Privatization & Concessioning of Railways: The Operator’s Perspective

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Prologue

Indian Railways were one of the earliest cases of Public Private Partnership in India, and probably the world, when they set up the Guaranteed Railway Companies during the latter half of the nineteenth century. RITES too has had considerable experience in Concessioning and Public Private Partnerships abroad.

In this Article, the Author has brought out the various nuances in structuring a Concession and has analysed the operator’s (as also the owner’s) perspective. The pros and cons in privatization and concessioning have been extensively covered. ‘Re-programming the Software’, as he terms it, provides a new meaning to the terminology and an interesting insight in the running of a concession.

Origins

The roots of privatisation can be traced back three decades to the UK’s Conservative Party manifesto of 1979, which aimed to rescue the country from the previous spells of labour rule that had led to the UK’s economic decline, culminating in a series of widespread and crippling strikes, especially during 1978-79 (the “Winter of Discontent”), wounding the country’s self-esteem. Pledging to curb the increasing power of the unions, which forced the government to constantly intervene in industrial disputes, the Conservatives came to power with Margaret Thatcher’s political and economic philosophy emphasising reduced state intervention, free markets, and entrepreneurialism. The new era of economic liberalism – “rolling back of the frontiers of the state” – through wholesale privatization or denationalization of state owned industries and utilities proved to be a totally unexpected and extraordinary success, transforming the UK into a fast growing economy and restoring national pride during the subsequent eleven Thatcherite years. A political motivation to reduce government involvement in industry unleashed unforeseen economic gains.
Drivers

Privatisation or change of ownership immediately, imperceptibly and inexorably alters the internal incentives that operate within organizations – from detached and disinterested discharge of public duties with little accountability to that of an interested, involved, responsible role, participative and hopeful of the financial rewards a better balance sheet would inevitably bring. The result is efficiency – certainly productive, if not always allocative. The superiority of private – as distinct from state owned management assumes that the decision makers involved in a principal-agent relationship aim to maximise profit\(^1\); the shareholders representing the principal while the managers are the agents, with the former always working to maximize their profits from the activities of the firm, the value of whose share would reflect its worth. Failure to run the firm well would be reflected in a fall in the share price, with the ever present threat of the existing management being subject to a takeover and being replaced or the firm becoming bankrupt. Public enterprise theory on the other hand, is based on the assumption that government seeks to maximize the economic welfare of a country, in the implementation of which the social objective is often replaced by political ones with a tendency for direct political intervention in managerial decisions coupled with the internal inefficiencies endemic to bureaucratic set ups. State-owned enterprises do not strive for cost minimization because of lack of a clear cut profit objective; instead a number of conflicting objectives, including non commercial ones, are followed due to political reasons. Thus, while government promotes economic welfare, privatization promotes profit maximization.

Compulsions for Concessioning Railways

While the 19th century was the century of the railroad, with the invention of the internal combustion engine, the 20th century belonged to the automobile, so that by the second half of the last century, most railways all over the world, especially in the developing countries, went into a downward spiral of not only declining profits but of mounting losses leading to neglect of maintenance and replacement of essential rolling stock, requiring modernization in order just to survive with the railway infrastructure and equipment being aged and technically obsolete. Not only so, plagued by excess staff, low productivity and lack of a commercial approach, the system proved to be a continuous drain on the exchequer, requiring periodic doses of life saving funds but still in urgent need of revival, rehabilitation, restructuring and revitalisation. Besides, with the development of modern highways and large capacity trucks, the inherent competitive advantage of railways diminished the state’s continued use of railways as policy instruments tending to further undermine their financial viability. Ultimately, under pressure from the World Bank, which realised that only funding consultancy and providing loans did not tackle the real problem of efficiency and productivity unless the incentives operating within organisations change, many governments decided to privatise their railway systems.

