

The World Bank's Involvement In Railway Restructuring: Applications In Turkey ⁱ

Louis S. Thompson
Railways Adviser

The World Bank

December 4, 1997

INTRODUCTION

The World Bank considers transport infrastructure, and railways, to be important drivers of economic development. In the 50 years since the beginning of the Bank, rail lending has amounted to about US\$15 billion covering most of the countries of the developing world. The Bank has, for example, made two rail loans to Turkey totaling about US\$ 240 million.

RAILWAYS I	TURKEY	1973	47.0
RAILWAYS II	TURKEY	1987	197.0

Lending to developing countries is inherently risky. Against this backdrop, the Bank's transport portfolio has been relatively successful. Within the transport loans, though, railway lending has often been problematic and, in 1982, the Bank issued a report, "The Railways Problem," which discussed the reasons for the lending problems.

"The Railways Problem" criticized the railways for being conservative, production-driven organizations rooted in the past and reluctant to face the future. The report emphasized also that the railways were only half the problem: their government owners also shared the blame for imposing politically driven burdens on the railways and for refusing to allow the railways an acceptable degree of managerial authority.

The result of the railways' "problem" has been broadly documented.ⁱⁱ During the 1970s and 1980s, many railways experienced financial and operational crises. In the **US**, 25 percent of the rail system was bankrupt in the early 1970s. Resolution of the crisis required creation of Conrail (later privatized), creation of Amtrak (still in Government hands at a total cost to date of US\$ 25 billion) and thorough deregulation of the transport industry. In **Japan**, the Government ultimately reorganized JNR (which was losing US\$15 billion per year and had a debt of US\$250 billion) into the current system of 6 passenger companies and one freight company. In **Germany**, the Government faced a cumulative loss of DM 500 billion by the end of the century if action were not taken: in response, the old Deutsche Bundesbahn (DB) was broken into infrastructure and operating companies (together called Deutsche Bahn, or DB AG) some of which are eventually to be

privatized. In the **UK** the Government broke the old British Railways (BR) into an infrastructure company (Railtrack), three equipment leasing companies (ROSCOS), six freight companies (bought by two ventures) and 25 passenger operating franchise companies. Similar change has occurred in many developing countries.ⁱⁱⁱ

THE NEED FOR CHANGE

The Bank has long encouraged change in railways. Some years after the “Railways Problem,” the Bank revisited the issue and found that some change was occurring and that a new set of tools was emerging for use in supporting more change in the future.^{iv} The primary drivers of change are “**globalization**” and “**marketization**”. For transport, the forces of globalization mean that a country’s inefficiencies can no longer be absorbed within its borders. If a country is to participate effectively in the world economy, it must be able to move goods rapidly and cheaply. If the country’s transport network is inadequate, that country’s export potential will be reduced, and the country’s citizens will pay more for imports (or competing local goods) than they need to; either way the country’s welfare is reduced. If local passenger travel is also inefficient, citizens cannot participate effectively in the educational and commercial activity needed to promote the economy’s participation in the global economy.

Recent completion of the World Trade Organization has established a framework for opening up all of the world’s economies to trade and travel. Within this framework, though, regional trade organizations may be even more important in influencing economic development and trade flows. The European Union (EU) has created a borderless market in which transport competition will be transformed. Turkey wishes to join the EU in the future so it will be directly affected by EU events. Since most of the Central and Eastern European (CEE) countries are physically connected to the EU (and most hope to join the EU someday), they are also directly affected by EU actions. Similarly, Mexico has become linked to the US and Canada through the North American Free Trade Agreement (NAFTA) to the point that the Mexican Railway had to be restructured and privatized along the US and Canadian models in order for Mexico to participate fully in the broader NAFTA market.

In the case of Turkey, globalization will have two implications. First, as Turkey attempts to coordinate its policies with the EU, distortions within Turkey’s transport sector will cause more and more harm to the Turkish economy. Second, of course, when Turkey actually links itself to the EU, then Turkish policy in the transport area, specifically rail, will have to match that of the EU.

