

THE BRAZILIAN URBAN BUS INDUSTRY: PRESENT CHALLENGES AND FUTURE PERSPECTIVES

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Abstract

The aim of this contribution is the description and understanding of the present crisis in the Brazilian urban bus sector and to point out new perspectives for the development of this industry. At the beginning, the present structure of the industry as well its modernisation and concentration level is explained. A further section deals with the challenges this industry is now facing, especially due to the rapid motorization the country is now undergoing as well to the invasion of the transport market by illegal operators, and the reaction the regular operators are offering to these challenges. Following this, the new legislation on public procurement procedures for administrative and concessions contracts is presented, which will oblige that these contract are preceded by competitive bidding procedures. On the ground of this analysis, the perspectives for the further development of the urban bus industry are discussed.

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Introduction

A striking feature in Brazilian cities is the operation of bus services by larger private companies, which show different degrees of modernisation. This situation differs deeply from that observed in neighbour countries, where tiny companies dominate the industry, although some recent development of modern enterprises can be seen in Argentina end Chile. As it shall be shown by the present contribution, the degree of modernisation of these enterprises can be demonstrated by their recent efforts in many fields (Aragão 1997b, Henry 1997a). From beginning of the eighties, they have been contracting specialised staff, mainly young engineers and managers, but also existing staff of the public administration seeking after better wages and work conditions (as the life in a public body can be extremely frustrating by the lack of continuity and influence of politicians in transportation planning).

Other measures of modernisation are the intensive use of computer and information systems, and the introduction of modern labour relationships (abandoning traditional paternalistic relationships). These processes go on as new generations of successors replace the heroic but technically backward founders. More recently, many enterprises are been ruled by professionals without any link to the founders' family. And this has much to do with the concentration in the industry, where single companies have been bought by larger groups of enterprises within their ambitious expansion plans. Finally, the major companies trend also to diversify their operations basis, extending from the operation in a single city to the operation in several towns, to the operation of interurban transportation and to the investment in non-transportation sectors (tourism, housing industry, commerce of vehicles, and the like).

Yet, all this sector is now challenged by a deep crisis, which is provoked by different factors: these are changes in the public transport market as the country is going through a rapid motorization process, an informal transport sector is spreading out as a cause of the chronic social crisis, and a new national regulation on procurement procedures for concession contracts requires more competitive bidding procedures. The aim of this contribution is the description and understanding of the present crisis in the Brazilian urban bus sector and to point out new perspectives for the development of this industry.

The Present Structure of the Industry

The staff of the National Association of the Urban Transport Enterprises (NTU) suppose that over two thousand enterprises operate urban line services, whereby over six hundred are presently members of the Association. This great lot of operators makes out a complex structure of enterprises with differentiated structure. At the one side, all of them can be considered as fully professional and capitalist enterprises, that is, they have surpassed the stage of primitive driver-owner operators oriented towards the immediate survival of the operator, and their business is the accumulation of capital. (Henry 1997b). At the other side, this capitalist structure is far from being homogeneous.

Henry (1997a) has built a typology of eight classes of Brazilian bus enterprises, where following situations are distinguished: a) the small, almost *individual* (owner-driver) *enterprise* (typical fleet: under twenty vehicles); b) the *family enterprise* (up to fifty vehicles); c) the *traditional enterprises* (from fifty to one hundred vehicles); d) the *evolutionary enterprises* (over one hundred vehicles); e) the *modernising enterprises* (100, 150 or even 200 vehicles); f) the *hegemonic enterprises* (from 200 up to 350 vehicles); and g) the *monopolising enterprises* (over 350 vehicles, the biggest ones own over 700 vehicles).

In the Table 1, this typology is reorganised into the classes A to H. Originating from a field research executed by (Henry 1997a) upon a sample of 371 firms in 53 cities around the country, this table shows the proportional distribution of these classes among the universe of urban passenger transport operators, as well the accumulative distribution of the total vehicle fleet among the classes. As it can seen here, there is still a considerable amount of small and medium sized firms, although the classes A to D absorb more than 85% of the total fleet.

