

**The urban public transport crisis in Brazil:
Two regulatory reform strategies and some questions to the World Bank**

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**The Crisis in the Brazilian Urban Transportation Industry and Tentative
Answers**

As presented and discussed in a previous paper presented in the last Thredbo Conference (Aragão and Brasileiro 1999), the urban public transport in Brazil is suffering from a continuing crisis since the Federal and the local Governments have not given any priority to the industry for years.. Additionally, the private bus enterprises and their unions have succeeded in capture the regulatory framework, putting into practise a quick concentration process and oligopolistic strategy. Thus the increasing traffic congestion and the lack of competition and the heavy inefficiencies of the bus industry have risen the operational costs.

All this situation has led to the loss of prestige of public transport, and a important part of former transit captives have migrated to individual transport. Another part of the still captives is being progressively attracted by informal operators, which have succeeded in some cities to get their official authorisation or at least toleration by the transit authorities . These factors have provoked a continuous loss of patronage in the formal bus industry, which is being challenged in their formerly protected market.

The main defence strategy of the industry leaders has so far relied in urging the authorities to repress the informal sector or, if this is politically infeasible, to turn the legalised smaller operators dependent of the bigger bus operators. Gaining support of important associations as the National Association of Public Transport (ANTP) and the National Forum of Transportation Secretaries, the National Association Urban Transport Enterprises has developed a single national regulatory strategy for the urban transportation industry (ANTP *et al.* 1999), which in the essence consolidates the predominance of bigger bus enterprises and sustains additionally their conglomeration into area operating consortia. The detailed description of this strategy follows in this paper.

This strategy is to be confronted with an alternative proposal put by a group of researchers, which have been for years dealing with transportation regulation, financing and management (Aragão *et al.* 2000^a). The referred alternative stresses competition and opening up of the industry to new actors, maintaining end developing the private entrepreneurship in the industry, but under a regulated

regime, where the entry into business shall be defined by competitive tendering procedures.

The aim of the present paper is to execute this comparison, exposing firstly the proposal of the referred entities, analysing its methodological and policy aspects and then confronting it with the alternative document. Finally, some comparative comments are made to the newly released strategy paper of the World Bank (Cities on the Move), suggesting new issues to the World Bank policy in the industry.

The model of the entities

Fundamentally, the model put by the three entities starts from the current legal framework for the urban transportation industry in Brazil, after which this activity is to be considered as a public service (article 30,V of the Federal Constitution). By this legal concept, it is in the competence of the Public Administration to run public service, but its execution may be delegated by a concession contract or permission, provided that a formal tendering procedure is organised in order to select the operator (art. 175 of the Constitution). Sticking to it (and even admitting the submission of the concession to a previous tendering procedure, to which the operators have so far offered open resistance), the strategy paper pledges for more flexibility for the contract terms, making possible that the operators run also "related activities" (mainly supplementary transportation services, the construction and commercial exploration of terminals, busways, parking places, and even of real estates in the influence area of the transit infrastructures).

On the basis of these principles, the document develops a general, unique, but flexible model for the relationships between authorities and operators. Main aspects of this model are:

- a) *The duration of the contract* shall be up to ten years for the simple execution of the services; between ten and twenty years, of some infrastructure investments within the bus technology are included; and up to twenty five years for contracts with rail investment.
- b) With respect to the *property of the assets*, all of them would belong to the operators (even automated fare control equipments), with exception of "public infrastructure".
- c) The tendering procedure *must not foresee monetary offers* as selection criterion.
- d) Any *competition* will occur solely by tendering procedure (competition for the entry).
- e) One sole company shall serve *smaller cities* (under 300,000 inhabitants).
- f) *In bigger cities*, the concession should include the construction of infrastructure, whereby the operators are to be associated into area consortia, under the form of specific purpose companies; these companies would mandatorily include operators with "proved experience in transit operation".
- g) *Revenue risks*: these would be attributed to the operator, especially when he decides to adopt promotional fares. As to the *cost risks*, these would be in principle be assumed by the operator, provided that the initial financial conditions of the contract are respected; in the case of unforeseen cost fluctuations and of cost variations provoked by governmental action, the fare price is to be adapted. The *demand risk* is also to be attributed to the operator,

but "under determined framework of duties", which are to be revised after an established period.