Marketization means first the enormous transition from planning to market now underway in most of the formerly socialist economies. It is clear that market forces lead to a very different economic structure and that the market-driven structure has profound implications for the transport system. The Bank has followed this transition carefully.^v In summary, it appears that planned economies produced and consumed far larger amounts of basic products (coal, steel, cement, electric power, etc.) per unit of economic activity than their market-oriented counterparts. There was thus a much larger demand for low cost, bulk transport (i.e. rail) in the planned economies than in market economies. In addition, planned economies focused on transport cost, but never fully included total logistics costs in their transport decisions (again favoring rail over truck). Finally, the low ownership rates for private automobiles meant that public transport played a different and larger role in the planned economies.

The outcome of the transition in transport has been startling. Figures 1a and 1b, 2a and 2b and 3a and 3b show that rail freight has fallen dramatically in the CEE countries, the Commonwealth of Independent States (CIS) and the Baltic Republics, while remaining relatively stable in the Western

economies and Turkey. Though a part of the freight traffic loss is no doubt related to a reduction in general economic activity, much of the loss is a result of economic restructuring, and most of the lost traffic will return only slowly, if ever. Although passenger traffic has shown slightly different levels of change, the trend is the same and the eventual percentage reduction may be as large or even larger. In particular, when auto ownership rates increase, the shift from public to private transport that is so prevalent in market economies is likely to occur with a corresponding reduction in rail passenger traffic.

The process of replacing government command or regulation with market forces has not been confined to the formerly planned economies. “Deregulation” has become a force in most of the **market** economies as well. Even the market economies have discovered that government interference has a high price in the economic distortion that such intervention inevitably produces. The US railway system, for example, was nearly destroyed by perverse government regulation and promotional programs favoring trucks, automobiles and airlines, and the problem was only corrected by the air, rail and trucking deregulation of the early 1980s. EU governments have gradually undertaken a similar deregulation of transport as the common market has evolved.

The process of change is not uniform in all countries. The starting point for each country differs and the composition of each economy is unique. There is therefore no simple cookbook recipe for how the transport sector, and the railway, must change. With this in mind, there are a series of common issues and challenges which all railways face. Even though the weight and mixture of the issues may vary, most will need to be addressed as the country attempts to find the approach to rail change which best suits the country’s unique circumstance.

THE ISSUES OF CHANGE IN RAILWAYS

Railway change issues fall into three broad categories: 1) separating railway from government and adoption by each of a revised set of roles and responsibilities; 2) restructuring the railway to increase its market focus while retaining the government’s role in supply of public infrastructure and support of social services; and, 3) rethinking the boundary between public and private sectors in the delivery of rail services.

Separating Railway from Government

The most important cause of the railways “problem” has been the confusion of roles between government and railway. Governments agencies are always slow moving, risk averse and concerned about accountability, not results: they cannot readily take rapid or risky decisions, nor can they rapidly change policies or resource allocation decisions. By contrast, market enterprises must respond rapidly to competitive forces, and they can take risks. As a result, government ministries (and their railways) are severely handicapped when they try to compete with private trucks, airlines and autos.

Government control also means political interference. Politicians who appropriate money for public railways expect that the railway will accommodate their political needs, whether this entails suppressed tariffs, bloated labor forces, distorted investment decisions or (occasionally) even corruption in procurement. No enterprise manager can be held fully accountable in this environment.

Railway and government must therefore be separated. Governments must set broad transport sector plans and policies for ensuring that the appropriate infrastructure is in place and effectively operated. Governments must also establish regulatory policies to ensure that the market can determine the

services needed without undue monopoly power being exercised. Where there are truly “social” needs, such as affordable transport for students and the elderly, governments must identify the needs and pay explicitly to efficient providers. Table 1 shows that social services can be an important issue. When railways carry mostly passengers, and if the passenger tariffs are low compared to freight, the railway’s social burden is inevitably high and the need for explicit support is great.

Many governments are also re-examining the question of what **level** of government is best suited to make which transport decisions. The emerging consensus is that many of the traditionally national transport decisions (for example urban transport) can best be exercised at the local or regional level, which requires a corresponding transfer of power and resources. Finally, of course, governments have to bear much of the cost of transition for things such as excess debt, debilitated assets, surplus labor and environmental problems which are a result of imposed government “sins of the past.”

