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The evolution of the State’s role in the regulation of land transport

Ian Thomson

Transport Unit,
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For nearly twenty years, the land transport sector of various Latin American countries has been undergoing highly significant institutional changes, both through the participation of the private sector and through the easing of economic regulations, giving rise to new needs for regulation of the market in general and the operating units in particular. The most important changes have taken place in rail and bus transport and in the road transport infrastructure. In the region, these changes took place first of all in Chile and reversed the previous predominance of State intervention associated with a development model which had begun to run out of steam. After a privatization process, the private enterprise which has won the concession for a railway or highway can exert various powers that militate against competition, not only by unjustifiably discriminating between the users of its services but also by discouraging economic production or diverting transport to another medium which has a higher real cost. It is therefore desirable that concession contracts should restrict the possibility that the concessionaire can take advantage of these powers for his own benefit against the interests of the community, while at the same time the contracts should maintain the incentives for him to improve his efficiency. The deregulation of a market can lead to a position where a dominant operator or group of operators may use his influence or financial capacity to eliminate the competition, which is something that the anti-monopoly legislation should be able to prevent. Sometimes, however, this legislation needs to be strengthened, for example by giving it the possibility of taking punitive or dissuasive measures against offenders. Furthermore, in the public transport systems of big cities deregulation can lead to unnecessary social costs, such as externalities connected with congestion or air pollution. In this case, awarding the corresponding concessions by public tender could be the best solution. Short-term concessions favour the competitiveness of the market, but longer-term concessions encourage the concessionaires to make investments in the activity. An optimum system of concessions could perhaps involve the concept of leasing the fixed installations and rolling stock or vehicles with a long service life.
I

Land transport in Latin America
over the last twenty years

1. The private sector takes the driver’s seat in rail transport

A notable change took place between the late 1970s and the late 1990s in the institutional framework of Latin American land transport, especially as regards the distribution of operations between the public and private sectors. In the case of rail transport (table 1), it is likely that by the end of the century the State sector will continue to be responsible for running trains only in countries like Paraguay, Uruguay and Venezuela, where rail transport is of little importance. In the rest of the region, the permanent way will continue to belong to the State, but the actual railway operations will be in the hands of private concessionaires. There are already two countries in the world where all the main line trains are run by private enterprises, and one of them is in South America (Bolivia).1 Even in countries like Brazil, which have traditionally favoured State intervention in transport operations, the railways have been transferred to concessionaires.

Twenty years ago, it was usual for the Latin American countries to have heavily subsidized State-owned railways whose business objectives were not usually very clearly specified and were interpreted in such a way as to favour social welfare at the expense of business profits, so that sometimes there was not even any intention of fixing scales of charges that came anywhere near the cost of operating the services.

Thus, for example, the freight rates of the State-owned Ferrocarriles Argentinos were defined as a function of the “economic capacity of the users” or the “value of the goods transported” (Argentina, Ministry of the Economy and Public Works and Services, 1977). In many countries in the world, including a number of Latin American ones, the use of such criteria in fixing rail freight rates contributed to the financial difficulties and loss of market share of the railways. To make up for this, Ferrocarriles Argentinos were favoured with a number of privileges such as exemption from import duties and heavy subsidies (amounting to US$210 million in 1977), which gave little incentive for their efficient administration.

2. Nationalizing road transport was never a logical step, and regulating such transport was a very complicated matter

The railways competed with a road transport sector which was effectively deregulated in economic as-

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1 The other is the United Kingdom.
pects, but at least in the case of Argentina, this situation was not due to the conviction that it was necessary but rather to the difficulty of putting regulation into practice (Argentina, Ministry of the Economy and Public Works and Services, 1977, pp. 46 and 171). Law No. 12.346 provided for the regulation and control of road cargo transport, but it was not feasible to apply the corresponding articles, while in other countries attempts were made to regulate road transport charges, but this always proved to be impossible.

Cases of the State operation of road transport services in market economies are extremely rare. Mainly for ideological reasons, State trucking firms were set up in the United Kingdom in the late 1940s and in Bolivia in the mid-1980s, but without the slightest economic justification and without any pretence that the existing firms were in danger of bankruptcy and thus warranted a government rescue operation.

Thus, the institutional changes which have taken place in land transport in the last twenty years have had very little effect on the road transport sector, which was already privately operated and largely deregulated, except with regard to international road transport.

3. Private enterprise runs urban transport too

As regards urban bus services in capital cities and other important centres, in the period between 1977 and 1997 only Quito went against the general trend towards the replacement of public services with private ones. In Mexico City, the service was nationalized and then returned to the private sector. Twenty years ago, a large part of the bus services in major cities such as Arequipa, Brasilia, Rio de Janeiro, São Paulo, Recife, Lima, Mendoza and Caracas were provided by publicly owned enterprises, usually municipal, but sometimes provincial or national.

