

BUS TRANSPORT; IS THERE A REGULATORY CYCLE?

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*“We shall not cease from exploration
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.”
T.S.Eliot. “Little Gidding”*

INTRODUCTION: THE CONCEPT OF A REGULATORY CYCLE

In his posthumously published book “The Economics and Politics of Regulation” Douglas Needham propounded the dynamic nature of the regulatory phenomenon in a world of uncertainty, change and multiple, often conflicting, economic interests. He argued that, as all economic actors (including the regulators themselves) pursued their own interests, the outcomes of regulation were not always well aligned with the original intentions. In some phases the regulators sought and acquired more and more powers as they saw the regulated companies taking actions to thwart the original regulatory intentions (what McKie called the “tar-baby” effect). In other phases the effects of excessive regulation might be perceived as sufficiently damaging to justify a shift to an alternative, more liberal market regime.

The timing of the book’s publication – in 1983 – coincided with the early years of transport deregulation in the United States (particularly in the rail, domestic air transport and road freight sectors), but predated the recognition of the potentially significant distinction between competition “in the market” and “for the market”. It therefore did not address the question whether fluctuations between the domination of administration and that of free market forms, and between public and private sector responsibility for production of major utilities, was inherently perennial or whether there was a potential stable long term combination of public role as procurer and private sector role as supplier of these public utility services.

That raises three main questions, namely (i) is there a regulatory cycle in the bus transport sector? (ii) if so, how is it generated? and, (iii) is it inevitable? This paper addresses those questions, in the context of two decades of experience of regulatory reform in the field of public passenger transport, documented mainly through papers from previous Thredbo conferences.

Is there a regulatory cycle in the bus sector?

There is some prima facie evidence of a regulatory cycle in the content of the Thredbo conferences themselves. As early as Thredbo 4, the history of regulation in Sri Lanka was presented as a cycle,¹ which has subsequently taken a further turn. By Thredbo 6 John Preston referred more generally to the possibility of a regulatory cycle in the sector, an idea that he subsequently expounded more fully in looking to the future in the UK.² Moreover, the vocabulary of the conferences has subtly changed from the Thredbo 1 concern with the problems of regulation and the benefits of competition, to a vocabulary of “light touch regulation” at Thredbo 5³; to “horses for courses” at Thredbo 5 and Thredbo 6⁴; to increased flexibility in regulatory regimes at Thredbo 7⁵, and, most recently, in Lisbon, to that of “trust for successful operation of partnerships”.⁶

More substantially, of course, we should seek evidence of regulatory cycles in actual sector experience. When I survey the history of countries with which I am familiar, I discern at least two different types of experience, that of the major industrialized countries and that of the less affluent developing economies. In this paper they are referred to as the post-colonial economies, although some countries such as Thailand and Argentina follow similar patterns even though they have not gone through a recent process of decolonization. While the cycles have quite a lot in common, they seem to me to exhibit significant differences both in content and motivation.

The industrialized country regulatory cycle

The industrialized country cycle is summarized graphically in figure 1. It consists of a cycling through private competitive supply, unregulated private monopoly, regulation of the private monopoly, nationalization and then back, through further regulatory reform to some type of private competitive supply.

¹ Roth, G and J Diandas. “Alternative Approaches to Improving Route Services in Sri Lanka” *Thredbo 4, Rotorua, 1995*

² Preston, J. “An overview of public transport reforms in Great Britain and forecasts for the future” *International Journal of Transport Economics, 28, 1, pp23-48*

³ Carr, J.D. “Light touch regulation for the privatized bus industry” *Thredbo 5, Leeds, 1997*

⁴ Preston, J, and D. van de Velde “Competitive tendering of public transport: Report on Theme A” *Thredbo 8, Rio de Janeiro, 2003*

⁵ Preston, J and D.M.van de Velde “Competitive Tendering of Public Transport: Report on Theme A” *Thredbo 7, Molde, Norway, 2001*

