Project Finance in Latin America: Practical Case Studies

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EUROMONEY BOOKS

Chapter 13

Ferrovias Guatemala

Type of project

Railroad.

Country

Guatemala.

Distinctive features

- Privatisation and rehabilitation of abandoned former state-owned railway.
- Ancillary revenue earned from right of way.

Description of financing

Financing came from three sources: 35 per cent from equity investment by US-based Railroad Development Corporation and local Guatemalan investors; 30 per cent from preferred stock sold to Guatemalan investors, and 35 per cent local Guatemalan bank debt and commercial paper.

Project summary

Railroad Development Corporation did a market analysis, secured necessary government approvals, made a majority equity investment, raised local financing, and rehabilitated Ferrovias Guatemala, the former state-owned national railroad.

Railroad Development Corporation

Railroad Development Corporation (RDC) is a privately held, Pittsburgh-based railway investment and management company, unique in its focus on the developing world. It currently has investments, as both operator and shareholder, in three freight railways: Buenos Aires al Pacifico and Ferrocarril Mesopotamico in Argentina, and Iowa Interstate in the United States. These railway systems alone represent approximately 9,000 kilometres of railway operations; employ approximately 2,000 people; and generate approximately US$100 million of annual revenue. Additionally, in mid-1998 the company began work on restoring rail service in Guatemala, which had not operated since early 1996 and, despite extensive damage by Hurricane Mitch, began limited operations as 'Ferrovias Guatemala' on 15 April 1999.

RDC has also been the first private operator in the rail sector in Africa, a continent where the privatisation trend has, until recently, been limited to investments by the national railways of France and South Africa. In January 1999, a consortium led by RDC and its partners negotiated the concession for Mozambique's Nacala railway and port. The same consortium, in partnership with Portos e Caminos de Ferro de Mocambique, was subsequently awarded the Malawi rail concession, which feeds the Nacala line.

Background – rail privatisations

Since the early 1990s, privatisation has swept the global railway market although this has not been a smooth transition. Major setbacks have occurred in projects where foreign partners have been unwilling or unable to integrate their practices and expertise into local environments. Experience suggests that most operators focus on technical expertise of the personnel while ignoring their cultural and language aptitude. The United States, where there are now over 600 private rail companies, has a reservoir of skilled personnel that can be applied to meet the technical requirements of any railroad project in the world. Critical to success is the structure of the privatisation and the transparency of the bid process. Experience suggests that having a strong local partner is necessary for ensuring that the cultural and, in many cases, the political skills are present. This case study focuses on freight rail and the lessons we can draw from RDC's experience, developments elsewhere, and to a lesser extent, the opportunities in passenger rail.

Successful restructuring driven by marketing

Experience has shown that it is more important to focus on marketing than even cost control. The fundamental value of a railway franchise is its traffic potential. The difficulty lies in finding customers and convincing them to use rail when they are used to using road, which offers a service that is typically faster and more flexible, at a very competitive price.

On this basis Europe is probably in the most difficult market for rail freight having only begun to identify their core markets, reconfigure their assets around those core markets, and implement strategies to stem ongoing loss of market share. With the exception of the United Kingdom, Europe's freight railways remain in government hands and inwardly focused. Volume is relatively stagnant against an expanding market, and 1998's major initiative, the open access Freight Freeways, has had negligible market impact due to high costs and institutional resistance. This was likely one reason for the recent withdrawal of US rail company CSX from NDX, a joint venture with the state railways of Germany and the Netherlands.

In Latin America, the railways are growing in market share, though admittedly from a low base. For the most part, Latin American railways are privatised and focusing on their markets. As of 1999, most of the railways in Latin America's larger countries – Argentina, Brazil, Chile, and Mexico – are in private hands. They are building volume and validating their performance by attracting private capital.

The United States enjoys the healthiest rail freight network. Railway profitability has improved steadily since deregulation occurred in 1980. The US rail network is now suffering from capacity constraints, an unprecedented problem but certainly a positive indication from a marketing perspective. Growth potential is limited in the United States to as little as 5 per cent per year due to limited ability to further increase a market share that is considered high in most market segments.