### Table 2

| Latin America (selected cities): Private, municipal or federal/national ownership of bus companies, 1977 and 1997 |
|----------------------|-----------|-----------|-----------|-----------|
| Buenos Aires         | P         | -         | P         | -         |
| La Paz               | P         | -         | P         | -         |
| São Paulo            | P         | M         | P         | -         |
| Santaef de Bogotá    | P         | F/M       | P         | -         |
| Quito                | P         | -         | P         | M         |
| Mexico City          | P         | F/M       | P         | F/M       |
| Asunción             | P         | -         | P         | -         |
| Lima                 | P         | F         | P         | -         |
| Montevideo           | P         | -         | P         | -         |
| Caracas              | P         | M         | P         | F         |

Source: Prepared by the author on the basis of information collected from interviews with public authorities and private entrepreneurs and various seminars or meetings organized by ECLAC, the Technical Committee of the Latin American Public and Urban Transport Congresses and national bodies.

*P = private ownership.

M = municipal ownership.

F = federal or national ownership. In the cases of Santaef de Bogotá and Mexico City, the public-sector bus companies belong to the districts in question, which come under the national government.

All the companies were privatized by the end of the year.

4. The State never played a significant role in inter-urban bus transport

On the other hand, there have been few cases of participation of public enterprises in non-urban bus transport. Only in Cuba has the State played a major role in this type of transport. Although there has not been a change of ownership in inter-urban bus transport, however, there have been fundamental changes in terms of regulation in some countries.

It should be noted that in 1977 governments did participate in inter-urban passenger transport by rail and air. Many of the national airlines, such as Aeroperú, Lan Chile, Lloyd Aéreo Boliviano, VASP, VIASA, etc., belonged to national or provincial governments, but now they are all in private hands (leaving aside the case of the airline Iberia, belonging to the Spanish Government, which still has a share in one of them), and the State railways of almost all the countries of the region offered inter-urban passenger services. In 1997, however, except in a very few cases (Southern Chile, Cuzco-Cañarilca and the Province of Buenos Aires) these trains no longer operated, or else were of little or no significance. The managements of privatized railways have shown very

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2 In this article, "deregulation" is used to refer to the elimination of all almost controls on economic matters connected with the supply of a service (scales of charges, frequencies, entry into or exit from the area of activity, etc.). In some cases, the regulation of a deregulated market appears to be in order, meaning basically the ordering of the market through the planning of the services provided, while maintaining elements of competition among the operators, which would determine the economic characteristics of their services within a regulatory framework laid down by the authorities.
little enthusiasm for operating passenger trains, except in the case of the Ferrocarril Oriente in Bolivia.

5. Governments intervened in inter-urban and urban bus transport through regulation

In 1977, private passenger transport companies, both urban and inter-urban, were subject to heavy State regulation; their fares were approved by the corresponding ministries and their carrying capacity and/or journey frequencies were controlled by the authorities. Especially outside urban areas, these companies basically played the part of contractors, i.e., of operators of services which were defined by the authorities, and they had little incentive to improve the quality of the services offered or take initiatives in their marketing. An observer of that time commented that the regulations in force impeded the entry of new entrepreneurs, inhibited competition, generated few incentives to improve the service, and worked against the efficient use of the few resources available in the sector (González Narváez, 1992).

In some countries—Brazil, for example—the regulations are still frozen in the conditions of twenty years ago. As recently as 1990, with reference to inter-urban bus transport in Brazil, ECLAC noted that "at least since 1945, no company had lost its license" to operate a line (ECLAC, 1991). Since 1990, the Brazilian government has made proposals for deregulation, but has always run into the determined resistance of monopolistic enterprises—usually only one for each route—and so far has always had to give way.

6. Traditional regulation and its problems

Generally speaking, State-owned enterprises have regulated themselves in accordance with the provisions regarding safety, technical conditions, scales of charges, etc., laid down in the legislative instruments which set them up. Sometimes, this has placed them at a disadvantage compared with private enterprises operating in the same sector which have not been obliged to comply with the same rules or which failed to comply with them because the controls or checks were not strict enough (Argentina, Ministry of the Economy and Public Works and Services, 1972, p. 176).

Private bus companies were subject to a number of regulations concerning not only technical matters or safety, but also the economic environment. An implicit or explicit concern in those regulations was the fear that the natural action of the market could leave some market segments without service or with services of unacceptable quality. Especially in the case of passenger transport, in order to try to ensure the continued supply of suitable services governments granted concessions or permits which usually remained in the hands of the same firms almost for ever. Subsequently, in order to protect users from the monopoly powers created in this way, the authorities subjected the operating companies to a variety of rules on scales of charges, frequencies, transfer of vehicles to other services, etc.

In the particular case of inter-urban passenger transport, the application of restrictions on the number of operators and the frequency of journeys on the various routes meant that at times of peak demand the factors of occupation rose to the maximum feasible levels and many potential passengers were simply unable to travel, except perhaps by resorting to the black market (ECLAC, 1991).