- h) *Service structure*: the services are to be bundled and delegated according to geographical areas or functional network segments. The planning of a basic service network would be the duty of the authorities, with the collaboration of the operators; supplementary services shall be planned solely by the operators.
- i) With respect to the *financial reward of the operators*, it shall occur basically on the ground of the fare box revenues, which are to be established and revised by the authorities. In the case of the supplementary services, the fare prices are to be proposed by the operators and approved by the authorities.
- j) *Operational control*: the quality of the services are to be controlled by opinion polls which shall be contracted by the operator and supervised by the authorities. On its turn, the efficiency is to be controlled by conventional means and electronic devices, which shall be run jointly by the operators and the authorities.
- k) *Funding of investments*: different revenue resources are to be put together, as fare revenues and revenues from "associated projects", tax revenues, as well resources of the operators and from credit operations. (This most relevant topic, which is closely related to the regulatory issue, is too summarily treated in the document!)

A first methodological appraisal of the strategy paper of the three entities

From an epistemological point of view, the very subject treated by the model are the so called "institutional relationships" between Government and the private enterprises in the provision of public utilities, which have been in the centre of the international debate since the seventies. Uncountable contributions and events have dealt so far with that matter, originating from different scientific branches, e.g. from economists, sociologists, lawyers, and others. With special regard to economics, these relationships have formed a new discipline called Regulation Economics.

The first aspect that strikes in the document of the three entities is the absolute absence from any reference to all the international and mature debate on the matter. It starts from current legal concepts which are interpreted in a narrow sense, without a regard to their intrinsic economic and politic meaning. All the paper gives than an impression that its real motive is to gather quickly legal arguments in order to justify a proposed institutional structure, whereby the interests of the operators shall be preserved in face of challenges both by authorities and the illegal operators. Some concessions to the general principles and rules of the Administrative Law as the execution of tendering procedures fit as collateral ornaments but do not reverse the main track of concentrating the economic power in the industry into the hand of the current operators.

Furthermore, the *central policy aims* of the (regulatory) model are not presented clearly, neither are the core problems to be treated and solved clearly systematised. This is particularly incomprehensible as one of the underwriting entities, the Associação Nacional de Transporte Público, has produced already a legion of programmatic papers on urban transport (see ANTP 1997 and 1999). There is virtually no link between the objectives and directives of the urban transportation policy, as proposed by this entity, and the model which it underwrites.

Of course, this is a fundamental methodological failure of the model, as any governmental intervention should be designed under the light of clearly stated policy objectives and problems to be solved (in economic terms, market failures are to be identified). Subsequently, the concrete regulatory measures are to be defined in different fields (e.g. entry and exit rules¹, quantitative regulation, price policy, performance assessment, social regulation, etc.) and previously evaluated with respect to their foreseeable benefits and costs. Finally, the decided measures are to be consequently implemented, to which aim the authorities have to put to function proper organisational measures, as the installation of a regulatory agency. The implemented regulatory policy is of course to be reviewed after a period, accordingly to the changes of the context for which it had been created (Aragão and Santos 1999; OECD 1997).

The most critical topics

One first aspect to be condemned is the relative uniformity of the regulatory pattern proposed, to which the different cities which have most different market situation are to be submitted. The claim that smaller cities, i.e. cities below an arbitrarily fixed population level have to pass their whole system to one single operator is simply lacking any economic justification. In the contrary, these cities, which are less congested and therefore do not need heavy investments which tend to have a "naturally monopolistic" character, would perhaps be best served with several smaller operators.

Equally, the mandatory introduction of geographically defined consortia for larger cities is proposed without any previous economic consideration, and the advantages of this forced industry "verticalisation" are not demonstrated. The suggestion of the use of organisational and financial instruments like special purpose companies and project financing is not followed by a deeper discussion of their suitability, either. Their application to urban transit projects is put under question even by organisations which ordinarily defend the privatisation of utility industries (The World Bank 2000). Particularly arrogant and capturing is the rule after which the consortia have to include mandatorily incumbent ("experienced") operators into the rank of their participants, as if the running of bus fleets would require a very elaborate know-how!

