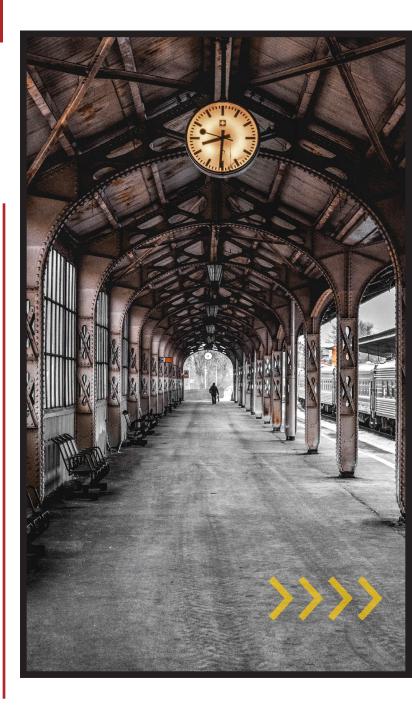
How Railways Are Being Financed in the **21st Century**?

KEY MESSAGES

Ms. Martha Lawrence

- Railway's problems can be fixed with some fancy financial instrument Financing is always a product of funding. Funding generally comes from four sources 1) passenger tickets, 2) payments for freight services, 3) government subsidies, and 4) providing other services like track access or advertising in passenger stations.
- Funding can be raised from the private sector based on the financial strength of a government. The largest pool of financing increased worldwide is sovereign financing. It is the cheapest financing, but it's often not available because governments have other priorities. Sovereign financing also includes loans from organizations like the world bank.
- The second source of financing is Pool financing which is corporate financing raised via state enterprise or corporation for the railway. One example of project financing is in Mexico, where between 1996 and 1999, concessional state railways were introduced. The purpose was primarily to improve the performance of the railway, but the concession brought the government over three billion dollars in concession fees. The concessionaires have invested a considerable amount of money in upgrading the assets.
 - Another source of financing is project financing which is based on the project in emerging markets. One type of such project is financing through publicprivate partnerships (PPP). The project financing can be done at a smaller scale than just a whole railway station development project. Development of logistics facilities and industrial lead lines are few examples of project financing in many countries. PPPs leverage is the smallest pool of financing, and PPPs financing is typically the most expensive, so it needs to be used wisely. It is best to use PPPs when project delivery is efficient by involving the private sector, not primarily as a source of financing. A PPP is not a financing instrument. It's a project delivery mechanism that has some private sector financing attached.



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- Sovereign and corporate bonds and corporate stocks are often traded on exchanges, making them more attractive to investors because they're more liquid.
- India and North America are exemplary in this type of financing. The government of India has provided money to the ministry of railways, which invested the funds in Dedicated Freight Corridor Corporation India Limited (DFCCIL), and these funds are accounted as the government's equity in the corporation. Second, the government of India has directly borrowed money from the world bank and Jamaica for the western corridor. For these projects and unlimited to DFCCIL and then third the company itself has borrowed money from the world bank with a guarantee of the government of India.
- North American railways have their equity stock traded on public stock exchanges and debt borrowed from the private sector; others such as Deutsche Bahn, the German railway or air jade the Russian railway or the China railway group have equity that is government equity. So, they mix sovereign with a substantial amount of debt borrowed from the private capital markets.
- PPPs financing is typically more expensive than sovereign or corporate financing because the investor's only recourse for payment is the project, and they can be complex to design and tender. They require the ongoing capacity to supervise effectively, so one must weigh the pros and cons.
- Typical financing instruments are loans, bonds, stocks, leases. Nearly all financing instruments are some permutation or combination of these basic types. Although none of this is free money, whatever the instrument to be used, the money must be paid back with interest or dividends. For the railway to be financially viable, the investment needs to be profitable enough to pay back the financing over time.
- Another common instrument of finance is green financing. Railways invest in green financing through green bonds, and they are similar to normal bonds. The only difference is that it attracts a pool of investors who want to invest in green activities.
- An important part of financing railways is reducing the investors' perception of risk. Government can help by creating an attractive business environment having transparent and fair sector governance. If we ensure that the railway has adequate funding and manage the risks around investing, financing is easy.

George Kaulback

- Funding refers to the sources of revenue or income that can be turned into cash and used to pay for a project or service includes cash flows from the delivery of rail services.
- Financing refers to the financial tools that can be used

to access money to pay for a project or service against future cash flows. So, generally, if the project is well funded.

- Suppose the downstream revenues aren't sufficient to pay for the initial financing of both debt and interest. It creates a funding gap that can be rectified in one of two ways in terms of capital subsidy or public funding.
- Alternatives of funding and finance mechanisms are largely about urban railways. Opportunities to increase revenues from rail operations, projects, or related assets include market pricing to maximum farebox revenue.
- If there is still a funding gap after all sources of revenue to the railway are maxed out. The potential mechanisms can be Value capture Mexican mechanisms, station parking charges, tolling, congestion charges, personal vehicle-related charges, sales tax, dedicated payroll taxes, business at urban centers, and carbon credits.
- There are three potential mechanisms for capturing land value. The first is incremental property tax revenues where real estate within the catchment zone would have higher taxation added property tax called incremental tax financing. It is a slightly higher rate to the property tax in those areas, which is used to provide a gap funding to the rail line development. A similar type of tax is just a one-time surtax or maybe over several years charged to property owners and used similarly flows to the railways. The last one is a development fee in which any land developments will be charged a fee in the area within the catchment of each station. Other types of potential revenues are congestion charges, incremental sales tax dedicated to rail projects. On a larger scale, global possibilities include bilateral agents who could help reduce the funding gap through infrastructure grants.