As the government role changes, railways are becoming enterprises established under commercial law in which the state merely owns the stock but does not attempt to exercise operating control or make day-to-day decisions. Though governments retain ultimate control over the use or disposition of infrastructure, the rail enterprise (at least in principle) functions like a privately owned corporation, making all normal operating and asset management decisions. From this point, the enterprise evolves as market needs dictate.

This is, at least, a good starting point. In practice, organizational change, by itself, is not enough because political and budgetary influence can be exercised almost as strongly informally as it can through direct government status. Separation helps in providing a clearer understanding of roles and responsibilities, but it is rarely enough.

Restructuring the Railway

There have been many government owned railways having explicit enterprise form (for example the old DB and BR) which continued to have severe problems in accommodating to the evolving transport market around them. Although the railways’ organization charts had roughly the right boxes and titles, the railways continued to be production driven and nationally oriented, primarily because the political process and politically developed budgeting isolated them from market forces. As customers gained more choices and became more sophisticated, and as competitors (especially trucks and automobiles) became more capable and aggressive, the railways continued to fall even further behind despite their nominal independence.

Examples of single nation responses to this issue can be found in the US, Canada and Japan. In these cases, the countries took their railways through a deep process of restructuring, regulatory reform and refinancing which worked. The railways of these three countries are in better condition (and pose less of a burden on the national treasury) than ever before.

A more interesting multi-national case can be found in the EU where the community needed to deal with a set of railways that were problems both within their national boundaries **and** even more so within the broader common market where all modes but railways had developed an inherently international perspective. The Commission believed that it was imperative that the railways’ national fortress mentality be broken so that the EU could eventually have international rail competition as effective as that of trucking. The Commission also intended to clarify the confusion between social and economic railway functions in order to encourage better decisions in transport (and in order to prevent countries from continuing to subsidize railways in the commercial sphere in the guise of subsidizing their social functions).^{vi}

The Commission took three far-reaching steps. The first required an “accounting” separation for infrastructure costs so that the public role of infrastructure planning and provision could be distinguished from the commercial operating functions. The second required that certain international operators be accorded non-discriminatory access to the infrastructure of the national railways. Finally, the Commission forbade payment of government subsidies to railways except for certain “social” services (local rail passenger services and certain infrastructure functions); this effectively requires line of business organizations in order to ensure that any subsidies paid go only to a permitted recipient.

The emerging, “European Model” has had a major impact on the way developing railways, especially CEE and CIS railways, look at themselves -- and on the way their governments view them. The idea of infrastructure “separation” is powerful because it furnishes a vehicle for dealing with the question of “unfair” support for highways in competition with railways. If governments subsidize trucks through insufficient collection of highway costs, then the government can support the rail infrastructure in a compensating way -- so long as it does not discriminate between national and international users in the process. In addition, infrastructure separation provides a way to reflect the value of the perceived environmental friendliness of rail. If governments (as in Sweden) believe that use of rail confers environmental benefits that cannot be internalized in market decisions, they may subsidize rail infrastructure costs accordingly.^{vii}

Infrastructure separation leads also to the realization that, once infrastructure costs are separated and appropriately supported by the public sector, the approach to provision of operating services can be fundamentally altered. If external costs and subsidy policy are reflected in infrastructure costs, there remains only a limited rationale for a public role in providing rail freight or intercity passenger services: in fact, the decisions can safely be left to the market as to which services should be supported^{viii}. Put another way, if the public role is adequately expressed in the planning, provision and support of rail infrastructure, what else does the public sector **have** to do?

A New Role for the Private Sector

The answer to the question is that, with adequate infrastructure properly the concern of the public sector(s), much of the responsibility for delivering transport **services** can eventually be shifted to the private sector. In fact, it is hard to argue that there is anything unique in the provision of transport services for which the public sector has an advantage over the private sector, especially in competition with private sector providers under similar conditions.

Faced with this conclusion, governments are increasing the role of the private sector in rail functions and service provision. The process begins with transfer of non-rail activities (manufacturing) to private sector providers. This is usually accompanied by transfer of explicitly welfare activities to public authorities (schools, hospitals, stores, etc.). In addition, the railway revises its policies as to “outsourcing” of services like equipment or track maintenance.