Second aspect: following the model, the duration of the contracts should be defined on the basis of their attractiveness for the operator. Of course, this is one important criterion, but should be articulated with another which is the incentive to efficiency. For running buses solely, five years duration seems to be international praxis (The World Bank 2000), and there is no any particular, and economically justified, reason for adopting longer periods for the Brazilian case. For the case of "infrastructure investments", which should entitle the operators for a longer contract period, the rules should appoint clearly which kind of investment is meant hereby: a simple repair of the pavement of the streets used by the operators, which above all will help them to reduce their operating costs, would be hardly a plausible justification for longer periods!

¹ In the case of concession contracts, which are the rule in infrastructure regulation, the rational design of contracting procedures, of the content and duration of the contract and of the fare policy is fundamental (Kerf *et al.* 1998).

With respect to the property of the assets, the most critical issue would be the control equipments, which are strategic for the implementation of the regulatory policy. If the authorities do not have the necessary financial resources to acquire and operate them, independent suppliers are to be contracted by the Administration, and these shall not have any relation with the operators to be controlled. The rules proposed by the document, which furthermore recommend a "collegiate" control of the operators by the authorities and themselves, open doors and windows to regulatory capture.

The document concedes a (most residual) space for competition by foreseeing the adoption of tendering procedures. Albeit the, really competitive, tendering is one important competitive moment in a regulated industry, it can by no means lead to the creation of competitive and efficiency-seeking behaviour isolated from other moments and instruments as incentive fare policy, competitive performance evaluation (e.g. yardstick and benchmarking competition) and some residual competition on the streets, especially along main corridors served by several operators. This last one moment counter-indicts clearly the adoption of area consortia and, above all, of the one-operator rule for smaller cities.

At last, with respect to the distribution of the several risks, it would be worth of mention that concession contracts are especially sensible to *political risks*, which are incomprehensibly ignored by the document. If we take a deeper look into the crisis in the bus industry, particularly onto the conflicts between the established and the informal operators, it can be concluded that the insistent refusal of the first ones to submit themselves to the legally foreseen tendering procedures demoralises the rule of law. In the consequence, as the authorities are impeded to fulfil their legal duties, other sectors of the society will not respect the pretended concession rights of the operators, and the increase of the syndrome of informality can not be otherwise interpreted as a direct result of too much "smartness" of the incumbent operators.

In the search for a broader and systemic regulatory concept

Reacting to this deficient nevertheless politically powerful proposal of the three entities, the group of academics originated from different Brazilian universities and forming the RESET (Network for Transportation Engineering and Socio-economic Studies) have supplied a counter proposal (Aragão *et al.* 2000^a). Pointing out the most severe failure of the model of the entities, which was the lack of a link between the model and broader urban transportation policy targets as well a list of clearly defined main problems to be solved, the alternative proposal departs from a broader view on the urban transportation sector and its main problems.

Indeed, the urban transit market is presently facing deep changes which forces a corresponding change in the marketing focus of the services. On the one side, there is a need to compete for the conquest of the passengers, as a large group of formerly captives have gained alternatives (individual transport and the illegal operators as well other services as contracted transport). But it must not be forgotten that there are still massive social needs of the remaining captive passengers to be satisfied. Therefore, there are clear limitations for a market oriented segmentation policy, which can lead to a situation where the captives get merely a second-class treatment

("soup kitchen for the poors"; we can not forget, either, the road space limitations for a too diversified segmentation policy).

Consequently, the supply of a general public service, which has to offer a high quality and a broad accessibility, is still on the order of the day. Of course, the concern in gaining more attractiveness for the travellers which have an option will lead to adaptations in the manner the services are supplied (more concern for passenger information, quality of infrastructure, equipment and service, eventually the introduction of optional upgraded services). Equally, the structuring role of public transport for the urban space must not be overseen.