Misreading market leads to expensive mistakes

The accumulation of experience in this decade suggests that most mistakes in developing effective rail businesses have been in the marketing, not cost control. In the United States and the United Kingdom, bankruptcies such as Chicago Missouri & Western and Charterail were the result of shortfalls in revenue rather than the failure to cut costs. In a capital-intensive industry it is essential to meet base-load traffic projections. In the United States, and in Argentina, companies like Toledo, Peoria & Western and Ferroexpreso Pampeano have had to be restructured as a result of insufficient revenue. Additionally, capital investment has been lost where it has not been matched to the market. For example, in its early years, Conrail rehabilitated its electric locomotive fleet, put it into storage, and finally cut it up for scrap because traffic shifted away from the electrified lines. (Conrail is a freight railroad created in the early 1970s after the bankruptcy of Penn Central, Erie Lackawanna, Lehigh Valley, and several other US railroads. It was first owned by its employees and the Department of Transportation of the US Government, then taken public, and then sold in pieces to two large rail systems, Norfolk Southern and CSX.) This state-owned enterprise was judged more by how much it was investing than how efficiently it was moving traffic. Similar electrification projects such as Mexico's Queratero line and Brazil's FEPASA have proven themselves such poor investments that they were among the first casualties of privatisation.

Rail freight markets in the developing world

The developing world is, in many cases, as solid a ground for investment as the United States, and better than Europe in many respects. For example, the structural fundamentals of the business in Africa are as good as in Latin America. Unlike Europe, where for largely political reasons 'open access' has institutionalised head-to-head competition among rail operators on often uncontrollable infrastructure entities, Africa has pursued franchises. The competition is from roads, more than other rail operators.

One example of this is the Ivory Coast/Burkina Faso concessionaire, Sitarail. For Sitarail, the annual revenue is approximately the same as for Iowa Interstate Railroad in the United States, yet in order to earn that revenue Sitarail only has to move 10 per cent of the volume. Sitarail operates in a different competitive environment than that of the United States; competing roads exist, but they are in poor condition. This is an excellent justification for investment in African railways.

Without a doubt, there are difficulties in developing countries. Cost structures are high; rolling stock and infrastructure is generally mismatched to the market; there are high staffing levels; and there really isn't much at all in the way of a railway capital market. These are mostly short-term, correctable problems, not long-term fundamental problems and an investor would rather be faced with cost than marketing problems. This is the fundamental logic behind RDC's investment in Guatemala's railway; despite the physical challenges, the market (Guatemala and El Salvador) will support a railway. It is also helpful that Central America is increasingly oriented towards private-sector solutions. Recent structural reform, which includes privatisation of railways, has served to reinforce that.

Concessioning versus commercialisation

Given the choice between commercialisation (in which the enterprise remains in state hands but with an often-ambiguous mandate to operate on a commercial basis) and concessioning (in which the state's assets are operated and maintained by the private sector, with a focus on profitability best achieved through traffic growth) there are many advantages to concessioning. In the case of concessioning, much of the financing comes from the private sector, as opposed to commercialisation, where it comes from the public sector. Additionally, in the case of concessioning there is less exposure to political pressure. Concessioning is more removed from the public arena and therefore less susceptible to political interference. For example, railways are often under pressure to subsidise their passenger services, particularly commuter traffic. In the United Kingdom this has been the major sensitive area and franchises have been, following the Argentine passenger model, awarded mainly on the basis of the least subsidy. For the most part, commercialised railways are distracted by being held hostage to political forces as well as market forces and so they can't focus on the business as clearly as under concessioning. Under concessioning the focus is on the customer, hopefully driven by a management stake in the success or failure of the company. In contrast, the focus of commercialisation is on the process.

Solutions in the developing world

The advantage the global industry now has is that the last decade has provided enough experience in every rail business segment across a diversity of environments so as to indicate how to optimise the involvement of the private sector. Precedents for almost all aspects of the industry now exist and other countries can benefit from them. For example, in Argentina, all of the suburban passenger and subway services around Buenos Aires have been privatised. The major difference between the passenger business and the freight business is that, in the passenger business, the competition is usually among bidders to run the service for the lowest subsidy. The United Kingdom, as we have seen, adopted this model as well.