When different levels of government imposed their own rules and regulations, this led to inconsistencies: for example, sometimes there was a difference between the fares charged by services belonging to the national government and similar services run by the regional authorities. Efforts to solve these inconsistencies led to the application of similarly inconsistent measures, such as prohibiting services coming under federal jurisdiction from transporting passengers from one point to another in a province, even though their routes through the province included stops at both the points in question.

It has been noted that there was a tendency to fix fares at relatively low levels, especially in urban transport, in order to reduce the travel costs of the lower-income sectors and/or keep down inflation (ECLAC, 1992). In addition to the legal uncertainty surrounding many operations, this brought with it various unfortunate consequences, such as reluctance to renew bus fleets and overloading of the buses in service (Thomson, 1994). The result was a service with low fares but also of low quality. This situation also fostered a climate of dishonesty between the supervisory authorities and the private enterprises. In one case at least (in Rio de Janeiro), some bus firms submitted false data to the authorities on the volumes of passengers transported, in order to secure permission to charge higher fares.

In some important cases, subsidies were granted not only to public-sector enterprises, thereby encour-
aging their inefficiency, but also to private firms, which sometimes led to the waste of resources because the firms took advantage of the situation for their own benefit (ECLAC, 1992). A study on the developed countries concluded that out of every dollar or equivalent spent on subsidizing urban collective transport, only 60 cents went to the benefit of users, while some 40 cents of the subsidy was lost through the payment of unjustifiably higher wages, over-staffing, etc. (Bly, Webster and Pounds, 1980). In the mid-1980s, the annual deficit of the public passenger transport companies in Mexico City and São Paulo came to over US$ 150 million in each case (ECLAC, 1992).

7. A situation crying out for reforms

The institutional situation of land transport had reached a stage where fundamental changes were called for and have in fact already been carried out or begun in such countries as Argentina, Bolivia, Chile, Mexico and Peru. In other countries the reforms are still to be embarked upon, having been delayed in some cases by the obstacles raised by vested interests favoured by the current regulations, such as bus companies which operate lines where the concessionaires never seem to have to open their activities up to competition. In the developed countries, land transport regulation was not radically different from Latin America, but it worked better because the markets were relatively stable, the bureaucracies were more efficient, and also, as far as passenger transport was concerned, public transport was less important compared with that operated by the private sector.

Reforms have been adopted in different countries, with very little connection between each other. Among the developed countries, special mention may be made of the innovations made in the United States and the United Kingdom. Interesting changes have also been made in New Zealand. In Latin America, Chile occupies a leading position in this respect. A great deal can be learned from all these experiences.

II

The rise and fall of State intervention

1. The rise of State intervention

Long before the Second World War, all over the world there was a tendency (in all but a few countries) towards growing State participation in the transport sector, either as an operator or as the regulator of the activities of firms operating in the sector. The State’s participation as an operator was initially motivated, in most cases, by the insolvency of railway, tramway or other enterprises due to such factors as: i) technological changes in motor transport and highways; ii) the rise in income levels (which encouraged the acquisition of private vehicles and reduced the demand for collective transport), and iii) the greater dispersion of land use patterns (which reduced the competitiveness of the traditional means of transport, which were obliged to run on permanent tracks). Moreover, in some countries such as Argentina or the United Kingdom State operation was the result of political ideologies.

Normally, State regulation precedes State operation, beginning, in the case of mechanized land transport, with the railways and tramways. In the case of the tramway companies, there was a clear need for regulation in the field of safety, because they share the use of public roads with other vehicles and pedestrians. As far back as the past century, however, some municipal authorities which were concerned about the monopoly status of the transport companies—as in the cases of Bogotá or Buenos Aires, for example—subjected them to controls on their scales of charges or other measures designed to guarantee the quality of the service provided to users (Jaramillo and Parías, 1995; Scobie, 1977). In later years, excessively rigid control over their charges was a very significant factor in giving rise to the nationalization or municipalization of the tramway companies (ECLAC, 1994).

2. The railways were regulated at an early date

The arrival of the railways significantly improved people’s access to their desired destinations and considerably reduced the cost of transporting goods. Although the railway companies charged monopolistic
rates, the cost of rail transport was still below the levels of the previous means of transport, so that to begin with regulation was not aimed at economic aspects. Later, people began to forget what the world had been like before the arrival of the railway companies and they began to become aware that those companies sometimes acted in a monopolistic or discriminatory manner, which led to the application of economic regulations. This took place at the national level in the United States in 1887, with the establishment of the Interstate Transportation Commission, whose powers were extended in 1935 to the road transport of passengers and goods, partly because of the influence of the railway companies, which exerted pressure to make sure that road transport did not enjoy greater trading freedom than they did. In the United Kingdom, Parliament had begun to take an interest in regulating the railways much earlier, in 1835, and by 1940 the railways were probably the most highly regulated economic activity in that country (Dyos and Aldcroft, 1969).

