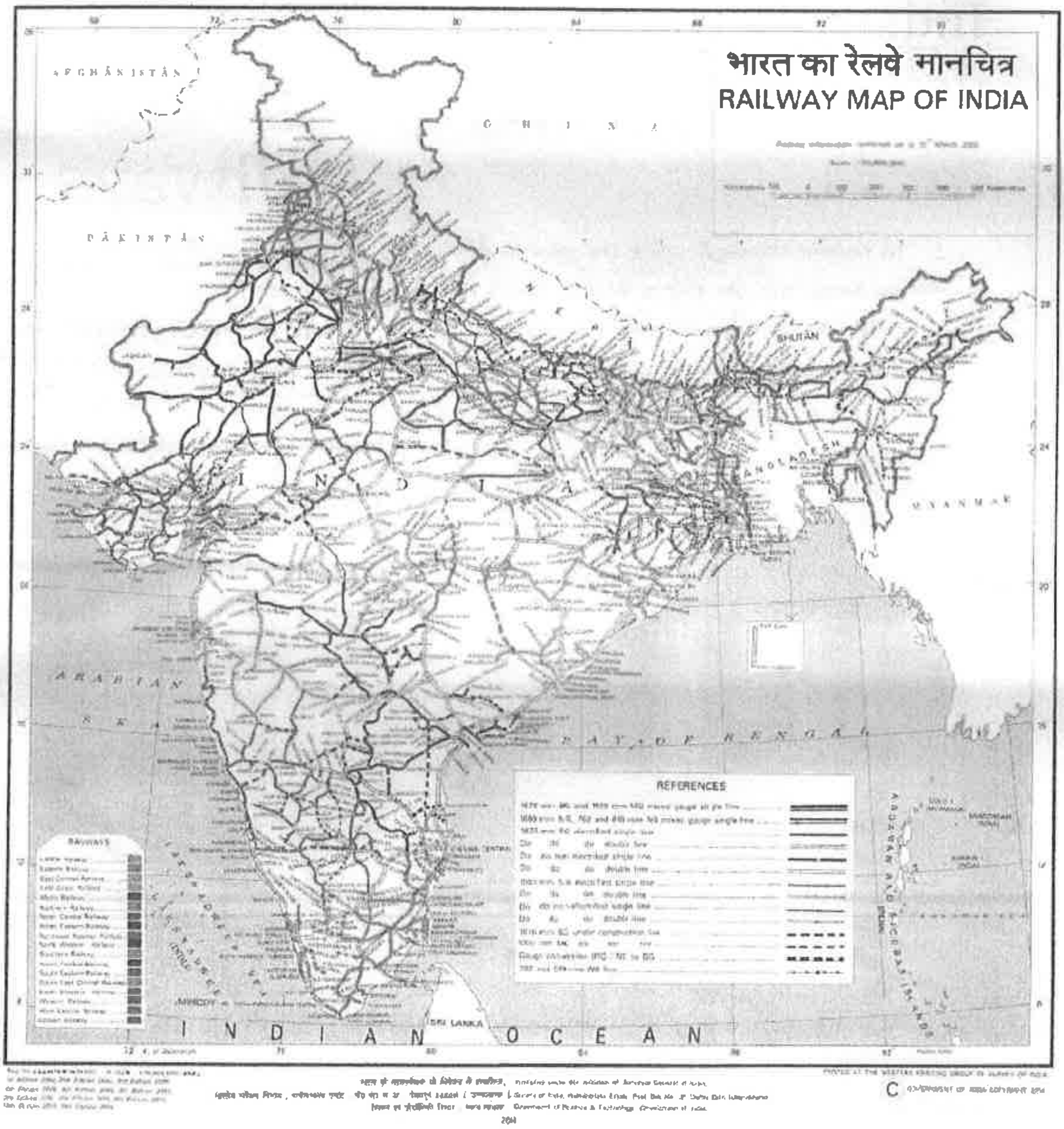
Indian Railways

The investment destination

December, 2014

Government of India

Ministry of Railways
(RAILWAY BOARD)
NEW DELHI

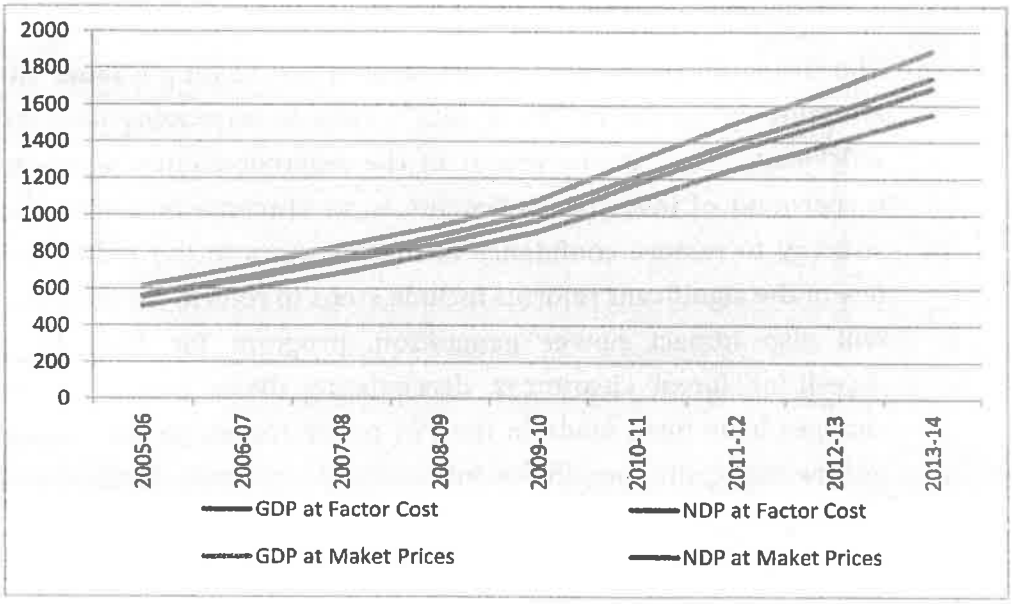

भारत का रेलवे मानचित्र
RAILWAY MAP OF INDIA
AFGHANISTAN
PAKISTAN
CHINA
NEPAL
BHUTAN
BANGLADESH
MYANMAR
INDIA
ARABIAN SEA
BAY OF BENGAL
REFERENCES
RAILWAYS
SRI LANKA
INDIAN OCEAN

Indian Railways: the investment destination

Background

1. In recent times despite the global downturn, India has exhibited resilience of its economy. As per a World Bank report[1], India's contribution to the global GDP has increased from 1.8 per cent to 2.7 per cent during 2005-2010 and is expected to reach 11 per cent by the year 2050. It is considered as