked to Alwar – Bandikui doubling work	8.62
	<b>TOTAL</b>	<b>496.16</b>

Further scrutiny revealed that MoR failed in exercising due diligence in identifying projects and booking expenditure from EBR as discussed below:

- In February 2016, RB instructed that ZRs may utilise surplus EBR funds available in one project on another EBR funded project with the concurrence of FA&CAO to ensure optimum funds utilisation. Audit observed that non-permissible adjustments were made from EBR to Non-EBR allocations and vice-versa. Details are given in the **Table 2.5** below:

( ₹ in crore)

<b>Table No. 2.5: Non-permissible adjustment of EBR</b>		
<b>Nature of Adjustment</b>	<b>Amount</b>	<b>Zone-wise breakup</b>
EBR to Non EBR	51.68	(ER-12,NER-39.68)
Non EBR to EBR	129.04	(ER-120.61, NWR-8.43)

- In the 109<sup>th</sup> Report of the Public Accounts Committee (PAC) on “Accounting of Projects in Indian Railways”, PAC expressed (December 2018) concern over non-drawal of project completion report. The Committee recommended that penal measures should be taken against the officers concerned. Audit observed that:
  - 37 projects (DL-33 and RE-04), which were physically complete prior to 2015-16, were sanctioned by RB for EBR funding. Completion Report of these projects were not drawn till March 2019. An expenditure of ₹ 784 crore was booked during 2015-19 on these projects from EBR funds. This expenditure was on account of residual works, contractual payments, establishment expenses etc. Indian Railways, however, estimated further requirement of ₹ 948 crore more funds for completing the residual works of these 37 projects.
  - 15 projects, pertaining to eight Zonal Railways<sup>32</sup> were sanctioned during 2015-19 for funding from EBR. These projects were dropped / proposed to be shelved midway. Out of total expenditure of ₹ 175 crore incurred on these projects, ₹ 86 crore was incurred from EBR. The reasons for dropping/proposing for shelving these projects were lack of tangible benefits, negative Rate of Return, change in policy/plan, ban on mining etc.

### **2.3.6 Ineffective Monitoring of EBR Funded Project**

In terms of RB’s instructions (June 2016), the physical and financial progress of EBR funded projects was to be monitored by the AMs Committee headed by AM

<sup>32</sup> ER-5, NR-1, NCR-3, SCR-1, SER-1, SECR-1, SWR-2, WR-1

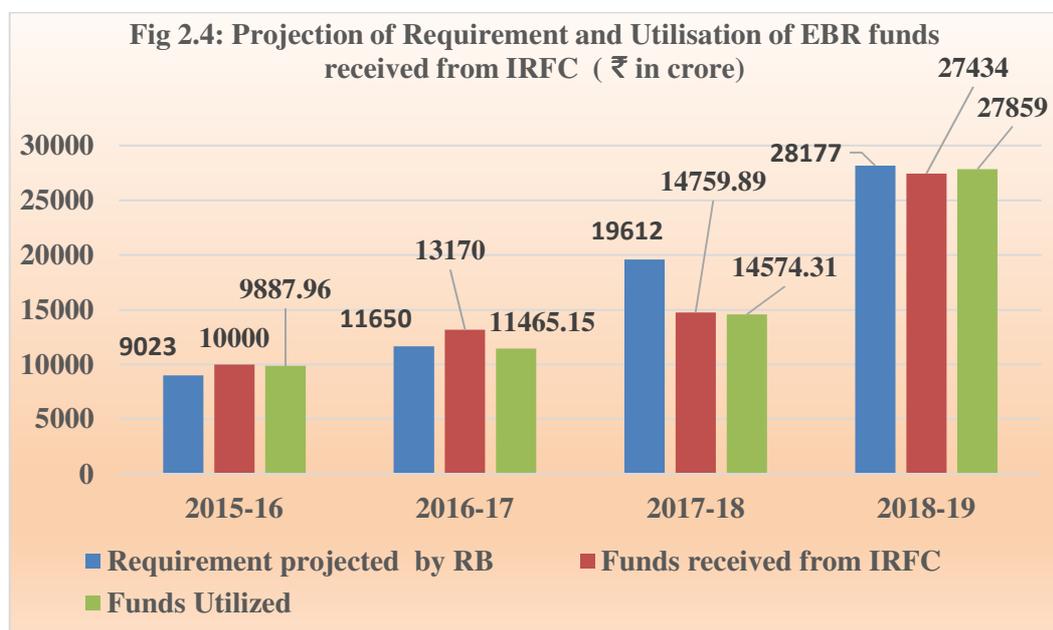
(Works). It was also instructed that the Committee would sign MoUs with the General Managers of Zonal Railways/CORE and heads of PSUs (Executing Agencies). The Committee was to draw up a project wise action plan with the Executing Agencies and also lay down the monitoring and reporting system for such projects.