3. How deregulation took place in the United States

Only in the last quarter of the twentieth century has a serious effort been made to deregulate the transport sector in the United States, through Acts such as the 1976 Act to revitalize the railways and reform the regulations affecting them, inter alia through the more flexible fixing of freight rates, and the 1978 Act on the deregulation of air transport, which set in motion a programme to liberalize air fares and entry into the industry. Later, in 1980, the well-known Staggers Act gave the railway companies greater freedom of action and the Act to reform the motor transport sector somewhat eased the rules on the fixing of charges and entry into the road freight transport industry. Four years later, the Act reforming the regulations on bus transport did the same for inter-urban bus transport (Transportation Quarterly, 1985).

Button (1990) classifies the United States regulations in three categories: i) economic regulations (on scales of charges, levels of production, number of producers, etc.); ii) social regulations (on safety, consumer protection, etc.), and iii) anti-monopoly regulations. He considers that strictly speaking deregulation has only concerned the first of these categories, although there have also been some re-interpretations in the third category which have resulted in partial de facto deregulation (it may be noted that Button’s system of classification is rather unusual, and in fact each of the three categories includes matters often considered to belong to the economic sphere).

The arguments put forward by economists, who had worked out the high costs involved in regulation, were an important motive for deregulation. In some cases it was possible to compare a deregulated activity—such as civil aviation in some large states—with the same activity subject to regulation. It was also suggested that regulation tended to benefit established companies or the regulators themselves (Button, 1990). The theory of “contestable markets” held that free access to a market could cause a dominant supplier to act as though he was really facing competition, even though such competition was potential rather than real. Another factor that also prompted serious consideration of the possibility of deregulation was the lower dynamism of the economy at the time and the suggestions that growth would be promoted by an economy in which there were greater incentives. The advocates of deregulation were able to point to the fact that previous cases where there had been deregulation (such as that of road transport in Britain and various subsectors in some states of the United States) had generally been successful.

4. Deregulation and privatization in Britain

In the United Kingdom, deregulation of the transport sector took longer than in the United States, although there was a marked increase in the actions taken in this area under the Conservative governments in power between 1980 and 1996. In Great Britain, the process also involved the denationalization of urban and inter-urban bus services and the railway system (as well as the ports and civil aviation). In United States, the railway system was never in State hands (except for a short time during the rescue operation for the Penn Central Railroad) and neither were the inter-urban buses, although the urban bus services continue to belong to the government sector in many cases.

Road freight transport in Britain had already been fairly extensively deregulated in 1968 by a Socialist government, but the first decisive step towards

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3 Button mentions that one consequence of deregulation of civil aviation was the lowering of fares on main routes but their increase on lower-volume routes where there was no competition. In other words, in practice the full validity of the theory of contestable markets still remains to be seen in some cases.
general deregulation was only taken in 1980, with the adoption of an Act which liberalized non-urban bus transport and promoted the privatization of the public operating companies in that field. In the mid-1980s, comparable measures were taken with respect to urban bus transport outside London. In London, the bus companies were privatized, but rather than liberalizing supply, a regulated scheme was introduced which included the award of bus routes by tender. As far as land transport is concerned, the process was completed with the privatization of the railways between 1994 and 1997.

The Labour government which took office in the latter year has not shown any interest in re-nationalizing the railway system, although it does aim to strengthen the regulation of the companies in that field or to use the threat of greater regulation as a means of promoting greater concern with the quality of the services offered to the public or an increase in investments (box 1). Nor does it envisage re-nationalizing the bus sector, although it does aim to regulate the services operated.

**Box 1**

**THE THREAT OF GREATER REGULATION AS AN INCENTIVE FOR MORE COMPETITIVE BEHAVIOUR BY EXISTING COMPANIES IN MONOPOLY MARKETS**

The theory of contestable markets was developed and applied in the context of the possible entry of new competitors as an incentive for more competitive behaviour by existing companies with monopoly powers. The same behaviour can be induced, however, by the threat of greater regulation. Cases of the latter type of reaction include the fares policy of the North Eastern Railway in England last century, the reduction in fares (after an increase which the Minister for the sector considered to be unjustified) decided upon by the association of urban bus operators in Santiago, Chile, in the early 1980s, and the investment policies of some of the recently privatized British railway companies when the Labour government took office in mid-1997.

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4 Initially, it was also intended to deregulate bus transport in London. Subsequently, however, there was an exchange of views and reports on this matter between the Managing Director of the State-owned London Transport company and the ECLAC Transport Unit, which recommended that bus transport in big cities like London should not be deregulated. It is not known up to what point the ECLAC recommendations influenced this change in policy.

5. **Not much is happening in this respect in other developed countries**

In other European countries there seems to be a certain lack of interest in the logic behind the British deregulation and privatization processes, although these generally seem to have been successful. On the European continent, greater importance is attached to such matters as the integration of the transport system, and it is considered that the global objectives of the State in the field of transport can be achieved more effectively if it is the State itself which operates the system. With regard to ports, whereas in the United Kingdom the financial results are taken as the framework for analysis, on the other side of the Channel greater attention is given to their contribution to the development of the areas in which they are located. In the Continental European countries, the changes which have taken place are due mainly to decisions taken at a higher level, that is to say, at the level of the European Union rather than that of the governments of each country. There is a great deal of discussion of the British and United States experience, but it has not influenced the policies of other developed countries very much.