one of the fastest growing economies with an average annual growth rate of 7.6 per cent in the last decade. According to IMF's World Economic Outlook, 2014, India is expected to recover from a growth rate of 4.4 per cent in 2013 to 5.4 per cent in 2014 supported by slightly stronger global growth, improving export competitiveness and implementation of recently approved investment projects. The 12th Plan (2012-17) document has projected an average annual growth rate of 8% p.a.

Figure 1: **Macro-economic aggregates (USD in bn)**

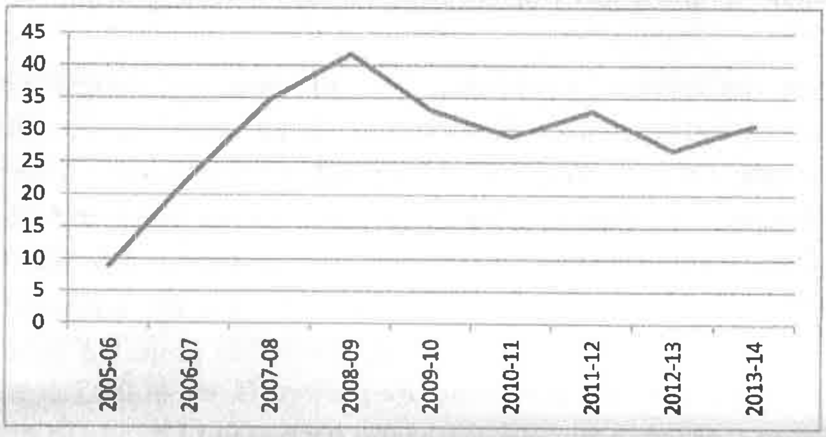


Source: Reserve Bank of India[2]

[1] World Bank Strategy on Country Partnership for India: FY 2013-17
[2] All data in this note in Indian Rupees converted to USD@ 1USD=INR 60.