A central issue is, of course, the introduction of moments of genuine competition, which is the most straightway approach for inducing a efficiency and quality seeking behaviour. Complying to the current legal framework and also on the basis of the international experience we can conclude that the competitive tendering procedure shall have a central role in the entry regulation, at least for line services. However, this competitive instrument is to be combined with other as a competitive performance assessment and incentive fare policies. Some residual competition on the street may be introduced along the main transit corridors.

A well-targeted diversification and segmentation policy may also introduce moments of healthy competition, contributing for more attractiveness of public transportation. The optional services are a privileged area for absorbing and the integration of new social actors into the supply of transit services, whereby new jobs and new investment opportunities for common savers may be created. As said before, the diversification policy will reach its limits when it begins to endanger systematically the economic balance of the main services network and to produce significant congestion.

It must not be forgotten that the urban public transport market is already segmented: the taxi, school bus and contracted transport offer valuable transportation means which are to be integrated into to broader transit policy. The international experience brings up example of fruitful co-operation between e.g. taxi and line transit services, especially during the night or in scarcely populated areas (see the AST system in Germany). As we suggested in the last Thredbo Conference, a co-operation council between the operators may open valuable spaces for this kind of experience.

It is to be expected that a regulatory reform which give priority for more efficiency and competitiveness and introduces mechanism like competitive tendering procedures may provoke changes into the industry structure, especially some concentration. In principle, this concentration may be regarded as a straightforward way for shaping a strong and globally competitive transit industry. On the other side, this concentration will not necessarily lead to the doom of the small operators, as different market niches are still to be developed. Alternatively, the small operators may build up co-operative between themselves (and, as a last resort, to fusion together). They may be also be subcontracted by the major operators or act as their franchisee, provided that the legislation is consequently adapted.

In every case, the restoration of the public authority is a main pre-condition for the implementation of a proper regulatory policy which is necessary for building up an

efficient, effective and sustainable passenger transport system. The political and technical weakness of the authorities, which is a present result of permanent capturing efforts by the operators in not in the interest of the society and even of the major part of the operators. This weakness has led to the demoralisation of the sector and even to the lack of interest for politicians to deal with the "messy matter" of public transport policy; in the end, the decision takers trend to disregard transit policy as an area where they feel at ease and may obtain electoral success.

The document of the three entities is particularly weak in regard to industry policy for the sector. The Brazilian road passenger transport bears important potentials both for exportation of services and equipments (Brazil is already an important global player in the international market for buses!) and for the attraction of masses of saving resources from the middle classes. The increase of the informal transportation sector is a clear demonstration for this potential. Therefore, a regulatory policy shall take all these potentials into account, as they are also important for the macro-economic policy. By the way, the defendants of a transit friendly policy can not expect a higher effort from the Federal Government in this domain, if they do not demonstrate the potentials of transit to help in its main present concern, which is still the maintenance of macroeconomic stability in the short term.

Thus the regulatory reform which is in the order of the day requires a concerted effort of the different involved social actors. Its main principles are contained in Table 1.

**Table 1 - Basic Principles for a Regulatory Reform
in the Brazilian Urban Passenger Transport Industry**

1. Good service for the different segments of the public, securing on the one hand a reasonable general accessibility levels especially for the transit captive groups and, on the other, attractiveness for groups which have options.
2. Search for productive efficiency using mechanisms that incentive the respective efforts, mainly by introducing moments of competition and by opening up of the market for new actors.
3. Search for resource allocation efficiency by building up systematically efficient networks which produce network, scope and density economies but are able to offer qualitatively good and attractive services.
4. The design of the regulation shall be flexible and well adapted to the local market particularities, preserving the autonomy of the local governments. The design of the regulatory measures shall take in account the costs and benefits of its implementation.
5. Search for environmental sustainability.
6. Search for relevant macroeconomic results as the mobilisation and attraction of national savings and the increase of exportations.