A notable exception is New Zealand, where the privatization and deregulation process displays many similarities with Great Britain. Indeed, the same private enterprises have even acquired concessions in both countries in some cases: the United States company Wisconsin Central in rail freight transport, for example, and the British firm Stagecoach in the field of urban bus services.

6. **In Latin America, deregulation began in Chile**

In the mid-1970s, a thorough-going reform of the economy was carried out in Chile which included quite comprehensive liberalization of economic activities, including transport. Road freight transport was deregulated first, in 1975, through the application of an anti-monopoly law (the previous government had controlled not only entry into this area of activity and the value of freight charges, but even the importation of trucks, granting a virtual monopoly to a Spanish make of truck). Later, between 1977 and 1979, the entry into and exit from inter-urban bus transport was liberalized, together with the fares charged. Subsequently, through a process which was only completed in 1987, the same was done in the case of urban bus transport (ECLAC, 1987).
The promoters of this Chilean deregulation process were not, generally speaking, transport engineers or professionals but general economists of the Chicago school who usually tend to lump together many different sectors of the economy. On one occasion, the Minister of Transport and Telecommunications (a Chilean Air Force General), tried to keep in being some quantitative regulations on the fleet of buses operating in Santiago, but the opposing opinion of the Minister of Finance (an engineer who shared the neo-liberal economic ideas of the Chicago school) prevailed (Thomson, 1992).

It should be noted that, as part of the deregulation process in Chile, serious attempts were made to maximize the efficiency of the market through, for example, various measures designed to give bus users the necessary information for making a rational choice between the different services offered, to defend users' rights, and to promote responsible conduct by the operating companies (through heavy fines for the loss of baggage on inter-urban buses, consideration of bus tickets as a legal contract between the entrepreneur and the passenger, etc.).

The Chilean experience in deregulating transport was quite heavily criticized in other countries of the region, rightly in some cases and wrongly in others (the fact that the reforms were introduced under a military government doubtless increased the amount of criticism). In freight transport, the Chilean reforms did not result in a set of institutions very different from those in other countries of the region, but in inter-urban passenger transport for a number of years there were no other countries in the region which had policies anything like those adopted by Chile or a comparable situation. Although criticized abroad, especially by entrepreneurs in countries where they were still benefited by the existing regulations, there is little doubt that the new Chilean policy was generally speaking a success, leading to highly competitive and efficient services. The bus companies make a profit and the users can choose between different qualities of service (mostly very good), at fares which also vary but are generally below those charged in other countries analysed by ECLAC in the early years of the present decade (ECLAC, 1991).

It may also be considered that deregulation has likewise been a success in almost all Chilean cities, although in the biggest urban centres, especially Santiago, it led to a number of problems connected with levels of fares, congestion and air pollution. On the positive side, the coverage of the services has notably improved. The reasons why deregulation has not been so successful in the larger cities have been analysed by ECLAC elsewhere (see, for example, Thomson, 1993). Although in the 1990s the government introduced regulations in Santiago which are considerably different from those existing fifteen years earlier, it is significant that no major changes have been made in the economic rules governing inter-urban passenger transport or urban transport in other cities.

7. Deregulation has crossed frontiers, but not many of them

The only other country which has adopted a deregulation scheme as comprehensive as that of Chile is Peru, where in fact the measures were of even greater scope, since authorization was given for the importation of used vehicles, many of which, brought from Asian countries, were acquired by small entrepreneurs and placed in service in Lima or other cities. Moreover, the use for purposes of collective transport of vehicles half way in size between a private car and a small bus, which is prohibited in Chile, is not subject to any such restrictions in Peru, where there has been a proliferation of such vehicles, known as Combís (after the passenger van made by Volkswagon).

Legislative Decree No. 640 of 25 June 1991, which eliminated "all administrative and legal obstacles impeding the free access of new concessionaires" was applied to inter-urban transport, but on some routes insufficient checks on the mechanical condition of the vehicles or shortcomings in the safety regulations led in 1997 to the decision to temporarily freeze the number of vehicles. Later in the same year, a draft Supreme Decree included among its preambular paragraphs the statement that "inter-provincial bus passenger transport is in a state of emergency" because of the high indices of accidents and other factors (CIDATT, 1997). The new draft proposes the restoration of a system of concessions.