AM's Committee met from time to time. On the basis of decisions taken by the Committee, Zonal railways were requested to provide certain details regarding month-wise targets, project-wise action plan, identification of slippages, if any, in execution of projects, targets for signing MoU.

Scrutiny of records, however, revealed that neither any MoU signed with the Executing Agencies nor any project wise action plan for completion of projects were drawn. Several Instructions followed by reminders did not evoke adequate response from the ZRs.

As per RB's instruction (October 2015), IRFC will raise funds periodically based on RB's requirement. RB reiterated its instruction to ZRs from time to time to send realistic quarterly projections in order to maintain efficient utilization of EBR funds and minimize interest burden of IR.

Projection of funds by MoR, funds provided by IRFC and funds utilised<sup>33</sup> during 2015-19 is given in the **Figure 2.4:**



Audit observed that the ZRs were not sending the quarterly requirement within the stipulated time making it difficult for RB to project realistic requirement of funds to IRFC. Out of ₹ 65,364 crore provided by IRFC, MoR could not utilize ₹ 948 crore<sup>34</sup> as on 31 March 2019 due to slow progress of works and unrealistic

<sup>33</sup> As reported by Accounts Directorate of RB, the expenditure from EBR was shown as ₹ 63,786 crore as against ₹ 64,416 crore as shown by the Zonal Railways

<sup>34</sup> ₹ 65,364 crore provided by IRFC less utilization of ₹ 64,416 crore by MoR

projection of requirement of funds by the Zonal Railways. Under-utilisation of funds had resulted in avoidable accretion of interest liability for MoR.

Audit observed that only 127 (32 per cent) out of 395 EBR funded projects were completed till March 2019 due to lack of proper monitoring and control mechanisms. Review of performance of IR in executing 395 projects revealed the following:

**2.3.6.1 Completed Projects**

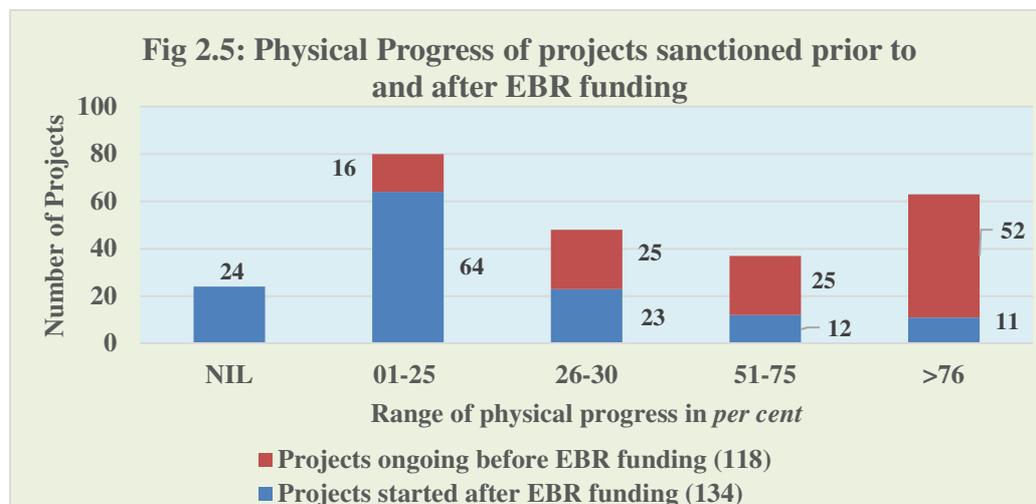
Audit reviewed the details of 127 projects completed during 2015-19. It was observed that majority of the works were either already completed by 2015-16 or involved very less amount of works:

- I. 37 projects were physically completed prior to introduction of EBR funding in 2015-16.
- II. Further, in respect of remaining 90 projects, physical progress of 41 projects (45.56 per cent) were more than 50 per cent prior to 2015-16. 42 were minor doubling projects where length of doubling ranged between 2.2 Km to 50 Km only.

**2.3.6.2 Ongoing Projects**

In September 2015, RB emphasized that the financing from EBR should be considered only for such projects, which could be completed within the next five years. This implied that the projects identified and funded from EBR should be completed by 2019-20. During 2015-19, MoR incurred ₹ 48,536 crore on 268 projects in progress till March 2019.