For its implementation, following list of co-operative action programmes is suggested:

1. market intelligence programme;
2. programme for the management modernisation in the operating companies;
3. programme for the management modernisation in the authorities;

4. concerted regulatory reform action programme;
5. programme for the reshaping of the bus industry;
6. programme for technological innovation;
7. programme for human resources of the industry;
8. programme for the compensations of adverse social impacts due to the modernisation process;
9. programme for the search and systematisation of funding resources;
10. programme for the promotion of exportation.

Some Questions to the World Bank and Concluding Remarks

In its most recent strategy paper (Cities on the Move), the World Bank reviews its predecessor, which had been published in the eighties and represented a reversal of the previous bank policy favouring huge public investments in heavy transit systems, as it defended openly deregulation and the retirement of authorities from direct operating functions, accordingly to the liberal agenda which had gained the ideological hegemony those years.

The most recent paper reflects the move of the "mainstream thinking" to more moderation (albeit sustaining the pledge for privatisation and market logic) and, above all, to the insertion of the utilities issues into the sustainability debate (either environmental and social, but also "financial"). Attempting to be the most possible "holistic", the topics dealt within the document include the role of transport in the city development and for poverty reduction (main policy focus of the institution), for the urban environment as well for safety and security, the policy for the road and public transport system; further the role of non-motorized transport, the pricing and financing issues, the institutional reform agenda and, conclusively, the implications to the Bank.

Of course, there is here no space to develop a comprehensive appraisal of this rich document, and therefore we will concentrate on some aspects which are relevant for the debate proposed by the present paper. Thus following positions of the document are to be pointed out:

- a) Maintenance of the planning function for the authorities, but carried out separately from the operating functions, which are preferably transferred to the private sector. Remaining public operators are to be commercialised or privatised.
- b) Mainly for the big cities, competition shall occur for the market and not in the market, and for this purpose the authorities are to develop proper skills for carrying out tendering procedures.
- c) The document defends the integration of small vehicle paratransit, whose trends to anti-competitive and anti-social behaviour are to be controlled; the adoption of modern organisation patterns as associations and franchising arrangements are to be introduced.
- d) With respect to investment in mass transit systems, the Bank maintains some cautious position because of the heavy impacts of such investments for public finances. The document defends that they are to be inserted in a major urban structure planning, and that their long term funding is to be secured. Although generally open to the participation of the private sector in the provision of

infrastructures, the Bank doubts whether the construction of transit system by private finance is feasible, even when integrated into major urban renewal schemes which would set up together with the transit system a unified "business package".

- e) Fare price control policies, when they come out to be necessary, should be integrated into a broader city transport financing plan; subsidies are hereby to be targeted and supported by the agencies responsible for the respective target groups. Modally integrated fares schemes are to be assessed for their impacts for the poor. The pricing principles for public transport are also to be inserted in to a more general pricing system for all urban transport systems, road charges included.
- f) In general, the operators should work in a competitive environment, adopting purely commercial principles. The authorities should compensate them for any non-commercial imposition.
- g) At the institutional level, the document pledges for jurisdictional co-ordination between central, regional and local authorities, especially in metropolitan areas; and for functional co-ordination between urban planning, traffic and transit authorities.
- h) The operation of the services should involve intensively the private sector; remaining public operators are to be commercialised or privatised.

Comparing the World Bank paper and the two previous Brazilian papers it can be easily concluded that the document of the RESET group bears more affinities with the World Bank positions than that one written by the three entities. Competition and integration of new (private) actors is decidedly a strong orientation of the RESET paper, whereas the other trends to confirm the predominance of huge companies and consortia, a structure which will be essentially anti-competitive, even when the organisation of tendering procedures is admitted.