In Lima, the individual municipalities grant concessions for the operation of bus services, but not with any intention of limiting the number of vehicles. In any case, many vehicles operate without the corresponding concession. It is estimated that in mid-1997 some 55,000 collective transport vehicles were operating in Metropolitan Lima. There is already a great deal of interest at both the metropolitan and municipal level in the possibility of reordering and rationalizing the network of collective transport routes.
TABLE 3
Argentina: Some indicators of inter-urban bus transport before and after deregulation of the services, 1990-1995

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of companies</th>
<th>Number of buses in service</th>
<th>Average age of fleet</th>
<th>Coefficient of occupation</th>
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<tr>
<td>1990</td>
<td>152</td>
<td>2,597</td>
<td>5.8</td>
<td>n.d.</td>
</tr>
<tr>
<td>1991</td>
<td>158</td>
<td>2,597</td>
<td>5.6</td>
<td>0.70</td>
</tr>
<tr>
<td>1992</td>
<td>150</td>
<td>2,844</td>
<td>5.3</td>
<td>0.62</td>
</tr>
<tr>
<td>1993</td>
<td>164</td>
<td>2,934</td>
<td>5.1</td>
<td>0.54</td>
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<tr>
<td>1994</td>
<td>165</td>
<td>3,278</td>
<td>4.4</td>
<td>0.50</td>
</tr>
<tr>
<td>1995</td>
<td>171</td>
<td>3,695</td>
<td>4.2</td>
<td>0.38</td>
</tr>
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Only a marginal increase in the number of companies was possible, because of the features of the type of deregulation adopted.

In Argentina, inter-provincial bus transport was deregulated in 1992, with results which were not evaluated in a general manner until late 1997. The operating companies complain of low profits, but users may well be satisfied with the new situation. As often happens when a bus transport service is deregulated, supply has increased more than demand, and coefficients of seat occupation have gone down (table 3). As long as the situation thus created does not lead to severe imbalances, it will doubtless be preferred by users to the previous situation.

This state of affairs can only last if operating costs have gone down since the application of the regulations, thus allowing the companies to obtain adequate profits at lower rates of occupation than before, or if the previous profits had been excessively high. In Argentina, there have still not been any important changes in terms of regulation of urban collective transport, regardless of whether it comes under federal, provincial or municipal jurisdiction.

In Bolivia, inter-urban bus transport has been deregulated and there has been a significant easing of the regulations regarding urban transport. In Latin America, as in Europe, however, cases of deregulation are still the exception rather than the rule. Chileans sometimes style themselves “the Englishmen of Latin America”, and in view of the fact that the deregulation of transport in both Chile and Great Britain has aroused relative skepticism in many other Latin American countries and in Continental Europe, respectively, perhaps they are right.

8. Privatization is moving forward faster than deregulation

The progress made in many Latin American countries in the privatization of transport services has been more notable than in the case of deregulation. At the end of the twentieth century, the only national railway systems in the region which will still be in the hands of the State are likely to be those of countries where this means of transport is of little relative importance, such as Paraguay and Venezuela (leaving aside the special case of Cuba). The only urban or inter-urban buses that will remain in public hands are likely to be those of some Brazilian cities, some trolleybuses in Argentina and Ecuador, the Metrobus system in Caracas, and some municipal buses in Quito (once again leaving aside the special case of Cuba).
III

The economic regulation of transport in the present circumstances

It is increasingly frequent nowadays to meet with two situations in terms of transport: private enterprises resulting from the sale or concession of public enterprises which previously controlled a transport market (case A), and subsectors of the transport area where the regulations previously applied to private operators have been eliminated or are considered to be excessively restrictive and are on the point of being reformed (case B). The problems of regulation are not the same in both these cases.

1. Case A

a) Companies with some monopoly powers

In case A, the private enterprises thus formed are usually operating in a market where they have some monopoly powers. It is therefore desirable to adopt some specific legal instruments to ensure that they do not exploit those powers for their own benefit against the interests of the community. For example, the manipulation of its own freight rates could enable a railway company to internalize for itself an excessively high proportion of the surpluses of its captive clients. The same could occur in the case of a highway whose management is entrusted under a concession to a private company which is allowed to collect tolls.

Save in exceptional cases, the monopoly power of a transport company is far from being complete, because of the existence of other transport options which may be less attractive for the client (such as trucks, which are an alternative to trains, or alternative routes to a highway which has been granted in concession). Although trucks can also transport bulky products such as minerals, however, they would only do so at a higher cost, while alternative routes are rarely attractive options.

Perhaps the State does not always need to worry too much about the distribution of profits between, say, a railway company and a mining firm. High freight charges may adversely affect economic progress, however, and not merely influence the distribution of the fruits of that progress among the companies involved. Thus, for example, charging freight rates much higher than the marginal costs could discourage investments in new mines which would be made if the freight rates offered were more reasonable.

A monopolistic enterprise (the railway, in our example) might charge lower freight rates to new clients, which would give rise to accusations of discriminatory treatment, as well as discouraging new investments by its traditional client.

The latter company could solve its problem by obtaining the concession to operate the railway from the government in the corresponding tender process or obtaining it subsequently from whoever won the concession. If it did this, it would lower the freight rates it charged itself and raise them for its competitors, with the opposite results to those described in the previous paragraph.

At all events, charging high freight rates to maximize the income of the railway company could divert part of the traffic to the highways, with social costs which might be considerable in terms of i) an increase in traffic accidents, ii) damage to the road surface due to the high axle loads of the trucks, and iii) delays caused to the occupants of light vehicles stuck behind slow-moving trucks on the roads serving mining areas.

b) Regulation of companies enjoying some monopoly powers

In some cases, it would be desirable for governments to retain some rights to intervene in the freight rates charged, perhaps by ensuring that they maintain a reasonable relationship with the corresponding marginal costs, in order to ensure non-discriminatory treatment of clients and to keep the profitability of the railway company within reasonable limits.