Next, responsibility for some rail services is transferred. In some cases, this has included outright sale of an operating function to the private sector (UK rail freight services and the entire New Zealand railway). In other cases, commercial rail services have been “concessioned” to the private sector with the infrastructure remaining in public hands (accompanied, in some cases, with retention of certain “social” operations in public hands). In fact, provision of “non-commercial” rail services, such as suburban, regional, or even metro passengers can also be concessioned or franchised to the private sector if the public authorities are willing to pay money **to**, rather than receive money **from**, the concessionaire or franchisee.^{ix} The net result of these decisions can be a hybrid outcome that has

some of the best of both worlds: the public sector manages policy formulation and economy-wide planning, the private sector exercises its strength in delivering services to customers.

It is important to emphasize that the actual balance between public and private may well rightly be different from country to country, nor does the shift from present to the eventual balance have to be done overnight. Turkey will have to strike its own balance based on its own circumstances and objectives -- bearing in mind that Turkey will always have to take into consideration the plans and action of neighboring countries. Equally important, I am not necessarily suggesting privatization or concessioning of TCDD at any time in the near future (though this may become an option in the mid-term). It is critical, though, in looking at TCDD's future, to understand how the railways and transport sectors around TCDD will be functioning.

Restructuring in Turkey

It seems fair to say, in looking at TCDD, that it is a reasonably representative case of a railway that faces a real challenge in making the transition from the traditional monolith to the future competitive railway. In addition, TCDD looks a lot like many of the EU railways as they face the changes mandated by the Commission. In looking at these kinds of problems elsewhere, the Bank's recommendations (and the EU's) usually contain many of the ingredients discussed above, including: clearer separation of TCDD's rail functions from government's policy and social functions; organization of TCDD along market-defined lines of business; TCDD to be a commercially driven organization supported by direct Government subsidy where social functions are imposed; and, TCDD, as a commercial organization, should be permitted and encouraged to be as efficient and competitive as its competitors. In addition, TCDD and the Government may also consider that a larger role should eventually be available for the private sector in the mid-term future as TCDD's role is clarified and strengthened. If TCDD wants to conform immediately to the EU approach, then TCDD should also consider separation of infrastructure, at least in an accounting sense.

Overall, I want to stress that, as the statistics and experience have shown, TCDD itself is already fairly well managed as a production railway: the challenge is to distinguish itself from Government and begin to operate commercially in the competitive transport market that will emerge more and more as the market-based policies of the Turkish Government and the EU are implemented. The issue is not to criticize the past, as that is easy to do. Our concern must be to plan for a future which will be quite different from what we have known and are comfortable with.

Financing the Transition

Transitions are costly because governments have to pay to fix problems that earlier policies created. As discussed, the old JNR had debts of over US\$ 250 billion which clearly could not be repaid by new rail operators. Many developing railways have heavy debt burdens which must be resolved if new management is to be able to concentrate on rail issues. Conrail in the US had infrastructure and operational problems so debilitating that US Government spent US\$ 8 billion to fix them even though this far exceeded the sale price of US\$ 2 billion. Commercially driven entities cannot afford to pay costs they did not generate and the only source of financing is government transitional assistance.

The most expensive problem of all can be redundant labor. Government railways typically have labor forces that have not adjusted adequately to changes in technology and traffic demand (TCDD suffers from this problem, though not as much as some comparable railways). In general this is because governments are more sensitive to labor unions in the political sphere than their railways are

responsive to cost pressures in the transport sector. The result is that, although some surplus labor might be hidden in the infrastructure sector (and appropriately paid in the public support -- which fiscal strains are making ever harder to do), commercialized operating enterprises are unable and unwilling to pay for more labor than they need, and governments must help in adjusting labor force size to that which the market will support. The good news is that measures have been developed in the US, Japan, Argentina and Brazil for changing labor force size: the bad news is that it can be expensive. In general, labor redundancy schemes have required payment of around one-month's wages for each year of service as well as reasonably generous provisions for retraining and/or early retirement.