Table 1 - Distribution of the Operator Classes in the Brazilian Urban Bus Industry

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Class	Average Fleet	% of the Enterprises	% of the Vehicles
A	498	4.07	17.03
В	268	14.63	32.98
C	162	13.82	18.83
D	93	22.76	17.78
E	61	9.76	4.98
F	34	26.02	7.54
G	14	6.50	0.78
Н	3	2.44	0.10
Total	119	100.00	100.00

Souce: Henry 1997a

Today, these enterprises bear different degrees of modernisation. First of all, new generations are taking over their command. In another field research involving 47 enterprises over the whole country (Aragão *et al.* 1997) it has been detected that 47% enterprises were being ruled by persons without any family ties with the founder, 15% by the descendants of the founder, 4% by people with other family ties with the founder, and 34% by the founder.

With respect to three basic management tools (organigram, effective operational programming and control), Henry's (1997) research led to the conclusion that 45% of the inquired enterprises did not work with any of these, 11% worked only with one of them, 11% with two of them, and 34% with all of them. On the other side, the use of computers (the computer was present in over 85% of the firms) is present in the accounting tasks (82%), in stock control (60%), fare revenue control (60%), maintenance control (54%) and other activities as investment programming, wages payment, communications, etc. (30%). On the other side, the findings of (Aragão *et* al 1997) pointed out that very few firms had developed a clear long-term strategy, executed their own demand research and invested in promotion.

Because of their great average size, the several maintenance functions use to be executed by the firms themselves, and only the minor operators depend largely on foreign maintenance services. Thus most of the firms have own painting, repair and washing workshops with specially trained staff (Henry, 1997a). Presently, some of these functions are being progressively contracted-out or left to the vehicle manufacturers, if the vehicles are still within the guarantee period (Aragão, 1997).

Henry's research also found that the firms invest largely in social facilities por the personnel as health services (present in 62% of the firms), training (48%), refectories (39%), recreation (28%) and resting (sleeping) rooms (21%). In contrast, the findings of (Aragão *et al.* 1997) indicated a low educational level especially in the operation and maintenance sector, and that the training programmes went rarely beyond the immediate daily tasks. In general, participation of the personnel in management decisions is poor developed (nothing more than boxes for suggestions - very few prizes are distributed). This apparently contradictory result is typical for a traditional paternalistic but authoritarian leading and management culture still present in Brazilian enterprises, although Henry points out that in the larger companies, the "familiar atmosphere" is progressively substituted by a cooler and objective one.

With respect to the staff per vehicle ratio, Henry founded that in the A and B size classes, the ratio staff per vehicle is above 4, and in the F, G and H classes, the same ratio is under 3 (Aragão *et al.* 1997). It shall be observed that the larger firms use to operate in the metropolitan areas, where unions may be stronger and be able to impose more favourable work conditions for their associates. It is to be remembered that in Brazil the fare collector is still under function, but he soon will be substituted by automatic fare collection systems (of the smartcard type).

As it is common in every mature capitalist development, the bus operator sector has experienced a steady concentration process, where smaller firms have been sold to or fused into larger companies. The Table 2 shows the present concentration situation in different major cities of Brazil. As it can be shown, the city with the least concentration level shows that one fourth of the operators controls 50% of the fleet. On general, the relative size of the operators is not correlated with the size of the market: factors like urban geography, the concrete history of the local industry, political factors and regulation control by the authorities seem to be more relevant for the supply structure (Santos and Brasileiro 1996).

Challenges of the present days

As advanced above, presently the urban bus industry is suffering a crisis, which will require deep reorganisation efforts for the operators. Since 1995, transit patronage has had a decreasing trend, although the vehicles have increased their production in kilometres (Tab. 3), partly because the authorities have introduced new lines and frequencies in the service net, in order to attend political demands from the communities, and partly because the operators have had to introduce more vehicles in order to maintain the

scheduled frequencies in a congested traffic environment. As a result of this, the service productivity, measured in passengers per km and passengers per vehicle, has decreased continuously (Tab. 4 and 5).