Mr. Johan Bouwer

- The regulatory model refers to the flow or channeling of the money. In the regulatory environment, the various portions in the railway make the money that comes back into the entity. The regulatory model was used in South Africa. in South Africa, per state entity, they corporatized a state entity in the early 90s, maintaining a balance sheet, and the balance sheet is used for funding neighboring countries. The state always owns the bottom infrastructure.
- The customer underpins everything. It is the customer who ultimately brings value to the railway. They pay the tariffs, pay the way, whether it's a long-term mining project, whether it's general freight movements, whether it's put to port movements. An investor could be the person in the railway and owns a locomotive and a wagon and operations. Most countries start with a dominant operator that evolves over the years into a more competitive, where the concessions of certain portions of the line are certain.



- Geographical concessions are usually how things evolve, and that could be done with or without rolling stock
- The financiers demand his future pay contract, specifically on the freight side, a 10 or 15-year contract worth pricing and profitability mechanisms. Cost-sharing mechanisms are favorable because they guarantee assets withdrawal at any time.

Mr. Farooq Hydar Sheikh

- Revenue is the key driver for that financing. There is a lot of negative perception among financers about the Pakistan railway.
- There are the total revenue sources from the core areas of revenue. In 2018-19, our total revenue was 54 billion, and revenue sources were passenger 29 billion, freight 18.8 billion, and sundry, which means another revenue branding and all other elements as land utilization was 4.3 billion and another coaching was 2 billion. PR took subsidies from the government to sustain our operations, and the government is also one of the main sources of funding. In the current year, 2021 PR revenue touched 50 billion, which is a record in the history of Pakistan railways.
- To address the challenges, we adopted the Indian railway model because they have similar conditions and a similar type of situation. We have evolved our model based on our ground realities and situations.
- Other major challenges faced by PR include the utilization of existing infrastructure and available rolling stock and the lack of digital platforms and technology for visibility of over operations. The models are operational to address these issues. PR is moving into the track access side policy where we only manage the track. The rest is all shifted towards the private sector.
- Another issue is Customer-centricity. Customer focus is missing, which is one of the key pillars. we are developing a customer-centric dynamic that is receptive to the market needs and meets or exceeds customer expectations. Where technology will play a key driver role, We are applying bottom-up strategy targeting. It has four main focus areas: marketing, customers, business management, and network investment. Network investment means to effectively utilize huge land. Infrastructure is available but not efficiently utilized as a source of funding and financing. There are certainly other factors like a lack of clear-cut transportation policy by the government of Pakistan. In India, a transportation policy includes you can't move goods from one province to another through road transport. They have heavily invested in their infrastructure. They have developed a dedicated freight corridor that means their land capacity on the passenger side is completely vacant, and there's no freight.

- We need structural changes by adopting a hybrid model to bring professionals from the private sector and make sure that this transformation journey is taking place differently from a conventional government style.
- Operational efficiency is one of the major challenges. There are a lot of conventional issues like bureaucracy and cultural change. To improve operational efficiencies, some of these strategic strategy parts are linked to the financing outsourcing of our core business units and evolving business model public-private partnership model, which will generate a lot of revenue and financing.
- Pension is one of our major liabilities. Thirty-five billion rupees is a permanent liability for the railway sector in this regard. It is increasing every year, so we are working with financial experts to help us generate and take this liability out of our balance sheet.
- Pakistan railways are encouraging the private sector to come and invest in that area, supporting them with the operational, mechanical, and maintenance of those, and providing them the track to use. In addition to new passenger coaches, we have already commissioned like 230 passenger coaches. Similarly, we are also adding 820 new freight wagons.
- Customer centricity will be the key driver for growth automation. We are bringing one of the software called which is railway automated travel advisory booking and advisory service. It is one window solution; it will also be a key driver for our growth procurement of RFID based on a rolling stock tracking system to ensure real-time.
- All these avenues contribute to generating some finance from one way or the other either through operational efficiency of saving money or by bringing public-private partnership.
- There are four or five main sources of funding that Pakistan railways will be working on. This is a Public-Private partnership initiative. We are offloading some of the activities, which are our non-core activities focusing on the core activities, working on the branding, government agencies to help on the front branding. Pakistan railway developed a robust plan for land utilization.
- Pakistan railways have 300 commercial stations and 170 000 passengers pass through our network daily, and 70 million consumers pass through our network in a year. It is a huge opportunity for the corporate sector to come and brand.
- PR is working on a 10-year business plan right now, which has never been in the history of Pakistan railways. It has been more on an operational basis of one-year and five-year. plans have been submitted, but they were just to meet the formalities.

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