ACTUAL EXPERIENCE

We all have a tendency to look ahead and be discouraged at how far there is to go. While this is natural, it is also fair to assess what has been accomplished. In fact, the picture is radically different from the Bank's perspective at the time of the "Railways Problem". By any reasonable measure, there has been real progress.

Separating Railway from Government

At least in legal form, many railways are now separated from their government agencies except in China, India and some of the CEE countries and the CIS. For example, there are **few** or **no** market economies remaining in which the railway is legally a government ministry, and the railway's status has already changed, or is changing, in many of the formerly planned economies (Hungary, for example, has now constituted its railway, MAV, as a joint stock company). The Ministry of Railways (MOR) of China is now examining how to carry out the separation although, to be fair, it will be difficult for the railway to take a course radically different or faster than the rest of the Chinese economy.

Although there is a distinction in legal form, there remain many countries in which government's informal interference is pervasive and railway independence is more real on paper than in practice. Many developing railways continue to deal with this problem and some, for example Poland, Morocco and Thailand, have secured agreement to allow the railway to function more or less commercially with government support for social (so called Public Service Obligation, or PSO) services.

Railway Restructuring

Where separation of railway from government has proceeded, there has been a great deal of ferment in railway structure. Most of the market oriented, developed railways have adopted one or the other forms of line of business organization in which there are profit centers below the top of the railway. In some cases, as in the old BR, this took the form of separation between several passenger businesses and freight. In others, such as Swedish State Railways, the current financial and institutional separation is between infrastructure (now called Banverket) and the operating railway (SJ). Polish National Railways (PKP) has announced a separation into infrastructure, passenger and freight business lines. DB AG is now implementing a separation involving an infrastructure company and separate freight and passenger companies. A number of other railways (Slovenia and many of the Scandanavian railways) have undertaken similar separations and others, such as MAV, are considering the approach.

It is still early to say with certainty how well infrastructure separation works, or where is it appropriate, especially when the question is to go beyond a mere **financial** separation (which is all that the Commission Order 91-440 requires) and adopt an actual **institutional** separation. Clearly separation does not offer a cost free panacea for railway ills. For one thing, infrastructure separation imposes significant costs in institutional complexity. Where the infrastructure remains in public hands while the operator is commercialized (SJ) or even privatized (Chile freight rail concessionaire), there is a risk of a lack of understanding or coordination between infrastructure maintenance versus dispatching and operating priorities. In all cases, separation implies a much more precise set of infrastructure pricing and access rules than have existed in the past. The possibility certainly exists that the costs of such complexity and reduced integration of operation and infrastructure can be significant. On the other hand, there is no clearer failure than many of the old line “monolithic” railways, so the costs of actual separation may well be more than compensated by clearer roles and increased market focus of the operating companies.

We can suggest at least a preliminary indicator of where infrastructure separation might be worthwhile. Where the railway is lightly used (see Figure 4 for a display of average traffic density among railways), only financial separation may be useful (and not even that if the railway is a single commodity railway). As traffic density increases, and especially as traffic types become more diverse (see Table 1), the potential benefits (and costs) of institutional separation begin to increase. Other factors that might tip the balance toward separation include a desire to create or increase rail versus rail competition (as is the case in the EU Commission’s policy or as in the UK), or a desire to facilitate private sector involvement in rail service provision (the UK, Germany and Italy, and many developing countries now adopting rail concessioning).

Increased Private Sector Involvement

Probably the most startling railway change in recent years has been the rapid growth in transferring the operation of some railway services to the private sector -- a change which no seasoned observer would have dared to predict at the beginning of the 1990s. Five of the six freight railways of Argentina have been in concessioned operation for several years. The concessioned railways have seen a rapid growth of traffic back toward levels of years ago. More startling, the suburban railways and the Metro of Buenos Aires have also been concessioned on the basis of minimum government payment (“negative concession”) with results in traffic growth and improved service that are even greater than in the freight area. In the process, the old Argentine rail losses of about US\$ 800 million per year have been converted into a US\$100 million capital outlay for the suburban services and the Metro, a result which, in percentage terms, is fully the equal of the JNR restructuring and privatization.