Table 2 - Concentration Level in the Bus Industry in Selected Brazilian Cities, 1996

City/ Metropolitan Area	Daily Demand (passengers)	Number of Operators	Biggest Companies	% of the Demand	% of the Fleet
			1	16,89	16,58
			2	11,00	9,70
Recife	1,527,000	19	3	10,27	8,10
			4	8,80	8,93
			the 4 biggest	46,96	43,33
			1		14,50
			2		9,70
Fortaleza	985,000	23	3	not avaliable	8,60
			4		7,70
			the 4 biggest		40,50
			1		15,00
			2		15,00
Curitiba	950,000	10	3	not available	13,50
			4		13,40
			the 4 biggest		56,90
			1	27,10	31,15
Federal District	770,000	9	2	27,00	29,23
(Brasília)			3	18,80	15,55
			the 3 biggest	72,90	72,93
			1	26,00	27,00
Campinas	450,000	7	2	22,30	22,10
			the 2 biggest	48,30	49,10
			1	28,50	35,60
Natal	430,000	6	2	29,90	27,40
			the 2 biggest	59,40	63,00
			1	21,00	15,70
Maceió	380,000	11	2	18,70	21,60
			3	16,50	14,40
			the 3 biggest	56,20	51,60
			1	38,80	36,80
João Pessoa	335,000	7	2	15,20	15,60
			the 2 biggest	54,00	52,40

Sources: EMTU/Recife, ETTUSA/Fortaleza, URBA/Curitiba, DMTU/DF, EMDEC/Campinas, STU/Natal, STU/Maceió, STU/ João Pessoa apud: Santos and Brasileiro 1996

On the other side, operation costs have increased, whereby the constant rise of the wages imposed by the unions has been the major factor for the evolution of the costs, another factor being the productivity lost of the system, caused by worsening congestions. Investment in productivity gains and a stabilisation of the wages in the last years and of the prices of some relevant production inputs (e.g. fuel prices) have counteracted the rise of the costs, and during the last two years, the costs per km have stabilised (Tab. 6), and so have also the fare prices (NTU 1998).

Several factors can be named in order to explain this critical trend. In the first place, the country is suffering from a rapid motorization as a consequence of a industrial policy that favours the attraction of international automobile manufacturer (which, in their turn, are seeking new markets in the emergent

economies), and new social groups, formerly captive public transport users, have got easier access to the private car, as appropriated financing mechanisms have also been created. This trend can be illustrated by the evolution of the sales of new automobiles and vans (Tab. 7). As a consequence of this, the public transport vehicles gets stuck in the congestion, as the authorities have suspended for more than a decade major investments in transit corridors.

Tab. 3 – The Evolution of the Monthly Patronage and Production in Kilometres of the Urban Bus Systems in São Paulo, Rio de Janeiro, Belo Horizonte, Recife, Porto Alegre, Salvador, Fortaleza and Brasília between 1994 and 1997

	1994	1995	1996	1997
Million Passengers				
April	426,4	461,7	455,0	437,0
October	461,8	479,6	457,3	461,0
Million Kilometres				
April	187,2	195,0	212,8	220,9
October	200,6	215,8	223,1	237,0

Source: NTU 1998

Tab. 4– The Evolution of the Passengers per Kilometre Index in the Urban Bus Systems in São Paulo, Rio de Janeiro, Belo Horizonte, Recife, Porto Alegre, Salvador, Fortaleza and Brasília between 1994 and 1997

April	October	April	October	April	October	April	October
1994	1994	1995	1995	1996	1996	1997	1997
2,28	2,30	2,37	2,22	2,14	2,05	1,98	