5 It may be noted that a mining client may depend on a railway company for the transport of its products, or the opposite may be the case if mineral traffic is of prime importance for the railway. An interesting example of this is the Centromin mining complex in the Central Highlands of Peru and the Ferrocarril Central, both of which are State enterprises in the course of privatization.
In case A, the general, anti-monopoly and other legal regulations are not sufficient, among other reasons because of the confidential nature of commercial contracts (one client cannot know how much another is being charged). In concession contracts it is necessary to ensure that the monopoly enterprise does not take advantage of this status and also has incentives to improve the quality of the services offered and reduce their cost.

In the United States, this problem is solved basically by defining a reasonable rate of profit for the monopoly enterprise. The principle preferred in the United Kingdom is to set the rates that the company is authorized to charge for a period of five years, expressed in the form of a number of percentage points above or below the consumer price index (Powell, 1992). Both systems have their advantages and disadvantages. The United States system makes it possible to ensure interest by investors and to maintain profitability even when there are unexpected fluctuations in the cost of inputs, but if the profitability allowed is set somewhat higher than the market levels, this could encourage the companies to make unnecessary investments simply in order to maximize the yield on their capital. Under the British system, the companies would have more incentive to reduce their costs, but sometimes it is not easy to define the adjustments authorized in their scales of charges.

c) Privatization of rail services in Britain: the role of the leasing companies

In the particular case of the British railway system, the privatization system separates the administration of the permanent way from the operation of the trains. A natural monopoly company, Railtrack, administers the permanent way, while more than 20 other companies operate the trains in different sectors of the system. The authority responsible for regulating the railways (the Rail Regulator) requires Railtrack to reduce its charges by 2% per year in real terms, in view of the possible savings in maintenance costs. Variations in the passenger fares charged by the monopoly operating companies, especially those providing urban or suburban services, are also subject to real maximum values (Glover, 1996).

The British rail privatization system includes various mechanisms for ensuring a suitable level of competition and incentives for the provision of services of satisfactory quality. Thus, for example, the concessions for the passenger services last for between 7 and 15 years, after which they are put up for tender again. Some operating companies are negotiating longer concessions in return for additional investments over and above those provided for in the contracts. A particular feature of the British railway privatization system is that the operating companies are not obliged to acquire their own equipment; initially, the whole of the rolling stock was in the hands of leasing companies (likewise privatized). There is also the option of acquiring new equipment through one of the leasing companies, of which there are three. Some operators prefer to acquire their new equipment from such companies, whereas others purchase it directly, or else through their parent companies.

2. Case B

a) The problems of a deregulated market

In case B the potential monopoly could also be a problem. In inter-urban passenger transport, for example, a company which already dominates the market could try to wipe out other competitors with smaller financial capacity by charging very low fares until it forces them to withdraw from the market. Situations of this type have occurred in Chile in the bus transport market and in civil aviation and have been taken to the courts. At the international level, similar actions taken by Pan American and British Airways effectively wiped out the commercial threat presented by the incipient Laker airline.

Big firms could also defend themselves against competition in other ways: for example, by building their own terminal and leaving the terminal used by the other companies, or making their services always leave a few minutes earlier than the others (there have also been occasions when the windshields or tyres of vehicles belonging to new competitors have been mysteriously broken).

In some cases there could be a monopolistic union through agreements between operating companies to control fares or restrict supply. Normally, such agreements do not take the form of written documents and it is hard to prove their existence. It is almost certain, however, that in Santiago, Chile, in the 1980s and in Lima ten years later, the collective transport operators came to agreements for a coordinated rise in fares.

Especially in the case of urban public transport, deregulation could also lead to oversupply by encouraging an excessive entry of new operators because they do not need to pay the marginal social
costs that they cause. These costs are connected with traffic congestion, air pollution and accidents. Something similar takes place in the case of road transport of goods: the taxes usually charged do not cover the corresponding road maintenance costs in the case of vehicles with high axle loading.

In case B, the market would appear to be potentially open because of the lack of obvious barriers to the entry of new operators. However, a latent barrier—such as the threat of a price war or something like that—could effectively discourage the entry of new companies.

In case A, a transport operator can discriminate between different groups of clients, but this possibility is not usually open to companies in case B.

b) Putting order in a deregulated market, without going back to the past

There can be little doubt that the regulations applied in the past reduced the commercial motivation of entrepreneurs. The problem that must be faced now in the field of transport is how to regulate activities in such a way as to ensure that the market is competitive and that the social benefits exceed the social costs caused, yet without stranding the greater efficiency that privatization and deregulation are supposed to generate and allowing the private firms to use all their initiative to develop markets and reduce costs.