2. India enjoys a considerably high degree of political stability, has well evolved financial systems, a vibrant and competitive private sector, high savings and investment ratios, strong financial regulatory framework and an expected demographic dividend to boast of in the future. India is the fourth largest destination for FDI among developing countries, with net FDI inflows at 1.7 per cent of GDP.

Figure 2: **Foreign Direct Investment to India (US$ bn)**



Source: Reserve Bank of India

3. The thrust of the present government is on creating a more competitive environment in the economy with a view to improving productivity and efficiency. The improvement in the macroeconomic aggregates and a turnaround of investor sentiments is an outcome of a well thought out strategy to restore confidence of the investors in the Indian economy. A few of the significant reforms include steps to reform the coal sector which will also impact power generation, program for financial inclusion, expediting forest clearances, deregulating diesel prices, etc. Significant changes have been made in the FDI policy regime in the recent times to ensure that India remains an increasingly attractive destination. Railway infrastructure has been opened up through the automatic route for FDI to the extent of 100%.

Infrastructure development

4. Massive investments in infrastructure are a pre-requisite to a sustained high level of growth. It is anticipated that infrastructure spending as a

percentage of GDP would be 10 per cent during the 12^{th} Plan period and 47 per cent of such investment is expected to be sourced from the private sector. According to estimates of Dunn and Bradstreet, infrastructure investment (as measured by Gross Fixed Capital Formation) is expected to increase to 12.1% of GDP by 2020 from 7% of GDP in 2010-11. However, it is recognized that stepping up infrastructure investment, improving productivity and quality of infrastructure spending, removing procedural bottlenecks and improving governance need to be urgently addressed.

5. As per the National Transport Policy Development Committee (NTPDC) achieving a growth rate of 7 per cent in the 12^{th} Five Year Plan, followed by 9 per cent till 2032, requires an increase in investment in transport from 2.6% in the 11^{th} Plan to 3.3% in 12^{th} Plan and stabilize at 3.7% till 2032. This implies a 7-fold increase in transport investment from the 11^{th} to 15^{th} Plan.

6. Long term finance for infrastructure projects is one of the issues that need to be addressed in the context of the limitation of banks to finance such projects. Infrastructure projects are capital intensive and, therefore, have long gestation periods. Hence, funds are locked in for long periods. Loan funds with long tenors and low costs are not easily available. In India, the bond market is also not well developed. Hence, attempts have been made in the past few years to finance infrastructure through private participation by creating an enabling framework for the same.

7. The institutionalized framework for attracting private investment in public sector infrastructure projects includes a transparent appraisal and approval mechanism and a fair and competitive bidding process to ensure a level playing field to the private sector. Scheme for financial support such as the Viability Gap Funding (VGF) Scheme is successfully providing grants to Public Private Partnership (PPP) projects and low cost funds are available through India Infrastructure Finance Company Limited (IIFCL) for meeting part of the project cost.

Role of Indian Railways in the economy

8. Indian Railways (IR) is a great national asset. A single transport network connects far flung areas of the country. Not only is it a carrier for passengers, it also transports freight from one end of the country to another. Of late, Indian Railways has suffered from chronic and significant under investment leading to an eroding share in national freight and passenger traffic. There is a clear recognition of the fact that for serving as the lifeline of the nation and making a contribution to the country's growth, the organization needs to become operationally and financially sound. Indian Railways is striving to enhance its market share and improve the quality of service so as to ensure that rail travel is an experience beyond other modes of travel. This can be achieved by eliminating capacity bottlenecks which constrain growth, improve productivity of assets and efficiency of operations and optimal employment of its resources including human capital.