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Concessioning of Railways

If “the business of government is not to be in business” and the railway is a business, privatization of state-owned railways takes the shape of concessioning or leasing of the railways assets to the highest bidder for a reasonable length of time – say 25 years to enable the Concessionaire to make a financial success of his venture. The underlying assumption here is that private enterprise and innovation would transform an inefficient loss-making state-owned public enterprise into a more efficient one, which could possibly even become profitable. By transferring all commercial risk to the operator, a concession passes full responsibility for operations to the Concessionaire or operator and so brings to bear incentives for efficiency in all aspects of management and operations.

Concessioning – The Owner’s Perspective

Part of the rationale for privatization is the strategic importance to the national economy of the railway itself. Since railways are often the largest component of a country’s infrastructure, the government has a vast amount of capital tied up in railways. To the extent that this capital is used productively, the entire economy is enhanced; to the extent that this capital is not used productively, the opposite is the result. The sale of state-owned assets was favored in those circumstances in which the economic value of the asset would be greater in private hands than it would be if retained by the government. However, the strategic importance of railways transcends their role as large-scale enterprises. In most economies, rail prices provide the basic parameters around which commodity markets take shape. Because Railways are among the largest enterprises in most emerging economies, the objective of concessioning is to enhance the value of railway assets – either getting more juice from existing ones or producing the same output with fewer resources. Thus, the objectives in concessioning are:

- To rid the railway of its parastatal status, and let it exist independently in a market economy.
- Attract investment in infrastructure.
- Use the rail infrastructure and rolling stock more effectively.
- Reduce the cost of transportation, as the running of the railways is most efficient over the long leads.
- To utilise a national asset to its best potential.

Privately owned companies are less easily manipulated by government for political purposes. In private hands, assets can be focused with greater confidence on achieving commercial goals that maximize their value. Much of the commercialization benefit of privatization can be gained by clarifying and simplifying the profit-making objectives of a state-owned railway and by de-politicizing its decision making. However, in actual practice, this does not happen. Unfortunately, state-owned Railways pursue both commercial and social objectives, with social objectives often overriding commercial goals.

The process of reform and restructuring is in itself a learning process. It takes a decade or so from idea germination to implementation. Concessioning or restructuring relates
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to defining the railways’ business, enhancing the source of its competitive advantage and redirecting its competencies. Divesting surplus assets, such as real estate, repair shops and affiliated service companies such as road passenger, parcel and property development not only helps to simplify the restructuring process and to focus management attention on the core business but also can provide the core business with the liquidity needed to weather the transition.

Structuring a Concession

A fiscal crisis usually opens the door to state owned railway concessioning, which can enable embattled railway systems to reclaim their inherent competitive advantage by restoring their advantage of low cost and high quality service when compared to other modes of transport, chiefly road. Concessioning is an effective means of conveying ownership responsibility without conveying outright ownership of railway assets, reducing front end capital costs to the concessionaire who uses public assets in return for a profit share and a commitment to reinvest in the railway, making a contractual commitment to maintain assets under its custody, as well as to make additions and improvements as stipulated in the concession contract. Concessions also provide an instrument that government can use to contract out the operation of inherently unprofitable services, by asking concessionaires to bid on a minimum subsidy rather than a minimum profit-share basis. Since the running of passenger trains normally does not even cover costs, yet provision of passenger – especially suburban transport – is a welfare measure and an instrument of state policy, the terms of the concession normally prescribe the quantity and quality of such services to be run.

Thus, there are two possibilities – first, the railway in question may be in loss with remote possibility of ever making money. Here the bidders propose a negative concession – in the sense that the dole out by the state to keep the system running may be reduced to say half what it was earlier. In a positive concession, the Concessionaire expects to turnaround the system and make profits, promising to part with a percentage thereof in the shape of a concession fee. In both cases, it is a win win situation for both parties involved.

Business Model

The Concessionaire’s sole objective is the interest of his stakeholders – who are in the business for profit maximization. The ultimate driver of every activity and decision is, profit. If this can be done by rehabilitating the infrastructure and rolling stock, so be it. If this can be done by building new lines and opening up disused ones, as also purchasing rolling stock, so be it. If not, all need to be deferred till the bottom line starts showing better health.