Source: NTU 1998

Tab. 5 – The Evolution of the Average Number of Passengers Carried Daily per Vehicle in the Urban Bus Systems ins São Paulo, Rio de Janeiro, Belo Horizonte, Recife, Porto Alegre, Salvador, Fortaleza and Brasília between 1994 and 1997*)

September 1995	April 1996	October 1996	April 1997	October 1997
636	556	544	531	548

Source: NTU 1998

Tab. 6 – The Evolution of the Weighted Cost per Kilometer in the Urban Bus Systems ins São Paulo, Rio de Janeiro, Belo Horizonte, Recife, Porto Alegre, Salvador, Fortaleza and Brasília between 1994 and 1997*)

April	October	April	October	April	October	April	October
1994	1994	1995	1995	1996	1996	1997	1997
1,30	1,40	1,50	1,60	1,69	1,69	1,67	1,72

Source: NTU 1998

*) in R\$ of December 1997 (1,10 R\$ \approx 1 US \$)

Tab. 7 – The Evolution of the Sales of Automobiles and Vans between 1990 and 1997*)

1990	1991	1992	1993	1994	1995	1996	1997
661,3	717,1	716,2	1057,9	1277,3	1566,3	1616,1	1809,4

Source: ANFAVEA apud NTU 1998

* in thousands

^{*)} obtained through the division of the total amount of the passengers carried in a month through the total fleet size and 25 (days).

Another important factor is the massive invasion of the public transport market by informal operators as a consequence of the social crisis and also of the huge investments made and of the financial facilities offered by foreign and national van manufacturers. The informal operators work with different types of vehicles, where vans enjoy overwhelming preference, followed by buses, motorcycles and minibuses. With respect to the social crisis, not only the unemployment of big masses leads to the increase of the informal sector, but also the small wages of the formally employed can induce these to search for additional, even illegal gain (NTU & ANTP 1997).

As a response to this situation, the regular operators have asked the authorities for more effective law enforcement and repression against illegal transport activities. On the other side, the informal operators have not been politically inactive, too, and have obtained success in pulling through the legalisation of their activities by several local parliaments. However, this legalisation of the van operators as an "alternative public transport system" often have led to the increase of the informal sector by new entrants, as these have recognised a perspective to get legalised as soon they make enough pressure upon the local representatives. On the other side, several other cities (e.g. São Paulo, Rio de Janeiro) have chosen a hard line against the illegal operators, after a first period of toleration. (Others have preferred to repress the sector form the very beginning).

But the regular operators themselves have recognised that repression alone, whenever necessary, would hardly overcome forever the threat from the informal sector. The flight from the regular service can be also explained by its lack of ability to recognise and to adapt itself to changes and values, expectations and needs in urban travel behaviour. Much potential of productivity gains and competitiveness remained also unexplored. Thus, quality management, segmentation market and technological modernisation (mainly by introduction of telematics into operational and fare control) are being intensively debated in the industry (NTU 1998). Also the minibus is being introduced by the regular operators, running special upgraded lines or also normal ones which need a more flexible vehicle (e.g. circular lines in town centres). Above all, further rise in the fare prices in order to compensate for the loss of patronage seems to be definitively out of question (ibid.).

But in one modernisation aspect the regular operators remain reluctant, that is the introduction of open competition among the operators, whenever not directly on the streets, but at least for the right to operate, that is, by means of a really competitive bidding. For this aspect, a new legislation on procurement procedures for administrative and concession contracts has been introduced, which entails a more competitive environment. Thus the new Brazilian framework keeps the sector regulation, not following the deregulation policies experienced in some Latin American countries and in the UK, although market behaviour is at least simulated by the competitive character of the tendering procedures (Aragão 1997, Cox et al. 1997, Glaister and Cox 1991). This is the point treated in the next section.