Range of physical progress of 252 ongoing projects<sup>35</sup> is shown in the **Figure 2.5**. Analysis of physical progress of these projects revealed that the physical progress of 88 projects, which were started after 2015-16, was below 25 per cent.



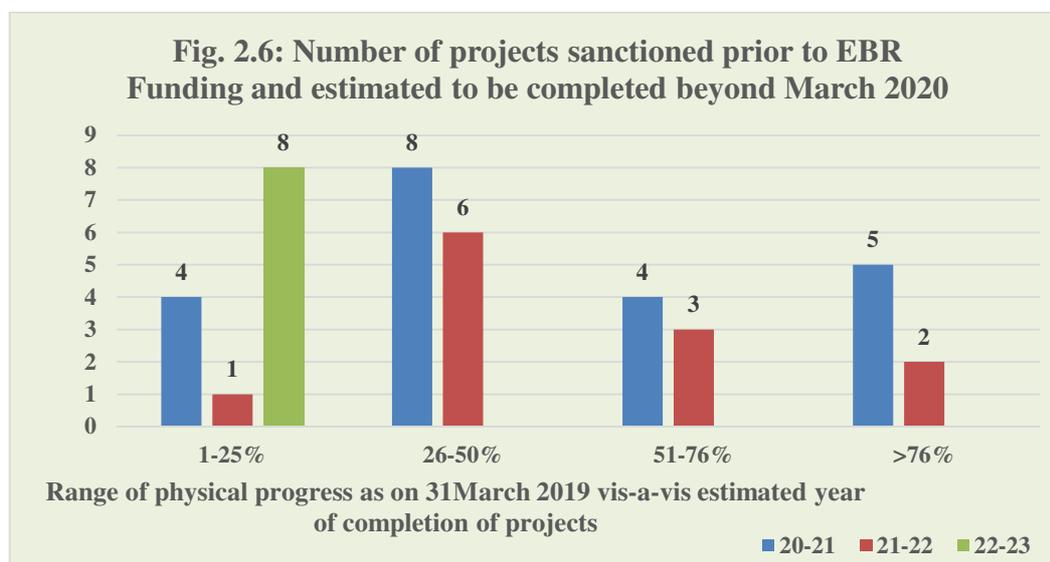
<sup>35</sup> Out of 268 ongoing projects, physical progress in respect of 16 projects not available

It also revealed that 118 projects were started prior to EBR funding (2015-16) and were in progress as on 31 March 2019. In respect of these projects, there already is a delay ranging between 05 years and 25 years since the year of their sanction as shown in the **Table 2.6**.

Year of sanction	Total Number of Projects
1994-2000	73
2000-2005	26
2005-2010	10
2010-2015	09
<b>TOTAL</b>	<b>118</b>

Audit, further, observed that out of 118 projects ongoing prior to

EBR funding, 41 projects were targeted for completion beyond March 2020 by MoR as shown in the **Fig. 2.6**. This was against MoR's own guidelines that only such projects which can be completed by March 2020 should be considered for funding from EBR.



Thus, the slow progress of works not only resulted in time overrun but also cost overrun of ₹ 37,553 crore.

### **2.3.6.3 Status of Commissioning of Projects**

The status of commissioning of projects funded from EBR during 2015-19 is shown in the **Table 2.7** below:

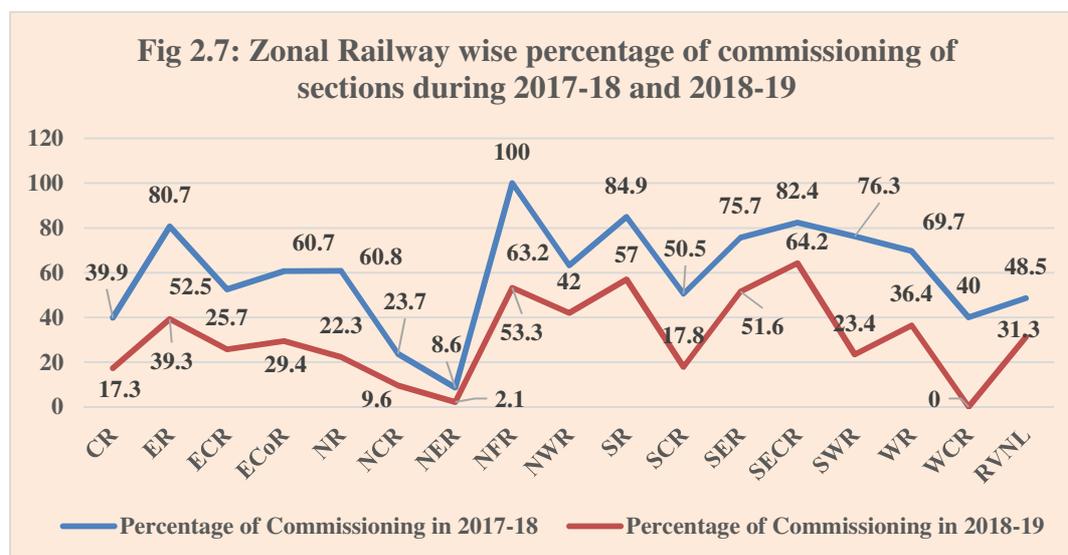
**Table 2.7: Status of Commissioning of Projects**