⁶ Stanley, J. “Workshop B Report: Creating and Maintaining Trusting Partnerships” *Thredbo 9, Lisbon*

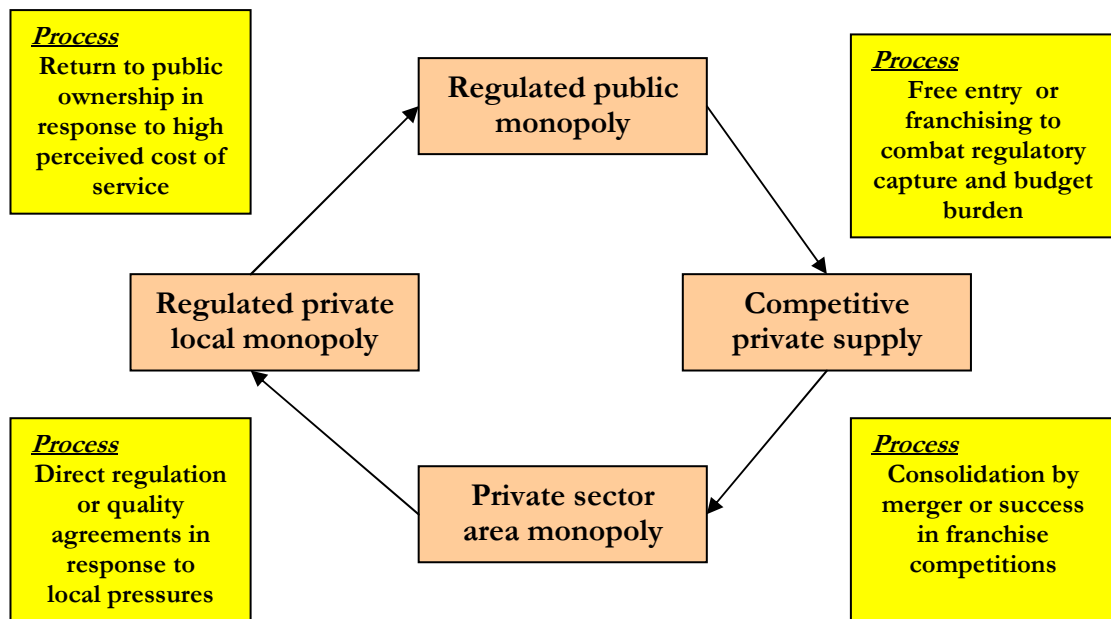


Figure 1: The industrialized country regulatory cycle

This cycle may be exemplified by the experience of the UK. In the immediate post First World War period bus services were competitively supplied by private companies. Problems of service co-ordination and service quality led to the introduction, in the early thirties of a system of administratively distributed route monopoly permissions. For ease of administration (probably a first sign of regulatory capture) and by commercial consolidation by purchase and merger, these route permissions gradually developed into local area monopoly arrangements. By the extension of municipal enterprise and by the policy dogma dictated nationalization of the private suppliers this transformed into local public sector monopolies after the Second World War. Even where areas were shared – as in the major metropolitan areas – the suppliers were usually one national and one municipally owned company. Smaller companies had only peripheral roles and there was virtually no truly informal sector element.

With increasing car ownership reducing demand, fare regulation was supported by subsidy, determined locally, but partly funded by national government as a result of the system of inter-governmental transfers. As the budget burden of this system increased, and the conservative government failed to impose fiscal discipline on the left controlled metropolitan authorities, national legislation was used to force either free entry or competitive tendering of franchising and to denationalize supply ownership.