But for the freight business, the private sector should be willing to pay. Examples are Conrail in the United States and New Zealand Rail, both of which received high cash prices when they were privatised. In the case of Conrail, an even higher price was paid when it was subsequently purchased by CSX and Norfolk Southern. Even for light-density freight lines, the private sector is often willing to pay, though usually at a lower price per traffic unit. Examples of this are the regional and short-line railroads in the United States and the Argentine freight concessions which, although bigger, are similar on a traffic density basis. For the international freight business, the model is the United States, where interchange of traffic is pervasive among the 600 railway companies. This model is being applied in places like Latin America, where railways that were never intended to connect – such as Argentina's and Brazil's – are evolving as international corridors. There are similar plans for developing traffic between Mexico and Central America.

Public investment to attract private investment

'It is important to recognise, however, that for some smaller railways the private sector does not offer a complete solution,' notes Henry Posner III, Chairman of RDC. For some developing countries, there is a real question as to whether railways can survive without public investment.

In considering the combination of capital needs and market constraints, the picture is not always encouraging. Focusing on the market in countries like Ecuador and Jamaica, it is questionable whether there is, or ever will be, sufficient traffic to justify any sort of freight rail services. In Ecuador, there might be container and cement business, and in Jamaica a small percentage of the network has bauxite flows, but that's about it. Another important consideration is the length of haul. In North America, a minimum 300-mile length of haul is usually required for a railroad to be competitive with road haulage. In Jamaica or Panama, for example, the length of haul has to be 50 miles or less because of the size of the country. Other problem areas include countries where the rail service has been suspended, such as Costa Rica, Guatemala, and Jamaica. So far, only Guatemala's system is being reopened. In these cases, governments made the decision to close their systems and force their few remaining rail customers to find alternative methods of transportation and often to invest in trucks. This can make it very difficult (though not impossible as the situation in Guatemala illustrates) to revive these railways.

Background – Guatemala's railway

Guatemala's railway has been one of the more challenging rail privatisation's. This is due to a multiplicity of factors, including: the abandonment of the railway in 1996; destruction of bridges and major sections of the right-of-way by Hurricane Mitch in 1998; invasion of stations by squatters; loss of the few remaining customers' traffic to trucks; deterioration of the track to the point where basic operations were not possible; and, unique among railways in the modern era, the theft of six miles of its mainline (the rails were used for construction projects or sold for scrap).