Six Brazilian national freight railway concessions have been sold. The total sale value of the Brazilian concessions was over US\$ 1.4 billion whereas the old national railway (RFFSA) was losing about US\$ 500 million per year, so the positive impact on the national budget was substantial. Only the railway of Sao Paulo state (FEPASA) remains in government hands and its concessioning is under discussion. The Government of Rio de Janeiro State is now concessioning the Rio suburban passenger services (Flumitrens) and the Metro as was done in Buenos Aires.

The railway of Bolivia was concessioned in November of 1995. The broad gauge freight railway of the Chilean State Railway has been concessioned for over two years, and the meter gauge railway (Feronor) was recently concessioned as well. Chile is now in the process of concessioning its railway infrastructure as well as three passenger operating companies. Mexico has recently completed the sale (for US\$ 2 billion!) of the first two of its planned four rail concessions, and the

others should follow in the coming months. Colombia, Guatemala and Peru have announced plans to concession their railways. In fact, within a very few years, there may not be **any** significant railways in Latin America (Cuba excepted) remaining in public operation, including freight **and** passenger operations.

The concessioning process is not confined to Latin America. The railway of Cote d'Ivoire and Burkina Faso has been in concessioned operation for one and one half years, with traffic results similar to Argentina. The Governments of Gabon, Cameroun, Zambia, Malawi and Senegal/Mali (international operations only) have also agreed to concessioned operations. In addition, Jordan is in the process of concessioning the Aqaba railway, and a number of CEE and Baltic countries have announced their intention to initiate operations by private operators over the publicly owned infrastructure. Table 2 contains a table of actual and potential rail concessions showing how they compare in several measures of size and effectiveness. Perhaps most important in looking at TCDD's future, many EU countries have opened the door to various types of private sector train operation over the public infrastructure. Of these, the case of DB may be the most interesting because, if DB successfully privatizes its freight operations, there will be no remaining question as to the feasibility of such a joint public/private partnership on a high density railway. Based on comparisons with Argentina, Figure 5 shows that many of the other potential concessions seem promising.

The World Bank's Role

The Bank has consistently supported the need to **separate railway roles from government** and has argued that all railways need to work with their governments to clarify the government's expectations for the railway.^x Early attempts to develop Strategic Plans for railway restructuring (Poland, Argentina, Hungary, Morocco, Tanzania, Mexico, Thailand, to name a few) were all supported under Bank lending. More recently, the Bank has been working in China and India to encourage assessment of restructuring options.

These efforts have met with mixed success. While Strategic Plans and their related Performance Agreements (or Contract Plans) have been helpful in helping railways and government to discuss common issues, they have often been threatened by the answers and, in many cases, action has been deferred or avoided. While such planning and role clarification is a necessary condition for change, it is evidently not a sufficient condition.

The Bank has also been active in financing plans for **restructuring** railways. The Polish initiative has some of its roots in Bank financed studies and its implementation will potentially be assisted by future lending. The Bank has also been involved in financing similar studies of restructuring in several CEE countries, notably Hungary, Romania and Bulgaria, though the implementation of these programs is not yet committed. The success of restructuring appears directly related to the government's perception as to the seriousness of its railway finances and the need for an efficient transport sector. Where the railway deficit is not seen as large, or where the importance of the railway in the transport sector is not great, restructuring can be difficult.

Bank support for **concessioning** has taken several forms, including financing of critical rehabilitation before concessioning, identification and cleanup of environmental problems, labor redundancy and retraining programs, and consulting assistance needed to prepare concessioning plans and market the concessions. In addition, the Bank's private sector group, the International Finance Corporation (IFC) has taken a role in several of the concessions. The Bank has vigorously supported railway concessioning in the belief that, at least in many developing countries where scarce public skills and

resources are needed elsewhere, commercial railway functions can best be operated by the private sector. This has not implied “privatization” in the US, Canadian, UK or New Zealand sense in which the ownership of rail infrastructure was actually transferred to the private sector; rather it implies a better division of public versus private roles. The results are encouraging so far.