The New Legislation on Contracting-Out Public Services

Inspired by French Administrative Law, public transportation is recognised by the Brazilian Law as a public service (Article 30 of the Brazilian Constitution; see Aragão and Marar 1996). Thereafter, its supply is a responsibility of Public Administration, but it can be delegated to private companies by means of an "administrative contract". By these contracts, the authorities keep the competency to plan the activities and to determine their prices; they are even entitled to alter the terms of the contracts or to suspend it simply. On the other side, the contracted company maintains its right to an economic equilibrium and also to the steadiness of the contract subject (see Aragão 1998, Bandeira de Mello 1995, Sundfeld 1994, Tacito 1961).

This doctrine has been confirmed by the 1988 Constitution and the recent Acts on Procurement Procedures and Concession Contracts (Laws no. 8666/93 and 8.987/95). The kind of administrative contracts established between the authorities and the bus operators belongs to the special category of "concession contracts", which have now obtained following regulatory framework: a) the contracted company is basically rewarded by the fare revenues, which shall be established by the winning proposal at the tendering processes; b) the proposals are selected or by the least price, or by the biggest monetary offer to the contracting authority or on the basis of a mixed criterion (price and offer); c) the length of the concession contracts shall be established case by case, accordingly to the economic realities of the sector, and the may be renewed.

It shall be stressed that the main aim of the Concessions Act was the introduction of real competition on economic terms, and the selection criteria foreseen by the Act are the central instrument for assuring this. Thereby, the tendering procedure is the main moment of the competition, which shall ensure the competitive character, maximising the economic and financial gains for the Administration, but also the morality and objectiveness of the selection process, producing a barrier against favouritism and corruption (Bandeira de Mello 1995, Wald et al. 1996). A special concern of the regulation is to avoid discriminatory clauses in the convocation bill, which could prejudice the competitive character of the procedure. Thus the new legal framework forbids requirements for participation in the process that are not strictly necessary for the proper execution of the contract. The procedure shall also be submitted to broad public controls (mainly by public audiences and by the open access to the documents produced by the selection committee), and eventual irregularities can be pointed out by any citizen, participant or not.

A few words about the fare policy: in the current praxis of the public transportation sector, and accordingly to the legal entitlement to the economic equilibrium, the operators are rewarded by a fare price that is determined by the Public Administration and is calculated on the grounds of a cost table, which

takes into account the variable and fixed costs and divides them through the number of paying passengers. Although this system has guaranteed really rewarding prices to the operators, many criticism has arisen because it has so far not encouraged productivity in the sector (Orrico Filho et al. 1998). In the contrary, the efficiency gains of the more modern enterprises have not been transferred to the society, but have been retained by these operators, once fare prices are calculated on the basis of average system costs. Therefore, it can be deduced that the existence of enterprises with a low productivity profile is in the interest of the more advanced companies.

The new legal framework challenges this fare policy, as it foresees that, in principle, the fare price shall be defined by the winning proposal of the tendering procedure. Of course, the strict compliance to this rule would signify a radical change for the whole bus sector; moreover, it would turn impossible to adopt an uniform fare policy for an entire urban area. In the result, this could even represent a prejudice for the passengers. A way to overpass this difficulty would be to make use of the selection criterion of the highest financial offer to the authority; its adoption implies that the fare prices remain being defined by the authorities.

Compared with the competitiveness and morality imposed by the new legislation, the present institutional reality in Brazil's bus sector bears following main features (Aragão 1998, Orrico Filho et al. 1998):

- 1. The services are locally regulated, whereby the attitude of the Public Administration towards the services and their operators bear differences (tighter control over routes, fares and timetable in the major cities, and relative absence in the minor cities and in the interurban passenger sector; see Aragão and Marar 1996).
- 2. The contract-out procedures rarely follow the formal rules of Administrative Law: very few of the present operators have even passed through a procurement procedure, having rather "inherited" the permissions or concessions decades before, from former companies. Actually, only newcomers are subject to procurement procedures.
- 3. Usually, new services are conferred to the geographically nearest incumbent companies; often the new services are recognised as a mere "extension" or a "complement" of an older line, and their attribution is decided internally by the authorities (often without any substantial supporting study).
- 4. In general, the contract subject is a bus line; but in some cities, it is the operation of a given number of vehicles (e.g. Brasília) or the operation in an area (e.g. Campinas). In the case of contracts with fixed periods, this period is generally unconditionally prorrogated for another equal period, without any consideration of the merits of the incumbent operator.