The Rail Network

9. Indian Railways is one of the largest transportation and logistics network of the world. Indian Railways run 12,617 trains to carry over 23 million passengers per day connecting more than 7,172 stations spread across the sub continent. It is equivalent to moving the entire population of the Australia. It runs more than 7,421 freight trains per day carrying about 3 million tonnes of freight every day. It has joined the select club of countries comprising Chinese, Russian and United States Railways with an originating freight loading of 1008.09 million tonnes (i.e. one billion plus) in 2012-13. During 2013-14, Indian Railways carried 1.05 billion tonnes of revenue earning freight traffic. However, the high density networks of the Indian Railways are facing acute capacity constraints coupled with a policy of subsidized passenger fares thereby leading to increases in freight tariffs to cross subsidize passenger revenues.

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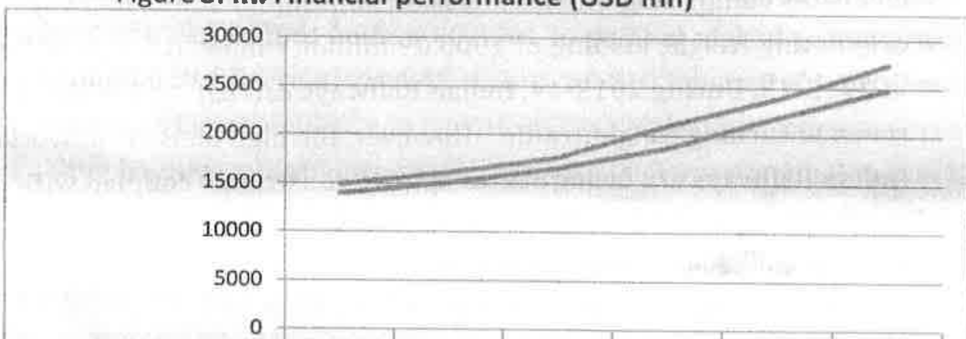
and productivity of manpower continue to be the thrust areas. As per NTPDC, there is a significant need for investment in railways. The share of Railways in freight traffic has declined from 90% in 1950-51 to 30% in 2011-12 and from 70% in 1950-51 to 10% in 2010-11 in passenger transport.

11. The strength of Indian Railways lies in its long network and robust equipment and rolling stock. A monopoly, Indian Railways, boasts of skilled manpower and well laid down operational practices and processes. However, of late, its finances have come under severe stress due to operational revenues being insufficient in generating surpluses to meet the needs for expansion of the system and its modernisation. Increasing human resources costs have cut sharply into the otherwise significant revenue generation by the system.

Current resources

12. Conventionally, the operational expenses of Indian Railways are financed through revenues. The capital expenditure is met out of financial support from the Central Government, internal generation of resources and borrowings. Borrowings are essentially through Indian Railway Finance Corporation (IRFC) by way of leasing of rolling stock. Possibilities exist for financing projects by raising debt from the market, internal, external and bilateral/multilateral and by way of private participation, especially through Public Private Partnerships (PPP).

Figure 3: IR: Financial performance (USD mn)



	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15 BE
Total receipts	14872	16114	17708	21030	23854	27396
Total expenditure	13948	15056	16577	18761	21911	24863

13. Indian Railways is not a corporate body but a Ministry in the Government of India. As per the Allocation of Business Rules, only Ministry of Finance can borrow funds for the Central Government. Hence, Indian Railways cannot borrow directly from the market. Therefore, IRFC was set up as the borrowing arm of Indian Railways. It is a wholly government-owned non-banking financial company (NBFC). Domestically it enjoys "AAA" rating and internationally "BBB+" rating which is equivalent to sovereign guarantee. Therefore, it is able to raise funds from the market at very competitive rates. Since IRFC lends only to the Ministry of Railways and the Ministry, in turn, provides for debt servicing in the Budget, the lending is not viewed as risk-prone. IRFC has successfully raised funds through domestic markets and also external commercial borrowings (ECBs). Till date IRFC has mobilized resources equivalent to Rs 1,14,327 crore (USD 19.06 bn). The cost of borrowing of IRFC is between 8% to 9.5% p.a.

FDI in Railways

14. Vide Notification No. S.O.2113(E) dated August 22, 2014, Government of India has opened up the following activities of Indian Railways for FDI through automatic route:
    a. Suburban corridor projects through PPP
    b. High speed train projects
    c. Dedicated freight lines
    d. Rolling stock including train sets and locomotives or coaches manufacturing and maintenance facilities
    e. Railway electrification
    f. Freight terminals
    g. Signaling systems
    h. Passenger terminals
    i. Infrastructure in industrial parks pertaining to railway lines or sidings including electrified railway lines and connectivity to main railway lines, and
    j. Mass Rapid Transit Systems.