However, there are some points where the World Bank position needs some deepening, in regard of the experiences in Brazil, precisely a country where public passenger transportation has been carried for long time mainly by private operators:

- a) The transfer to the private sector of the operating function, which has been praised by the Bank as a mean to build up a more efficient and competitive transit market (and this potential can not be denied), provokes regularly a counter-reaction by these operator, which is collusion. The public authorities, especially in the developing countries, are in the rule too weak to impose a regulatory rule which is in the interest of society. This trend has to be treated by the Bank more seriously, positive experiences and best practices in enforcing really competitive regulation are to be analysed and systematised.
- b) The Bank insists in giving a chance to small transit operators. Indeed, this measure not only secure a more rich supply to the dwellers, but generates a great lot of sustainable jobs, but as far the small transit does not destroy economically the operation of the systems with higher capacity (busses, rail transit, etc.) and does not increase significantly traffic congestion. On the other side, small transit does not only offer jobs but also investment opportunities for lower middle classes and even poor, enabling that new social groups may develop their entrepreneurship. Thus transit policy shall not only be *for* the poor, but also *by* the poor, and perhaps the Bank officials dealing with urban transportation (and

other urban infrastructures) and those with the reduction of poverty should work more closely together on this issue.

- c) Going further on this "popular investment" theme, true competitiveness may be fostered by turning urban transit into a broad investment subject in the financial market. The setting up of small enterprises, enforcing that major operators open up their capital (for example, by conditioning that lending operations above a defined threshold amount will only be conceded to companies that go public) and giving incentives to the setting up of leasing clubs may democratise transit business and foster the development of national financial markets. Therefore it is recommended that Bank officials for the infrastructure work together with colleagues dealing with the maturing of the financial markets in the developing countries.

As concluding remarks, it may be said that the urban transportation policy has to be inserted into broader economic policies. Evidently, its role for environment and for attack against poverty, and also for the reduction of systemic production costs of an economy (which rise with the transportation costs) are already relevant "macro"-economic arguments for an active urban transportation policy. Nevertheless, new issues as the use of urban transportation as well other infrastructures for industrial and export policy, for the development of new entrepreneurship, for the maturing of national financial markets and even for the stabilisation of public finances (in the sense that e.g. good public-private partnership projects may issue new obligations with better conditions which can replace current burdensome public obligations), are to be brought in.

References

Aragão J, Brasileiro A (1999): *The Brazilian Urban Bus Industry: Present Challenges and Future Perspectives*. 6th International Conference on Competition and Ownership in Land Passenger Transport (Thredbo 6). Cape Town.

Aragão J., Brasileiro A, Lima Neto O, Santos E, Orrico Filho R (2000): Construindo modelos de relações institucionais e regulatórias no transporte público urbano: algumas considerações metodológicas. In Aragão J., Santos E (2000) *Transporte em Tempos de Reforma. Ensaio sobre a Problemática*. Brasília: LGE.

Aragão J, Santos E (1999): *Sustainable Compounded Regulatory Systems for Urban Passenger Transport: In the search for a conceptual framework*. 6th International Conference on Competition and Ownership in Land Passenger Transport (Thredbo 6). Cape Town.

ASSOCIAÇÃO NACIONAL DE TRANSPORTE PÚBLICO (1997): *Transporte Humano. Cidades com Qualidade de Vida*. São Paulo: ANTP.

ASSOCIAÇÃO NACIONAL DE TRANSPORTE PÚBLICO (1999): O Transporte na Cidade do Século 21. *Revista dos Transportes Públicos*. Número 84. Ano 21. 3^o Trimestre. São Paulo : ANTP.

ASSOCIAÇÃO NACIONAL DE TRANSPORTE PÚBLICO, ASSOCIAÇÃO NACIONAL DE Empresas de transporte urbano, TRANSPORTE PÚBLICO, FORUM NACIONAL DE SECRETÁRIOS DE TRÂNSITO E TRANSPORTE (1999): *Modelos de Relações Institucionais e de Investimento*. São Paulo. <http://www.transpublico.org.br>. As downloaded in September 1999.

Kerf M., Gray R. D., Irwin T., Lévesque C., Taylor R.R. (1998): *Concessions for Infrastructure — A guide to Their Design and Award*. World Bank Technical Paper No. 399. Washington: The International Bank for Reconstruction and Development.

OECD (1997): *Regulatory Reform and Innovation*. Paris: OECD.

The World Bank (2000). *Cities on the Move*. Washington: The World Bank.
<http://www.worldbank.org>.