Shorn of all the jargon, there is only one business model that works – the cash inflow must be greater than the cash outgo. If demand exists, increase in production through better utilization of existing resources and/or induction of additional resources is warranted. If demand is insufficient – while efforts to boost it are required – equally important is to exercise control on costs and downsizing (rightsizing?) activities, staff and span of areas covered to ensure that the cash inflow is not exceeded.
Here is where an incisive understanding of costs is required. Every activity has an associated benefit and a corresponding cost. As long as the former is greater than the latter, the activity should be performed. If not it needs to be given up.

Selection of Personnel

Here is where selection of the right experts to run a concession becomes crucial. Because technical railway skills are required to run a railway, a concession team must invariably be composed of experienced railwaymen with proven expertise in civil and track engineering, rolling stock and operating and marketing skills. Since ultimately the idea is not to only run a railway but to do so for profit, the finance expert on the team must be a critical element, privy and participative to all decisions.

Thus, concessioning projects can be best executed by those who have two types of experiences:

1. Field experience in the railways - which builds the technical competence - first to understand the nuances of railway functioning of each particular discipline, then to master it and finally to plan and then execute the course of action required by that discipline in the concession project in question.

2. The business orientation acquired in a Company like RITES – the commercial and profitability outlook that such a Company builds in its managers, so that they are constantly evaluating every action from the cost benefit angle – of what it ultimately contributes to the bottom line.

Reprogramming the Software

The hardware of a railway consists of its moveable and immovable infrastructure. The former consists of the rolling stock comprising coaches, wagons and locomotives. The latter consists of the track and bridges, buildings, signals and communication equipment. The software of a railway on the other hand, consists of the practices and procedures that first maintain this hardware and then determines how this hardware works to produce the desired output.

The operator has to simply use the hardware given to him to maximum advantage, using the operating software designed by him based on his experience and knowledge. Software improvement is a constantly evolving process to see that system resources – existing and future – are optimally utilised. What is not so obvious to the uninitiated is that, the availability of even the most technologically advanced permanent way, rolling stock, signaling system electric traction, etc., by themselves, do not ensure the success of a railway
system unless the software – the operating practices in use, which will eventually use the hardware – the resources of the system – to produce the final product or service of transportation – is so programmed to utilize them optimally. It is in this sense that the operator is a constant system optimiser, using the resources available to him to constantly maximise constraints.

In a concession project, the focus shifts from doing a task because one is supposed to do it mindlessly without any knowledge or involvement of the final objective, to questioning each activity from the cost and efficiency angle, aligning every individual task with the overall objective of performing it as economically and efficiently as possible, with the aim of increasing revenues and curtailing cost to cover all system expenses and produce a reasonable return.

When converting from being a parastatal being supported (and so often exploited!) by the owner – the government – to an independent company surviving in the marketplace, the greatest change that needs to come about is in the mindset. The aura, status, authority, power, prestige and position associated with governmental structures need to give way to a commercial, profit oriented approach, weighing each activity in the light of the return it is giving to the owners of the concession company – the shareholders. This change of thinking takes time because it needs to come about in the minds of human beings – it is not some simple operation of a machine that will produce a certain reaction based upon the control lever operated. The greatest challenge to any concession comes from reprogramming this software.

Operating a Concession: Abandonment of Unprofitable Light Density Lines

Since the operator is driven by profit maximization, to make a success of the venture, he would endeavour to reduce costs wherever possible, at the same time boost revenues through all the means at his disposal. In this endeavour, one of the first steps to do would be to drastically prune staff and close down unremunerative low density lines, since the ultimate goal is the reduction of rail related transport costs and this can only be achieved by a leaner, meaner and more efficient sector with no duplication.

In this connection, a distinction is made between profitable lines that typically have high traffic density from lines that are less profitable (or not profitable at all) that typically have low traffic density. In Canada, this distinction was used to facilitate abandonment of light density lines, that eventually lead either to divestment or to government subsidy of the ongoing operation. Nowhere is this more evident than in the case of British Rail nearly half a century ago.