Year in which the projects/sections were sanctioned	Total Track Length of projects/sections sanctioned (in Km)	Length of track commissioned	
		in Km	in per cent
2015-16	15771.28	1971.19	12.50
2016-17	3614.60	3	0.08
2017-18	3434.83	2170.99	63.20
2018-19	4134.83	1403.35	33.94

From the table above, it may be seen that the performance of Indian Railways was far below the desired level. In 2016-17, the progress of commissioning was insignificant.

In February 2017, Chairman, Railway Board expressed concern over the slow progress of works and utilisation of EBR fund. All ZRs were, therefore, directed to critically review the pace of works and utilisation of EBR funds. In April 2017, RB communicated the targets (in terms of sections) for the year 2017-18.

Scrutiny of records revealed that none of the ZRs achieved the Railway Board’s target during 2017-18 and 2018-19. Audit reviewed the zone-wise commissioning of projects/sections as against the target set during 2017-19, which is depicted in the **Figure 2.7**:



As can be seen from the figure above, compared with 2017-18, performance in terms of kilometer of track commissioned in 2018-19 has gone down in all the ZRs. Non-achievement of target for commissioning of track was indicative of inefficiency of IR in timely execution of project. The slow pace of commissioning not only have the adverse impact on revenue generation but also burdened IR with interest due to time and cost overrun.

**2.4 Conclusion**

Ministry of Railways (MOR) resorted to Extra Budgetary Resources for financing its projects from 2015-16. A sum of ₹ 1.5 lakh crore was to be raised from LIC through IRFC and utilized during the five year period 2015-20. Besides availability of funds, effective monitoring of physical and financial progress of projects was envisaged at the apex level (Railway Board).

Audit observed that the financing arrangement with LIC materialized partially due to regulatory constraints. Ministry of Railways (MoR) / IRFC recouped the shortfall by raising funds through market borrowings.

Review of identification and sanction of projects for funding from EBR and their execution revealed that financially unviable projects were sanctioned. Projects were sanctioned without taking into account the feasibility of completion within the target.

Monitoring mechanism as envisaged was not followed. Slow progress/non-completion of projects resulted in blockade of funds and therefore, the objective of generation of revenue or debt servicing could not be achieved.

The issues highlighted in this chapter were brought to the notice of the MoR on 2 April 2020 for obtaining their views. The response of the Ministry is awaited (June 2020).

### **2.5 Recommendations**

- 1. Ministry of Railways needs to strengthen monitoring mechanism both at the Railway Board and Zonal Headquarters level for efficient execution of projects.***
- 2. Ministry of Railways needs to ensure assessment of requirement of funds based on realistic and timely projections from Zonal Railways.***
- 3. Ministry of Railways needs to ensure optimal and judicious utilisation of EBR funds.***

New Delhi

Dated: 16 July 2020



(ROY MATHRANI)

Deputy Comptroller and Auditor General

Countersigned

New Delhi

Dated: 17 July 2020



(RAJIV MEHRISHI)