- 5. The authorities ensure the profitability of the operation on the basis of the fare policy; but actually they hardly have precise informations about the real costs. In general, the capacity of the authorities to control effectively the compliance with the regulatory rules is low.
- 6. As a consequence of this essentially not competitive process, the operators have consolidated in the cities where they work powerful cartels, composed by a set of dominant operators and a larger number of minor companies, which fulfil the role to keep average costs high.

The situation described in the former section refers to present times, when the new legislation has not yet turned to be effective at large. Of course, the full application of the new rules will revolve the whole administrative and entrepreneurial life of the sector, pulling the companies off from their stability. On the other side, the Public Administration will have to undergo a deep restructure, as new complex tasks are to be mastered, as the execution of frequent procurement procedures and the administration of formal and rigorous contracts.

Looking at the whole bus industry, the new regime will reinforce the consolidation and growth process of the modern enterprise groups, opening them new markets through the whole country and even abroad (thus the new regime can be considered as a school for global competitiveness). For the more backward groups the remaining alternatives would be to be sold to the winning groups, to search for new niches in passenger transport (tourism, school transport, and the like) or to become franchisees of the modern enterprises (or to be subcontracted by them).

Returning to the present realities, what are the concrete results and reactions that can be already observed? Firstly, the new legislation is being permanently altered, as one of the most often expressed criticism against it is its excessive rigour and detail (Borges 1993). In practice, this can produce difficulties and delays in the execution of the procurement procedures. The bus industry sector has not remained inactive, too. Its strategy has been to hinder its application in the sector. The first attempt has been to put into the Congress a new legislation project on concessions and procurement procedures (Projeto de Lei no. 1974/96), which shall give to the passenger transportation sector a specific regulation in this matter. Of course, this project foresees a highly protective regulation, with long contract periods (15 years, renewable for another 15 years!), subjective, non-economical selection criteria, a fare policy which shall guarantee the full cost recovery (incl. profits plus reserve for future extensions), extensive participation of the operators at the control procedures and a relative freedom to subcontract third operators without any consent by the authorities.

Unfortunately, there is no space to advance more details over the recent procurement procedures executed in the industry. Several attempts have been immediately blocked in the Courts by the operators, which have used relatively irrelevant formal aspects in order to claim a writ. Where the procedures have been put into movement, they hardly have been really competitive in economical terms. Nevertheless,

some cities (e.g. Brasília, Belo Horizonte, João Pessoa) have been able to pull through procurement procedures, although the contract rules are still too generous for the operators (long contract periods that can be doubled without any other condition than the willingness of the operator to continue to operate).

Policy lessons for a new development cycle of the Brazilian urban bus industry

As shown above, although impressive in its size and in its modernisation patterns, the Brazilian Urban Bus industry is in a typical "cross-roads" situation, challenged by several environmental and internal changes. Thus the search for a basic mechanism of a new development cycle is now the very debate. This new organisational and institutional mechanism should be able to ensure the development of an efficient and globally competitive bus enterprise sector that would be able a) to attend the mobility needs of the (presently still captive) population, b) to maintain and even rise its patronage (attracting new passengers from individual transport or at least reducing the flight to the private car), c) to contribute to the induction of a sustainable urban development pattern, but also d) to contribute to the stabilisation of the labour market, e) to develop exportable goods and services, and at least f) to induce new investments from small savers but also from foreign capital.

Some changes are already occurring, as the intensive debate on quality management (e.g. the National Quality Prize for Public Transport, promoted by the National Association for Public Transport; as well the introduction of computerised operational control technology. The most recent trend is the intensive of mini-busses for selective upgraded services, in order to compete with the informal mini-van services and also to exploit a emerging market of car-users sick of worsening congestions and of rising parking costs. Hereby, the need to treat the transit market in a segmented manner, using intensively marketing techniques, has been recognised at last (NTU 1998).