Reopening the railway

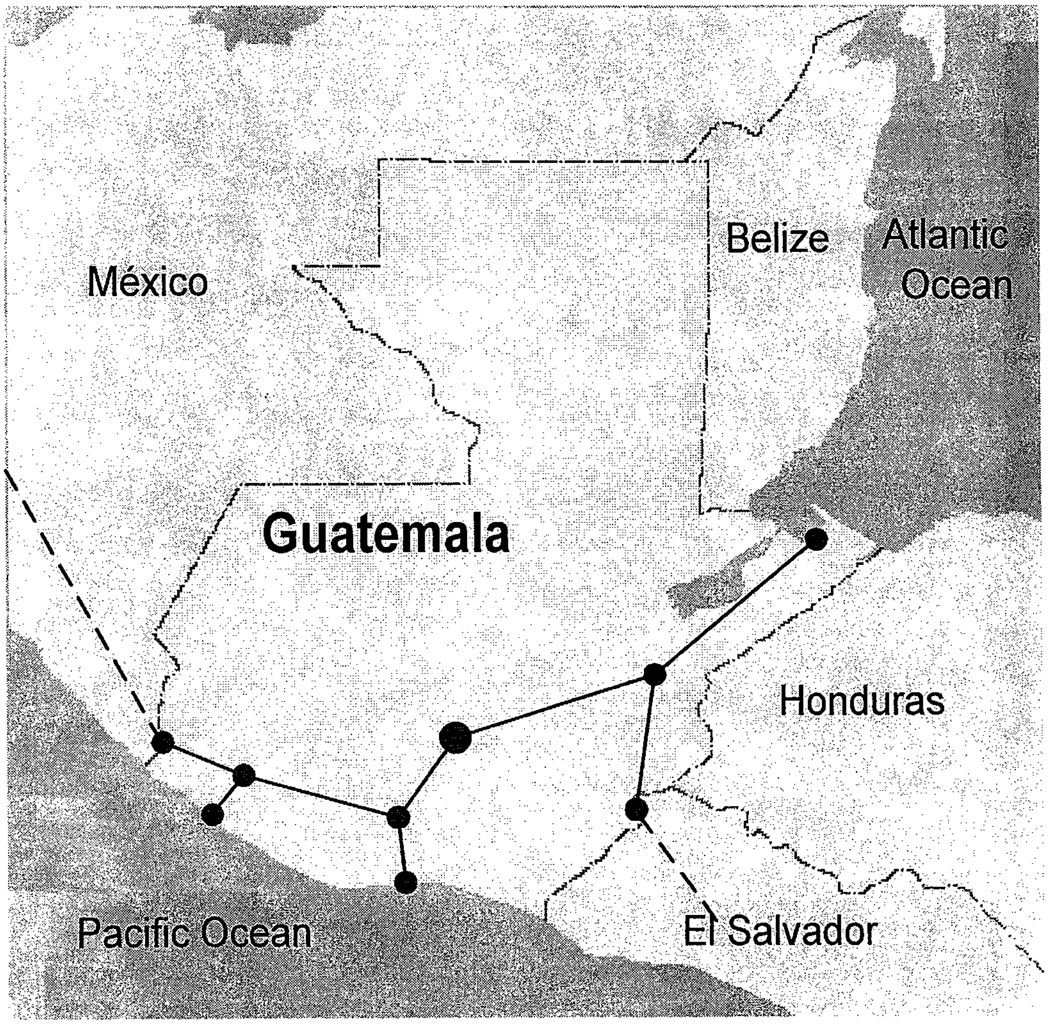
Despite these circumstances, the first portion of the railway reopened for traffic in April 1999, financed (with the exception of replacement by the owner, the government, of the assets destroyed by Hurricane Mitch) entirely by the private sector. Maps of the railroad and its project phases are found in Exhibits 1 and 2. Exhibit 3, the track profile, shows the elevation above sea level at various stages of the line. Because of the mountainous terrain, there is no point in competing with the Panama Canal for transcontinental freight.

The rehabilitation programme on the first phase of track, which is narrow gauge (three foot) and unballasted, requires replacing 25 per cent of cross ties and replacing rails where they were missing. Bridges, drainage and tunnel structures were in fair to good condition. Numerous washouts needed to be repaired. Rolling stock comprises: 10 Bombardier/ALCO model MX620 (2000 hp) locomotives, and seven Babcok and Wilcox/GE (Spain) Model U.10B (1050 hp) locomotives. Freight wagon rolling stock is comprised of: 75 roller bearing and 35 friction bearing platform (flat) cars; 25 friction bearing tank cars; and 30 roller bearing and 110 friction bearing box cars. Conversion of friction bearing to roller bearing journals is part of the rehabilitation programme.

The feasibility of the project rests on demand. Unlike many countries, Guatemala's population centre is 200 miles from its main international trade link, the Atlantic ports of Puerto Santo Tomas and Puerto Barrios. This distance, while relatively short, is sufficient to allow the railway to compete on a head-to-head basis, even considering the need to reach most customers by truck at the Guatemala City end of the line.