Of course, not all countries follow precisely that same route. France has traditionally used area monopolies in urban public transport and given more freedom to its concessionaires. But since 1982 it has also felt the need to encourage more competition between operators⁷ The Netherlands adopted a much more cautious and experimental in its move towards franchising.⁸ And in Oslo, Norway, the development of a performance contract used the threat of competition if performance did not meet specified standards as an alternative to actual competition, viewing this as the first stage in the development of quality contracts.⁹

⁷ Duthion, B., P Vincent and J.C.Ziv "The SAPIN legislation and its effects on tendering and competition in public transport in France" *Thredbo 6, Capetown, 1999*

⁸ Van de Velde, D.M. "The Experience of the Netherlands: Towards Competition" *Thredbo 6, Capetown, 1999*

⁹ Norheim, B. "Competitive pressure as an alternative to competitive tendering? The development of a performance contract in Oslo" *Thredbo 6, Capetown, 1999*

The difference in starting point clearly was a great influence on the cost savings which accrued from the introduction of competition. In the most recent review the initial impacts were still being estimated as ranging between 20% and 50% where a transfer from public monopoly to private competition was concerned, though rather smaller where the change involved moves from negotiated to tendered contracts for private operators. In the longer term some of these benefits have receded as bidders make more provision for asset replacement, worry less about retaining market share at all costs, and make less errors in bidding. But the cost reductions are still seen as substantial.¹⁰ Only two major exceptions to that have been observed. In South Africa failure to date to mobilize the benefits of competitive tendering appear to result from complications introduced by government's attempt to simultaneously increase quality of service and use the franchising system as an instrument of black economic empowerment.¹¹ In France, the combination of strong horizontal integration with other municipal service supply (particularly water), the highly concentrated structure of only three major supplying companies, and the large size of the tender packages (usually a whole city), make the failure to gain the cost reductions that had been obtained elsewhere unsurprising.¹²

The possibility that structural adjustment, collusion and predatory action may negate the cost reducing effects of competitive tendering, has, from the outset liberalization, raised concerns about the sustainability of effective competition in the sector.¹³ Subsequent experience has heightened that concern as a process of ownership consolidation, establishment of recognized areas of influence in tendering has reduced the number of suppliers and the extent of competition in the shire and metropolitan counties. Even in London, where comprehensive competitive tendering prevailed, the number of competitors and the sharpness of competition have declined. If that cannot be offset, that is a possible reason for an ensuing shift to other regulatory structures.

A similar effect may be in play in the unregulated market. Particularly in the metropolitan areas, where the Passenger Transport Executives have lost their rights to supply service directly on an exclusive basis, but where the market outcome is almost a private monopoly supply (albeit potentially contestable), the authorities have begun to consider various forms of "quality partnerships" with the dominant suppliers. This is sufficiently close to the situation which prevailed pre deregulation for the cynic to consider that the cycle is already complete. It is discussed in more detail below.

The post-colonial economy regulatory cycle

The post colonial country cycle, shown in simple diagrammatic form in Figure 2, by definition has a different starting point. Many of the countries which were formerly British or French colonies until the late 40's inherited urban bus sectors which were privately operated – usually by a company from the original colonial power – but subject to substantial control as a private monopoly. On achieving independence some governments immediately nationalized the expatriate companies, while others simply reasserted and strengthened the regulatory powers. In both types of case the newly independent, mostly quasi socialist, governments usually felt it necessary to implement and enforce strict controls on fares in the interests of passengers. In many cases the immediate effect of these controls was that the expatriate

¹⁰ Wallis, I.P. and D.E.Hensher "Competitive tendering for urban bus services; international experience and issues" *Thredbo 9, Lisbon. 2003*

¹¹ Walters, J.A. "Overview of public transport policy developments in the commuter bus industry in South Africa" *Thredbo 9, Lisbon. 2003*

¹² Yvrande-Billon, A. "The Attribution Process of delegation Contracts in the French Urban Public transport Sector: Why is Competitive tendering a Myth?" *Thredbo 9, Lisbon. 2003*

¹³ Gwilliam, K.M. "Setting the Market Free; Deregulation of the Bus Industry" *Journal of transport Economics and Policy*. Vol23 No 1. January, 1989.pp29-44

companies withdrew from the country or voluntarily accepted nationalization on the best terms they could get.