Comptroller and Auditor General of India



## Glossary of Terms

<b>Terms</b>	<b>Description</b>
<b>17-Zones of Indian Railways</b>	<b>Central Railway (CR), Eastern Railway (ER), East Central Railway (ECR), East Coast Railway (ECoR), Northern Railway (NR), North Central Railway (NCR), North Eastern Railway (NER), Northeast Frontier Railway (NFR/NEFR), North Western Railway (NWR), Southern Railway (SR), South Central Railway (SCR), South Eastern Railway (SER), Southeast Central Railway (SECR), South Western Railway (SWR), Western Railway (WR), West Central Railway (WCR) &amp; Metro Railway, Kolkata (MR)</b>
<b>8-Railway Production Units</b>	<b>Chittaranjan Locomotive Works (CLW), Chittaranjan; Diesel Locomotive Works (DLW), Varanasi; Integral Coach Factory (ICF), Chennai; Rail Coach Factory (RCF), Kapurthala; Rail Wheel Factory (RWF), Yelahanka; Rail Wheel Plant (RWP), Bela; Diesel Loco Modernisation Works (DMW), Patiala, Rail Coach Factory (RCF), Raebareilly</b>
<b>Average lead</b>	<b>Average haul of a passenger or a tonne of freight</b>
<b>Capital-at-charge</b>	<b>The capital-at-charge represents the Central Government's investment in Railways by way of loan capital and value of the assets thus created.</b>
<b>Demand Recoverable</b>	<b>Unrealized earnings recoverable on account of rent/lease of land and buildings, interest and maintenance charges of sidings etc.</b>
<b>Extra Budgetary Resources</b>	<b>Resources of IR other than general budget support and internally generated resources</b>
<b>Gross Traffic Receipts</b>	<b>Receipts of railways through its operations</b>
<b>Metre Gauge</b>	<b>It is a rail gauge (1,000 mm) still used in some parts of India of movement of rail traffic</b>
<b>New lines</b>	<b>Construction/laying of new railway links/lines not existed earlier</b>
<b>Operating Ratio</b>	<b>The ratio of working expenses (excluding suspense but including appropriation to Depreciation Reserve Fund and Pension Fund) to gross earnings.</b>
<b>Ordinary Working Expenses</b>	<b>Expenditure on administration, operation, maintenance and repairs, contribution to Depreciation Reserve Fund and Pension Fund</b>

<i>Capital Expenditure</i>	<i>Expenditure incurred for creation, acquisition, construction and replacement of assets</i>
<i>Revenue Expenditure</i>	<i>Expenditure incurred for day to day operations, maintenance of railways including dividend payment</i>
<i>Traffic Suspense</i>	<i>Unrealised operational earnings of the railways</i>
<i>Total Working Expenditure</i>	<i>Ordinary working expenditure and appropriation to Depreciation Reserve Fund and Pension Fund</i>
<i>Staff Productivity</i>	<i>It is measured in terms of volume of traffic handled (in terms of NTKM) per thousand employees.</i>
<i>Capital Output Ratio</i>	<i>The amount of capital employed to produce one unit of output (Total Traffic in NTKMs)</i>
<i>Net Surplus</i>	<i>Difference between the gross earnings and the working expenses after the payment of dividend to general revenues</i>
<i>Other Coaching Earnings</i>	<i>Earnings from transportation of parcels, luggage and post office mail and catering etc.,</i>
<i>Passenger Earnings</i>	<i>Earnings from carrying passengers on rail</i>
<i>Freight Earnings</i>	<i>Earnings from carrying goods on rail</i>

**Annexure 1**

**Statement showing the increase/decrease in various components of  
Sundry and Other Coaching Earnings in 2018-19 as compared to 2017-18**

[Para Ref:1.2.3. (c)]

(₹ in crore)

Sl No.	Particulars	Sundry Earning		Increase (+)/ Decrease (-)
		2017-18	2018-19	
1	Property development of Land/air space including earnings from RLDA	2601.58	18.18	(-) 2583.35
2	Retired Railway employees Libralised Health Scheme	282.67	228.51	(-) 54.16
3	Right of way for OFC laid by/for Rail Tel.	6.85	5.05	(-) 1.80
4	Receipts from Catering Department	712.90	768.50	(+) 55.60
5	Reimbursement of operating loss on Strategic Lines	1733.80	1940.00	(+) 206.20
6	Right of way leave facilities for others	304.91	393.16	(+) 88.25
7	Residential building/Rest houses	105.08	174.49	(+) 69.41
8	Interest and maintenance charges of Saloons & Level Crossings	145.11	199.94	(+) 54.83
9	Advertisements,	204.10	223.53	(+) 19.43
10	Other Sundry Earnings	2591.23	3044.86	(+) 453.63
11	<b>Total</b>	<b>8688.18</b>	<b>6996.22</b>	<b>(-) 1691.96</b>
12	Other Coaching Earnings	4314.44	4474.47	(+) 160.03
13	<b>Grand Total</b>	<b>13002.62</b>	<b>11470.69</b>	<b>(-) 1531.93</b>





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