Exhibit 1

Guatemala's railway network



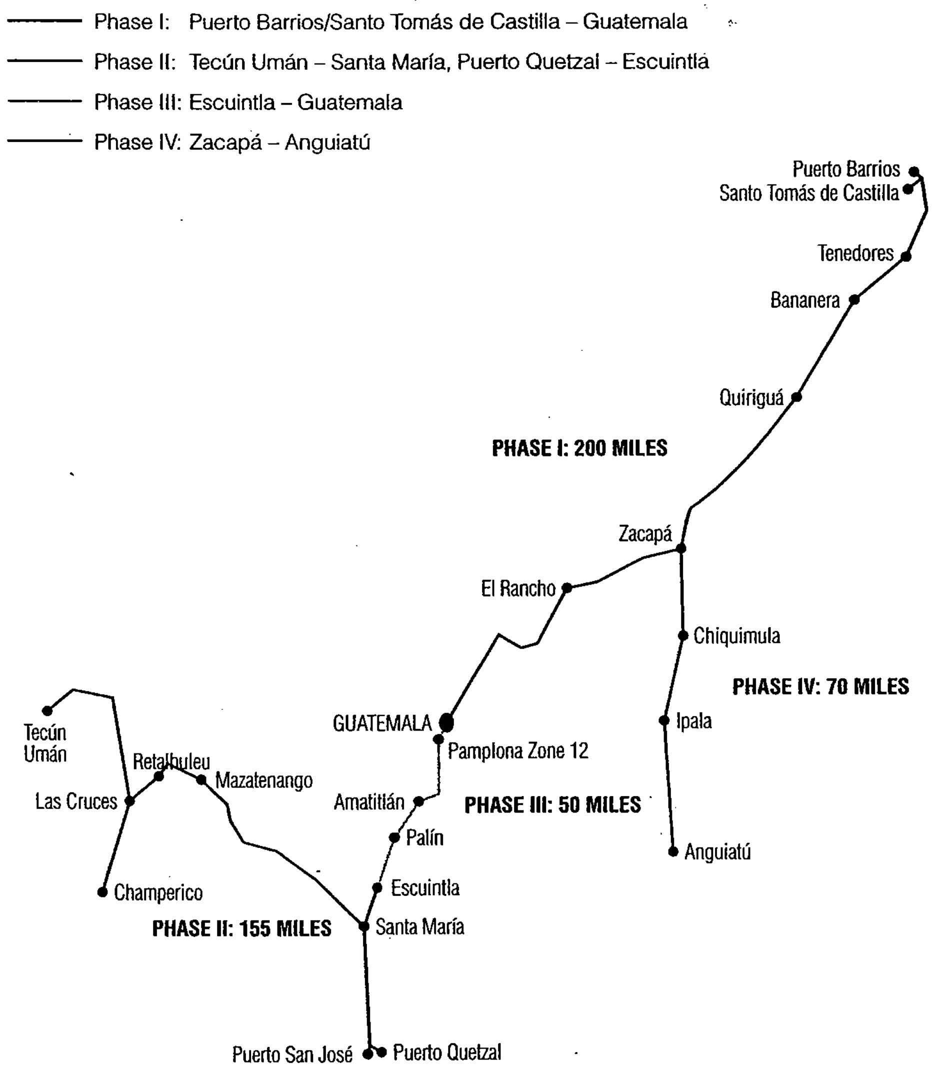
Other strategic aspects of the transaction include the opportunity to develop additional uses for the railway's right-of-way such as pipelines, fibre optics, electricity transmission, and station facilities. These are especially important given the railway's location: while the initial phase of the project will link Guatemala City with the Atlantic, subsequent phases will reopen links with the Pacific, Mexico and El Salvador.

Project financing

Financing of the project was led by RDC, with support from Guatemala's largest investment bank, Capitales e Inversiones. It was possible to attract the local investment necessary to fund the remaining equity required primarily because RDC was willing to invest its own capital for the majority of the equity, but also because RDC's plan was based on the market and the rehabilitation plan was a low-budget survival programme. Existing rolling stock is being

Exhibit 2

Project phases



rehabilitated and the track program is limited to replacement of 25 per cent of the cross-ties. This is sufficient for a low-speed, but reliable, operation.

An important element of the structure was the introduction of a substantial Guatemalan ownership in the company, thus providing the local business, political, and cultural elements necessary to make the business successful. The Guatemalan investors consist of about 50 high-net-worth individuals and strategic corporate investors such as shippers that plan to use the railroad. These investors in some cases have a vested interest in having the railroad operate, but also help RDC's management with perspective on the local cultural and political environment. As a result, the railroad is more a partnership than an arm's length investor relationship.