CONCLUSION

There is no more difficult area in public reform than getting state owned railways to adapt to an environment in which public resources are increasingly restricted and in which the market, not the government, makes the most decisions. It is a problem with which the governments of the US, UK, France, Germany and Japan (to name a few) struggled for many years without notable success. That which was difficult for the open, market economies was even harder for developing country governments. It would have been easy to give up, and many involved parties did so.

In recent years, though, the awareness has grown that the cost of transport inefficiency can threaten the economy of a country, either through the macroeconomic burden of railway deficits or the imposed costs of uncompetitive transport. With change imperative, governments and the private sector have developed tools for railway reform and have applied them successfully. These tools are available to all, and they work under the right circumstances. The World Bank is ready to assist in Turkey with both financial and technical assistance and, in fact, we have a proven track record of doing so. Obviously, the future of TCDD is not going to be an easy thing to plan or manage and there will be problems on the way from today to a future compatible with Europe and EU practices: the Bank will assist in this transition if we can do so.

ⁱ This paper has been adapted from a paper published in “Japan Railway and Transport Review,” June, 1997

ⁱⁱ see, for example, Tanahashi, Yasushi. 1992. “Reform of Railways in Japan.” Discussion Paper INU 99. World Bank, Infrastructure and Urban Development Department. Washington, DC and Fukui, Koichiro. 1992. “Japanese National Railways Privatization Study: The Experience of Japan and Lessons for Developing Countries.” World Bank Discussion Paper 172. Washington, DC. See also, Commission of the European Communities. 1996. “White Paper: A Strategy for revitalizing the Community’s Railways. Brussels.

ⁱⁱⁱ a number of these cases are documented in Kopicki, Ron and Louis S. Thompson. 1995. “Best Methods of Railway Restructuring and Privatization.” The World Bank, CFS Discussion Paper Series Number 111.

^{iv} see Galenson, Alice C and Louis S. Thompson. 1994. “The Evolution of the World Bank’s Railway Lending.” World Bank, World Bank Discussion paper No. 269.

^v see, for example, Bennathan, Esra, Julia Fraser and Louis S. Thompson. 1992. “What Determines demand for Freight Transport?” Policy, Research and External Affairs Working Paper Series 998. World Bank, Infrastructure and Urban Development Department, Washington, DC. Blackshaw, Philip W. and Louis S. Thompson, “Railway Reform in the Central and Eastern European Economies.” Policy, Research and External Affairs Working paper 1137. World Bank, Washington, DC. See also Thompson, Louis S. and Julia M. Fraser. 1996. “Command Legacy Will take time to Overcome.” Rail Business Report 1996. Railway Gazette International. London

^{vi} see European Commission Orders 91-440 and 95/18 and 95/19. See also Commission White Paper on Transport Policy.

^{vii} Rail’s environmental benefits are subject to definition and qualification. See, for example, Commission of the European Communities. 1995. “Towards Fair and Efficient Pricing in Transport: Green Paper.” Brussels, 20.12.95

^{viii} Urban and regional transport remain exceptions to this conclusion, of course. It is explicitly provided in Commission Decisions (and economic logic) that there can be external costs and benefits associated with urban and certain types of rural passenger travel that cannot adequately be included in infrastructure payments. This said, it is usually a good idea to make sure that urban or rural authorities value the external costs and benefits highly enough that they are willing to pay at least a share of the support needed.

^{ix} the words “concession,” “franchise” and “management contract” can be difficult to distinguish. In general, a rail concession is longer in term (at least 10 years, and more normally 20 years or longer) than a franchise (5 to 7 years) or a management contract (5 years or less). In addition, concessions tend to leave more commercial risk in the hands of the concessionaire, whereas governments take more risk in franchising arrangements. Governments take essentially all risks in management contracts, and they make most decisions. This said, these are imprecise terms and they are often used interchangeably. See, Shaw, L. Nicola, Kenneth M. Gwilliam and Louis S. Thompson. 1996. “Concessions in Transport.” World Bank, TWU Papers. TWU 27. Washington, DC.

^x see, for example, Huff, Lee W. And Louis S. Thompson. 1990. “Techniques for Railway Restructuring.” Policy, Research and External Affairs Working Paper Series No. 380. World Bank, Infrastructure and Urban Development Department. Washington, DC.