In deregulated markets, as already noted, a big firm could try to dominate the market, or operators could join together, either formally or informally, for the same purpose. Anti-monopoly laws can limit such tendencies, although sometimes it is difficult to prove the existence of monopolistic actions, especially if there is no written or recorded evidence of the apparent concerted action of the operating firms. When a dominant company tries to wipe out smaller companies operating in the same market, the latter may win in court, but only after they have been wiped out commercially (as occurred in the case of Laker Airlines). One way of partly solving problems of this type is to oblige the big company to pay compensation which is higher than the damage suffered by the companies affected by its actions, as is done in the United States.

It often happens that a company temporarily works at a loss in order to wipe out the competition by such actions as reducing fares to levels below cost and making its services leave a few minutes before those of the rival company in order to take passengers away from it, but once the competition has been wiped out its raises the fares again, sometimes to levels considerably higher than its costs. One way of discouraging such practices is to require that any change in fares, routes or frequencies must be announced well in advance. This would at least mean that the company engaging in such practices would have to keep on offering its special low fares for some time after the withdrawal of its competitors. In Great Britain, bus companies are required to inform the authorities of modifications in their services at least 42 days before putting them into effect; the reason for this is to give the authorities time to arrange socially useful services (by granting subsidies) when the market stops providing them and also to produce timetables for the services, but it would also serve to reduce the incidence of anti-competitive practices.

As already noted, in Santiago (Chile) the almost complete economic deregulation of the public transport system came to an end in the early 1990s. The Ministry of Transport and Telecommunications decided to identify the services that should be operated and granted concessions for their operation, by tender, to companies in the private sector, normally made up of the members of bus owners' associations which had provided the services previously. Generally speaking, the experience in Santiago has been quite successful (Thomson, 1995).

In Santiago, the maximum duration of the concessions is seven years, after which each route is put up for tender again. If the term of the concessions were longer, the companies could construct their own facilities for maintaining their vehicles, but this would weaken the competitiveness of the market and the companies would have fewer incentives to offer good quality services to their clients, although if the companies had their own workshops the buses would probably be better maintained than if they used commercial workshops, especially if each owner indi-

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6 The word "oversupply" is very freely used but is not very clearly defined. With regard to deregulated markets, ECLAC uses it in the sense of the supply generated when operators do not have to pay the whole of the marginal social costs corresponding to their actions.

7 If the users are few in number and well organized, they could make investigations aimed at proving the existence of anti-competitive practices which adversely affect their interests. Bus passengers, however, are very numerous and are not usually organized, although in some countries institutions have recently been set up to defend consumers' interests.
individually arranges the maintenance of his bus or buses with the latter.

One way out of the controversy over the respective virtues of short or long terms for concessions could be the establishment of leasing companies for workshops, which would lease them to the companies holding concessions. As far as is known, this is not done anywhere in the world; the case of the leasing of railway rolling stock in Great Britain is no different in principle, however, except that workshops are immovable pieces of real estate, while rolling stock can be moved from one place to another.

The Santiago system of granting bus route concessions by tender also solves the problem of the probably excessive expansion of the number of vehicles which tends to accompany the deregulation of collective transport. The best solution would be to charge each bus a toll which reflects the social costs of the congestion, pollution and accidents caused by its presence on the streets. Until a system of charges to private vehicles for road use is adopted, however, it would not be appropriate to think of applying it to collective transport.

(Original: Spanish)

Bibliography

— (1992): The impacts of subsidies, regulation and different forms of ownership on the service quality and operational efficiency of urban bus systems in Latin America, LC/L.675, Santiago, Chile.
— (1994): The development of urban public transport in Latin America and the world, LC/G.1817, Santiago, Chile.

International Railway Journal (several years): Bristol, Connecticut.
Jane's World Railways (several years): Surrey, Canada, Jane's Information Group Limited.
Realidad Ferroviaria (several years): Buenos Aires, Fundación Instituto Argentino de Ferrocarriles.
Rieles (several years): Buenos Aires, Magazine Satelital, S.R.L.
— (1993): La desreglamentación del transporte autobusero urbano e interurbano: cómo funciona y cómo podría funcionar mejor, Memoria del VI Congreso Latinoamericano de Transporte Público (CIATP) y del VI.
Encuentro Latinoamericano de Transporte Urbano (ELATU), San José, Costa Rica, FUNDESTRA.
—(1994): The transportation systems of Latin American cities: How they might better serve the needs of the poor, Enhancing the Management of Metropolitan Living Environments in Latin America, UNCRD, Research Report Series, No. 1, Nagoya, Japan, United Nations Centre for Regional Development (UNCRD).
—(1995): Una evaluación crítica de algunos aspectos del desarrollo del sistema de transporte urbano de Santiago, in F. Martínez Concha (ed.), Actas del VII Congreso Chileno de Ingeniería de Transporte, Santiago, Chile, Sociedad Chilena de Ingeniería de Transporte (SOCHITRAN)
Transportation Quarterly (1985): Joint Conference, Eno Foundation, Board of Directors and Board of Consultants, Westport, CT, April.