The target capital structure is about 35 per cent equity, 30 per cent preferred stock, and

Exhibit 3

Track profile – elevation above sea level

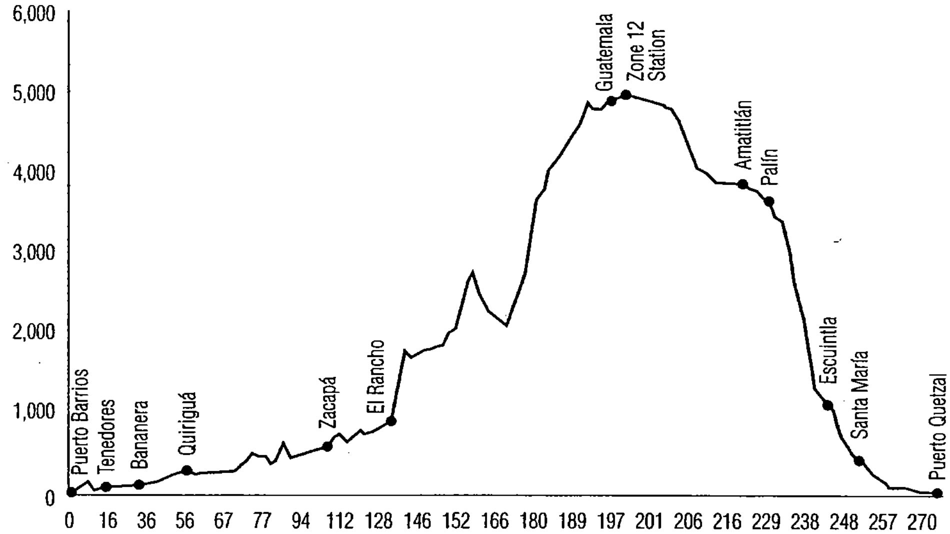


Exhibit 4

The railways marketing plan

Traffic	*Flow*	*Service*	*Equipment*
Containers	Atlantic to/from Guatemala	Daily	Flatcars
Coal	Atlantic to El Progreso	As needed	Hoppers
Cement	El Progreso to various destinations	Daily	Flatcars (containerised) or box cars
Petroleum products	Atlantic to Guatemala	As needed	Tank cars
Bananas	Various origins to Atlantic	Daily	Box cars
Coffee	Guatemala to Atlantic	Daily	Box cars or flatcars (containerised)
Steel	Atlantic to Guatemala	Daily	Flatcars, gondolas
Wheat	Atlantic to Guatemala	Daily	Box cars
Sugar	Guatemala to Atlantic	Daily	Flatcars (containerised)

35 per cent bank debt and commercial paper. Preferred stock and commercial paper were chosen because these instruments are already used in Guatemala, where there is a substantial capital base despite the size of the country. Preferred stock provides investors with higher return and risk than debt but still leaves control in RDC's hands. The company expects to structure longer-term debt that can be placed in Guatemala after liquidity returns to the local market and after the railroad has secured more long-term contracts with shippers. The Guatemalan financial markets have recently been affected by turmoil in other Latin American markets. RDC and some of the local equity investors are providing bridge financing until the markets normalise. One of the advantages of having local strategic investors has been their willing-

ness to provide financing and help the railroad become operational in whatever way they can. Although RDC expects to achieve its target financial structure over the longer term, its short-term objective is to get the Atlantic coast route of the railroad in operation despite what the financial markets are doing and the willingness of RDC and the local equity investors to provide debt financing shows the level of commitment to that objective.

RDC has a number of initiatives underway to secure long-term leases of the right of way for pipelines, fibre optics, etc. Combined, these leases should provide a revenue stream that banks will consider to be reasonable collateral. RDC's management prefers to wait until most of these leases are signed so it can negotiate its long-term debt arrangements from a position of strength. Lenders are expected to be primarily Guatemalan commercial banks and multilateral institutions such as the International Finance Corporation.

Interestingly, the reaction of the international financial markets has been for the most part negative, for two fundamental reasons. First, Guatemala is a small country and in the shadow of Mexico; institutions interested in Latin America have tended to focus on the bigger countries. And second, having minimised the cost of the project, it is considered 'too small' for most institutions. Commercial banks and insurance companies lenders to railways in the United States are generally accustomed to the liquidity of rolling stock and the stable and well documented revenue streams found in the North American railroad market, and are not yet receptive to higher-risk lending opportunities with railroads in developing countries.