The Plan head

15. Recognising the fact that the economy can grow at a satisfactory pace only if the Railways grow at an even faster pace, Government of India has expressed repeatedly its intent to modernise and develop the Indian Railway system by adopting best international practices, exploring innovative means of financing projects, reviewing the structure of the organisation, cutting costs and enhancing revenues. The ultimate aim is to provide to the masses a safe and modern railway system, not less but better than any other comparable system.

16. In various reports generated in the past the requirement of funds towards meeting the objectives of modernization, enhanced safety and customer satisfaction, has been estimated as significant and which cannot be generated in a business as usual scenario. The Report of the Expert Group on Modernisation of Indian Railways estimated in the year 2012, a requirement of Rs. 5,60,000 crore (USD 93.33 bn) towards modernisation of Indian Railways to make it a self sustainable and customer-oriented organisation. Hence, Indian Railways is considering undertaking a massive investment programme. A shelf of projects amounting to Rs. 5,00,000 crore (USD 83.33 bn) is already available with the organisation awaiting financial closure. Further, 4 dedicated freight corridors are planned in addition to 2 corridors currently under implementation. If considered feasible, High Speed Rail Corridors are also intended to be introduced for passenger movement. Further, modernization of signaling equipment and electrification works are also required to be carried out.

17. The following schemes involving private participation are available with the Railways for funding of infrastructure.

    A. Rail connectivity/capacity augmentation
        (i) Policy of participative models
        (ii) Cost sharing with States
    B. Container train operations
    C. Terminal facilities
        (i) Private freight terminals

(ii) Station re-development

D. Other assets

(i) Wagon investment schemes

18. Indian Railways is drawing up an action plan to maximise revenues from non-core activities such as exploiting air-rights over buildings, advertisements, station development, logistic parks, etc. Measures for efficiency improvements related to improving turnaround of rolling stock, plugging wastages by way of improving procurement practices, etc are under active consideration.

19. The organisation is aiming at generating funds amounting to Rs. 6 lakh crore (USD 100 bn) in the next three years. Since it may not be possible to generate such resources within such a short time from the domestic market alone, it is proposed to explore the possibility of borrowing funds from external sources as well.

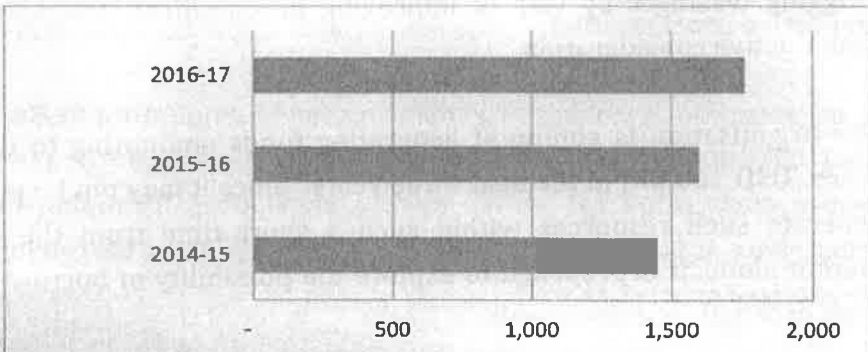
20. As Railway projects have long gestation periods and not a very high rate of return, ideal sources of borrowing would be long tenor low cost funds such as pension and insurance funds from countries such as Australia, Canada, Scandinavia, France and Germany. Ideally, with a cost of borrowing of 4%-5% p.a. and a repayment period of 20 to 30 years, it would be possible for Indian Railways to service the debt from the enhanced revenues arising out of increased line capacity and higher average speeds as a result of modernisation and efficiency improvements.

21. The projects amenable to alternate means of financing could include viable projects falling under new lines, dedicated freight corridors, railway station redevelopment, gauge conversions, procurement of locomotives and EMUs, power generation, private trains, high speed rail, etc. The viability of the individual project could determine the option to be exercised for arranging the necessary finances.