On the other side, the modernisation of the whole industry puts also the question of a regulatory reform. In part, this reform is being forced by the new legislation, although some resistance against its application has been observed, as commented above. But the bus operators themselves are now feeling the need to a new regulatory framework, as the overprotective and excessively prescriptive contracting-out culture is hindering them to develop a fully creative entrepreneurship. On the other side, the operators themselves recognise their political isolation, and a lack of competition inside the industry would be considered by the other more competitive sector as well by the whole public opinion as an immoral situation. Finally, the exaggerated protection would weak the competitiveness of the whole formalised bus industry vis-à-vis the informal sector; and for the near future, the Brazilian firms would also lack competitiveness in front of international competitors, which soon or later will not disregard the opportunities of the huge Brazilian road passenger transport market.

Thus, searching for a new regulatory framework, one could start with the assumption that, at least for the conventional line services, the authorities will keep their planning and regulatory functions, as a full deregulation policy in a British or Chilean manner seems to be out of question. In this "core" service system, it would even be important that the authorities develop their competencies, introducing computerised control technologies and adopting competitive contracting-out practices, including modern contract management techniques.

But beside this core system, several other service markets (school transport, upgraded and exclusive contracted community services, contracted transport for workforce, excursion tours, etc.) should be treated in a more liberal manner, where the operators should develop freely their initiative and creativeness to attract new patronage for public transport. In this "free sector", there should be few entry restrictions by the authorities, and public regulation should be limited to safety and qualitative matters. Only the danger of greater congestions and a endangerment of the economic equilibrium of the main line service system, both provoked by a oversupply of transit services, could justify a more intense intervention in these markets by the authorities.

The result of these boundary conditions would be a composition of different regulatory frameworks, combining different intervention levels, from relatively deregulated services up to strictly publicly planned ones. We can even observe that this "regulatory mix" has already been practised, as in every city line, school, excursion, exclusive and other special services have been running side by side, although the theoretical issues on transport regulation have largely disregarded this (i.e., they have concentrated themselves on the most effective single regulation pattern, mostly only for line services)¹.

Of course, this regulatory approach puts new challenges, as to ensure a equilibrium between the different complementary competing markets (and this competition would be an desired outcome), so that the main line service system does no lose its financial feasibility. It should also be ensured that the line service will not degrade to a "second-class" service, reserved for the passengers that can not afford the prices of the several upgraded options. Another issue would be the congestion problems eventually created by a huge fleet of upgraded minibus services running in the CBD's, which could even generate new masses of trips. (How far could we consider this one outcome compliant with the objectives of a sustainable transport policy?). Framed by these boundary conditions, the objective function of the regulatory mix would to attract the greatest possible patronage.

What would be the outcome of this regulatory reform for the Brazilian bus industry? There can not be any doubt that the already existing concentration process will reinforce, producing a small amount of grand enterprise groups. Of course, this does not mean the end for the small enterprises, as these can

¹ The British deregulated regime can be used as a good example for a compound regulation, as commercial (fully deregulated) services are complemented by tendered services planned by the authorities.

survive exploring market niches, building up efficient and competitive associations and co-operatives or even to go under a franchising contract with major companies (example: the British National Express experience). The design of the local tendering procedures could also ensure the presence of small (but efficient) enterprises, putting up a barrier against excessive concentration.

At last, a further step to a definitive modernisation of the sector would be to open up the enterprises to capital participation by individual savers and by financial institutions, thus contributing to the development of the still modest Brazilian capital market. This would not only reinforce the managerial modernisation (since the financial market requires fully competent management), but also help the operators to get out of their political and economical isolation. Another macro-economically relevant step would be to develop the exportation of services and expertise abroad, mainly in the Latin-American neighbour countries, thus submitting the sector to a full global competition.

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