Prospects for the railway

Because capacity will be finite, RDC eventually expects to arrange long-term contracts with major shippers. However, shippers are unlikely to make such a commitment until the railroad has an operating track record. RDC will provide transportation in the spot market until shippers have sufficient confidence to sign contracts.

Once existing capacity is used up, RDC will have to purchase or lease additional locomotives and freight cars. New rolling stock will be more expensive than existing equipment because it will have to be imported and modified to Guatemala's narrow gauge. Brazil and South Africa have narrow gauges, but they are not the same narrow gauge as Guatemala's. A locomotive purchased in one of those countries would have to be shipped by sea and its wheels would have to be modified and adjusted. This is a sharp contrast to the liquid market for rolling stock in North America and one of the reasons that equipment financing is difficult in this environment.

Many emerging-market railroads can be good investment opportunities for RDC if the price is right. Valuation of an investment opportunity such as Ferrovias Guatemala is based on a net present value (NPV) analysis driven by a bottom-up estimate of revenue, an estimate of rehabilitation costs, and an estimate of ongoing operating costs. Discount rates used in such a valuation must be substantially higher than for rail investment in North America because the business is subject to substantially higher revenue risk, and because it's in a developing country. Revenue is the single most important driver of value, as it is the most difficult to predict, especially in a market where rail has been absent for years.

The Guatemalan railway project is also unusual in that RDC has the ability to lease the right of way for non-rail businesses. In most countries, the railroad concessionaire does not have such an opportunity. However, the Guatemalan Ministry of Transportation did not see any other serious bidders. It did not have the budget to hire a consulting firm to help with unbundling the economics of the railroad and the right-of-way access. Ministry officials also thought that offering RDC such an additional earning opportunity would help get the railroad running again. After not running for three years, a railroad in a location such as Central America deteriorates from washouts and theft and the value of the franchise diminishes as shippers find other alternatives. If restoration did not begin in 1997, it was unlikely to occur at all.

Lessons learned

The most important lesson learned from this business is that, on a deal-by-deal basis, it is almost always necessary to start from scratch. Models developed elsewhere have limited application. The way to be successful is to be efficient in screening and analysing transactions. The investor has to have good judgement in choosing battles. The way to succeed is to be selective in the transactions reviewed, and to analyse them at least possible cost. To contrast Guatemala with Australia, one of the bidders for a freight concession in Australia issued a press release saying that they had spent over US$1 million putting together an unsuccessful bid. In contrast, the total cost of RDC's due diligence, documentation, and transaction closing in Guatemala was under US$100,000. The American-style, elimination-of-risk model for developing transactions is not viable in smaller, developing countries. A company such as RDC must rely more on transaction efficiency and judgement than elimination of risk. Furthermore, Posner argues that it is not realistic to eliminate risk in developing countries. He says, 'Unless you accept a higher level of risk, it is not going to happen.' All of the above suggests that as long as there is a plan and a commitment demonstrated by the sponsor, a railway project like Ferrovias Guatemala can be financed.

Conclusions

As with any business, there have been both positive and negative results from railway concessioning. In Latin America, the operating results have been positive, though some governments, such as Bolivia's, have been disappointed at the number of bidders. In fact, Mexico only had one bidder for the Pacific North concession, its second largest. There simply has not been the level of interest that is occurring for businesses such as electricity and telephones. Some railways such as Nicaragua's have been liquidated. That's very disappointing given that concessioning could have been considered as another option.

Likewise, in the future there will continue to be successes and failures. The future will see continuous improvements in efficiency as a result of concessioning, but governments probably will continue to be disappointed with the level of interest in railways by the private sector. The ultimate message to countries considering rail concessioning is therefore to focus on the transportation market; maintain realistic expectations as to the value of the business; and remember to look to other countries that have already paid for this experience. It is important to learn the lessons already learned, often expensively, in other markets.

This case study is based on an article written by Henry Posner III, Chairman of Railroad Development Corporation, for the *Journal of Project Finance*, Summer 1999.