Addressing risks

22. The revenues of Indian Railways are rising consistently and likely to move to a higher growth path in the next few years due to a more commercial approach in operating the system as well as modernisation. Further, the revenues are not seasonal and, therefore, not subject to vagaries of economic cycles.

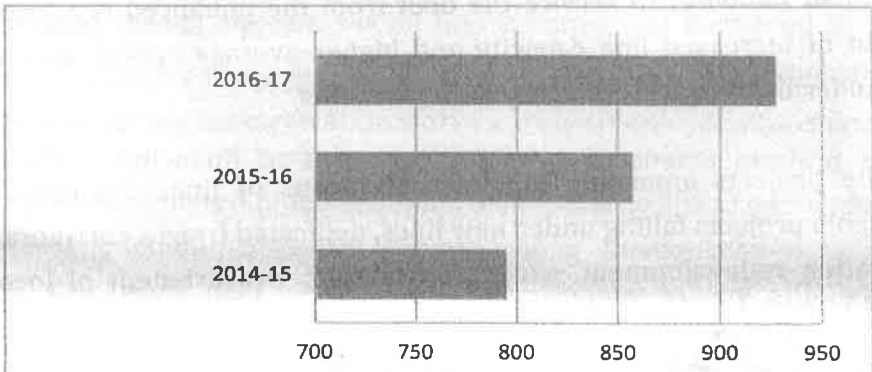
Figure 4: **Projected PKMs Originating (bn)**



	2014-15	2015-16	2016-17
■ Projected PKMs Originating (billion)	1,450	1,598	1,760

Source: 12th Plan Document

Figure 5: **Projected NTKMs (bn)**



	2014-15	2015-16	2016-17
■ Projected NTKMs (billion)	795	857	927

Source: 12th Plan Document

23. The borrowing arm of Indian Railways, IRFC, as stated earlier, enjoys a domestic rating of AAA and BBB+ in the international market as the repayments to IRFC are scheduled and provided for through the Indian Railways' budget which is approved by the Parliament. Mainly from the perspective of lenders, there is minimum risk as IRFC is a wholly-government owned company.

24. For the purpose of generating resources for financing railway projects, it is proposed to develop a structure in the form of a special purpose vehicle (SPV) to attract low cost long tenor funds such as pension and insurance funds. **Adequate safeguards and assurances regarding servicing such debt shall be provided to give comfort to the lenders.** In a manner similar to provisioning for IRFC borrowings, **provisioning could be made in the budget of Indian Railways towards repayment of debt raised for the purpose of financing projects**. Alternatively, the first charge on the gain in revenues arising as a result of undertaking the aforesaid debt-financed projects could be earmarked towards servicing this debt. The idea of raising this debt through IRFC may also be explored. Nevertheless, the attempt would be to address all risk concerns of lenders while creating this structure.

Conclusion

25. India has the potential to grow at a rate much higher than the average growth rate in the world. The impact of such growth will lead to generation of demand within the country which will, in turn, have a significant impact on the world economy due to the volumes involved. The Mid-year economic review of the budget states that the economy has registered a growth of 5%in the first half of 2014-15. This is in line with the estimates prepared by the World Bank and IMF.

26. Performance of Indian Railways is closely tied with the overall macro environment and growth of GDP in the country. It is the backbone of India's transport infrastructure. From the national perspective, as compared to road, it is a more energy efficient means of transport. "The non-optimal inter-modal distribution is estimated to cause a loss of about

4.5 per cent of GDP to the national's economy." "If consistent economic growth of 7-10 per cent per annum is to be achieved over the next 20 years, there is a pressing need for unprecedented capacity expansion of the railways for both freight and passenger traffic", NTDPC Report. Hence, the investment in Railways needs to be enhanced considerably from about 0.4% of GDP in the last two decades to about 0.8% in the 12th Plan and then to around 1.1% and 1.2% of the GDP in the following three Plans. This implies investments of the order of Rs. 900 billion (USD 15 bn) in the 12th Plan, Rs. 1.9 trillion (USD 32 bn) in the 13th Plan and Rs. 4.6 trillion (USD 77 bn) in the 15th Plan (at 2012-13 price levels).

27. **Hence, Indian Railways is poised to take off on a high growth trajectory to meet the aspirations of the country. The country is destined to move on a high growth path and so is Indian Railways.**