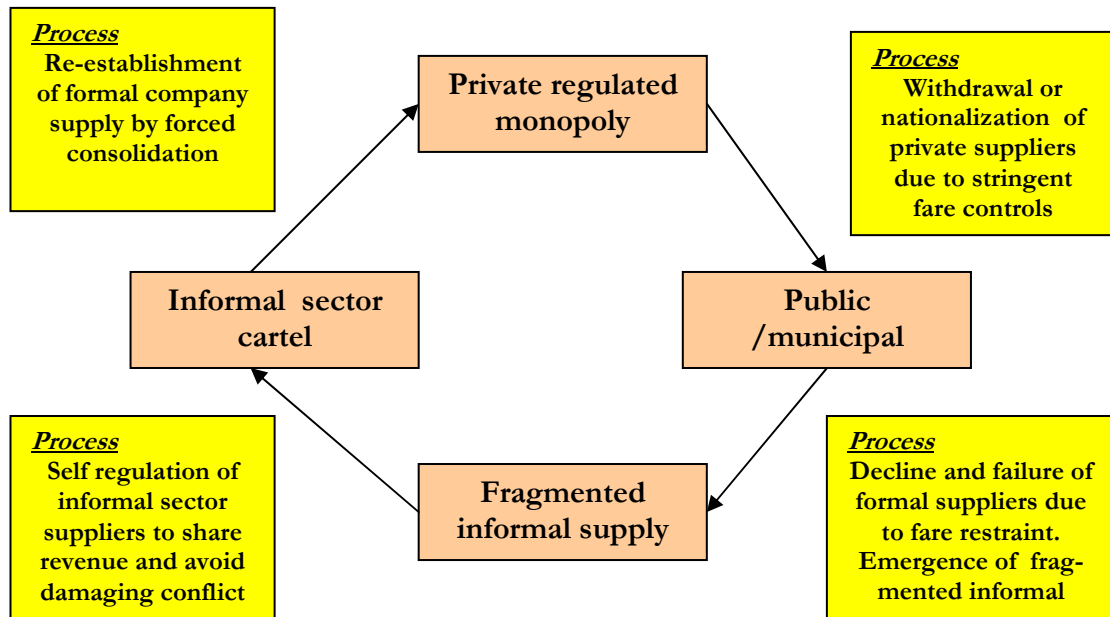


Figure 2: The post-colonial regulatory cycle

But that was not the end of the story. As the constraints on commercial freedom of operators – whether privately or publicly owned – became increasingly binding, their finances deteriorated dramatically. In some cases, such as that of Anbessa in Addis Ababa, Ethiopia, where the government has frozen fares at the 1992 level, the government has recognized the need for subsidy. But then, as in Douala, Cameroon, where the budgetary burden of adequate subsidy became excessive, and the failure of the formal bus company SOCATUR left the sector effectively unregulated, the sector relied increasingly on service from small vehicles in fragmented ownership. Eventually cash starvation drove most of the traditional large companies in Africa to bankruptcy. The traditional services were then totally replaced by an informal sector which was sometimes more able to survive because of lower costs and sometimes escaped the constraints on the traditional formal sector enterprises. Interestingly, the same experience can be observed in the 90s in several of the transitional economies of Eastern Europe and Central Asia, which were in a sense also in a post-colonial era.¹⁴

The informal sector, though initially chaotic, will usually arrive at some form of self regulation to share revenue, often in the form of “tour-de-role” dispatching of full vehicles from a central terminal. While this is not a very efficient use of vehicles or drivers time, and can have significant disadvantages for passengers, it does avoid conflict. Where this is seen to be particularly inefficient, some form of public sector regulation (in the case of some parts of Sri Lanka, the specification of common timetables) will re-emerge. ¹⁵

In a number of countries, the wheel has now almost come full circle. In Africa, in Accra, Lagos and Dakar governments have attempted to establish large bus operation either by re-creating publicly owned companies (as in Accra) or by subsidizing and protecting a selected private company (as in Dakar). Similarly in the Dominican Republic in the Caribbean, the government has re-established a public large bus operating company, OMSA.