The Example of British Rail

In the late 1950s, Britain’s railway network was in desperate need of improvement, with mounting deficits despite huge outlays under the 1955 Modernisation Plan. When Dr. Richard Beeching was brought in from ICI to head the railways in 1961, British Rail was
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losing £ 140 million a year. His brief was simple – make the railways pay. His solution was equally straightforward – massive cuts. Reflecting the declining use of many lines, stations and freight facilities, the Beeching Plan closed a third of the network, scrapped a huge number of wagons, cut almost 70,000 jobs, trimming a number of the obviously financially unprofitable operations to yield a smaller and more manageable set of activities. Beeching thus effectively helped clarify the broader understanding of the role of the railways and introducing a more business like approach to railway management, much akin to what IR’s Chairman, M. S. Gujral did in the early 1980s. He was also instrumental in modernising many aspects of the railway system, particularly a greater emphasis on block trains which did not require expensive and time-consuming shunting en route. Railwaymen generally believed his actions were inspired and dramatically improved the system, so that his legacy continued. Thus, between 1962 and 1973:

- 45% of stations open to passengers were closed.
- 90% of all freight stations and depots were closed.
- 80% of marshaling yards were closed.
- 30% of track open to passenger traffic was closed.
- 40% of track open to freight traffic was closed.
- the freight wagon fleet was reduced by 70%.

Rationalization and modernization of the railway asset base, together with continuing cost controls and productivity improvement programs, led to consistent and substantial reductions in total railway manpower – from over 470,000 employees in 1962 to 120,000 by 1993-94 – and to corresponding gains in productivity. Total passenger traffic remained broadly stable, despite this reduction in the asset base and manpower of the railway, although the absolute levels of freight traffic continued to fall.

Revenue Sustainability of Railway Lines

Reverting to the present day, studies by leading experts suggest that a railway needs to earn a minimum amount of revenue per km to pay for operations and maintenance of an existing line. Hence, to be financially justified, an existing line must have:

1. 0.5 million tonnes of traffic per km. For new lines, this increases tenfold to 5 to 10 mt.
2. Another view is that, with market-constrained tariffs, each line would typically need to carry at least 1 million net tonnes a year to be financially viable.

3. A third view is that since railways are expensive to maintain, an annual traffic of at least 1.5 million net tonnes per route km is required just to keep an existing line open and maintained for the long term.

Strategy – Other Steps

Because of the peculiar economics of rail transport, which is essentially volume driven, other additional steps to significantly improve profitability would include:

- Increasing train size.
- Reducing crew size and consolidating crew runs.
- Closing low-traffic branch lines.
- Eliminating guards and guard vans.
- Rationalising marshaling yard operations.
- Increasing the cargo hauling capacity of rolling stock, including replacing four wheel rail cars with bogie cars and increasing the draw gear capacity.
- Reducing the number of freight booking points and the number of stations and yards.
- Sizing locomotives to enable longer trains to be hauled.

Others would be to:

- Concentrate on block train movement from origin to destination.
- Rationalisation of marshalling and carriage and wagon examination.
- Rationalisation of locomotive turning and fuelling.
- Rationalisation of stoppages for passenger trains.

Concessioning of Railways in Africa

Since for a railway company like RITES the scope for concessioning of Railways is the most in Africa, an analysis of the experience would be useful. (Here, the experience of the very recent ones of Mozambique, Kenya, Uganda and Tanzania has been excluded, but the experience so far is far from what was expected by both the governments and the concessionaires concerned).

The first railways south of the Sahara headed inland from the ports at Cape Town and Durban in the 1860’s and 1870’s, and it was only after the turn of the 20th century that large scale railway development began in other parts of Africa. The pattern was invariably the same - isolated lines heading inland from a port to reach a trading centre or a mine, with a few branch lines being added over time. Constructed under colonial administrations, the lines were mostly state owned, some being also constructed by concessions or by mining companies.

This development reflected the limited inter-country trade. As European colonies, there was little trade between, say, English and French colonies. Even today, trade volumes between adjacent countries are still small. Thus African Railways, are closely linked to the ports (often under a common integrated administration) and, where railways traverse more than one country, freight traffic is almost all transit with comparatively little originating or terminating in the intermediate country. The traffic is low by world standards – akin to a branch line in India.

While operating reasonably successfully up to the 1960’s, with the development of the road system, the higher value general freight moved to road, with rail being left with bulk mineral and agricultural traffic and fuel. Whilst covering working expenses, enough reserves to fund asset renewal could not be generated, the railways being intermittently provided loans from multilateral or bilateral agencies, often leaving them with poor infrastructure and different kinds of rolling stock.

In addition, running passenger services without compensation not only consumed resources that could be used to renew the freight and infrastructure assets but also tied up scarce locomotives that could be better used for profitable freight services. Besides, the many wars and civil disturbances during the last 50 years also often first targeted the railways for destruction, further aggravating the situation.

Consequently, the railways being concessioned in Africa are mostly badly run down, needing substantial rehabilitation of both infrastructure and rolling stock, it being widely expected that the concessioning would lead to very substantial investments by the concessionaire who would continue to run the loss-making passenger services.

Based on the 13 rail concessions in sub-Saharan Africa since 1993\(^8\), with another 7 on the anvil\(^9\), the discernible and encouraging trend is that, despite the hiccups, throughput has generally increased with the railways performing better than if they had not been concessioned. In short:

- Operating more efficiently and competitively, the concessioned railways have reduced costs and improved service levels, thus attracting more traffic to the more efficient mode.
- Passenger service requirements have been lived up to, with no services being reduced.
- Freight and passenger rates have not increased significantly.
- Most concessions have had substantial investments, principally in infrastructure, by bilateral and multilateral lending agencies. Concessioning has been, in most cases, a pre-condition of lending.

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8. Ivory Coast/Burkina Faso, Cameroon, Gabon, Malawi, DRCongo, Zimbabwe, Togo, Maputo corridor, Senegal/Mali, Zambia, Madagascar, Mozambique (Beira and Nacala).
However, many of these rail systems cannot finance major future infrastructure renewals, either through concessionaire funds or from internally generated returns since few, if any, of the concessions are generating significant enough profits, certainly not enough to fund long-term renewals. Thus, while overall concessioning in Africa has revitalized many systems, it is doubtful whether it can ensure their long-term survival without further injections of public investments.

Conclusion

Privatisation is often hailed as the best way, in which railways can be ‘freed’ from the constraints of state ownership, to harness the investment, innovation and entrepreneurial spirit which the private sector can inject into what is often seen as a dying organisation.

However, in the ultimate analysis, with everything to go for it in theory, in actual practice, Concessioning is no unqualified panacea for railway ills, resulting in what one expert terms the “concessioning fallacy”\(^{10}\) in that governments assume that concessioning their country’s railway is a solution to the funding dilemma. This rests on their mistaken notion that private companies will come with baskets of money to invest. Keeping the track under state ownership and charging private operators a usage fee may sound simple to apply, but it raises many complex problems.

The problem with privatization in some countries is that the Government expects too much of the private sector, and then blames it when things go wrong. Private companies have to make profit otherwise they go bust, unlike Government departments which have no such constraints\(^{11}\).

Governments need to recognise that in almost all cases the privatised railways will still require state funding, either through general support, specific investment grants, or some form of public service contract payment for performing a specific obligation.

Even though the government may hand over the assets for a nominal amount, the cost of operating, maintaining and renewing the railway is seldom covered by the revenue - let alone the costs of upgrading or addressing any maintenance backlog. What governments failed to understand is that the economic benefit of the railway is usually much greater than the financial benefit. To be financially viable, the railway usually needs some form of support.


\[11. \text{Briginshaw, David : ‘Has Privatisation Come Full Circle’, International Rail Journal, April 2008.}\]