¹⁴ Gwilliam, K.M., R.T.Meakin and A.Kumar "Designing Competition in Urban Bus transport: Lessons from Uzbekistan" *Thredbo 6, Capetown, 1999*

¹⁵ Gwilliam, K.M. "Creative Problem Solving in Developing Countries" *Thredbo 9, Lisbon, 2005*

In some cases it is arguable that we have already seen more than one turn of the cycle. For example, in Argentina, the economic collapse around 2000 precipitated the re-emergence of a private sector just as fragmented as that which followed the decline of the public sector under the Peron regime in 1962, which had in the period between that date and the late nineties reconsolidated into a stable medium scale company franchising system.¹⁶

Unfortunately, in none of these cases have the fundamental causes of the decline of big bus services (inappropriate regulatory control unmatched by adequate financial support) been addressed. So, as is already apparent with DDD in Dakar, it is likely that the effort will ultimately fail because of the unsustainability of the budget burden which a successful effort would require.

What drives the cycle in bus regulation?

In the stereotype processes set out above we have identified a number of drivers which appear to have molded the regulatory situation. Some of these deserve more careful consideration.

Inefficient fare regulation

There is little doubt that inefficient fare regulation has led to the failure of the traditional formal companies in the developing countries of Africa and in some of the transitional economies of Central Asia. There have traditionally been two or three different elements in this inefficiency.

First, there has been excessive, unfunded, constraint of general fare levels. This has been the story of most African post-colonial countries, and also of some of the Central Asian transitional economies. The process of decline in those circumstances has been well documented in Thredbo conferences.¹⁷ It usually takes the form of initial reduction in expenditures on vehicle maintenance and replacement ultimately followed by reduction in available fleet. Refusal to recognize this by revising fares or schedules only makes things worse and hastens the development of the informal sector replacements.¹⁸

Second, the impacts of control of fare structures have often been destructive. Flat fares in large cities have the apparently beneficial social effect of making it possible for the poor, who in many cities live on the periphery of the city, to access employment and other facilities without disadvantage. But their effect has often been exactly the contrary. Flat fares for formal operators have had to be set sufficiently high to finance cross subsidy of longer routes. This has stimulated an informal unregulated sector to enter and undercut the formal operators in their more profitable areas, thus further undermining the formal sector, which was often unable to make any commercial competitive response. Their best protection might perversely be simply to cut service on the longer routes. Even if the informal sector was subject to the same flat fare control, as in the Dominican Republic, the result would simply be a reduction in average route length so that the peripherally located poor actually finish up paying two or three fares to complete a journey from periphery to centre.

Third, there have been an excessive number of unfunded concessions. For example, the countries of the former Soviet Union, all inherited a large number of concessionary fare

¹⁶ Salvucci, F.P. "Observations on the Buenos Aires experience with increased private sector roles in the production of commuter rail, transit and bus services" *Thredbo 5, Leeds, 1997*

¹⁷ Gwilliam, K.M. Competition in passenger transport in the developing world" *Journal of transport Economics and Policy*. Vol 9. 2002. pp 99-118

¹⁸ Gwilliam, K.M., "Bus Franchising in Developing Countries: Some Recent World Bank Experience" *Thredbo 8, Rio de Janeiro. 2003*

obligations which had traditionally been funded through the budget support of the parastatal companies. In some cities as much as 80% of passengers had the legal right to free or reduced fare travel. And when such a large proportion have legitimate concessions it becomes very difficult to collect fares from those who should pay. Economic liberalization in the economies undermined the fiscal base for support. Moreover in some cases, such as the Russian Federation, new democratic Parliaments could not resist testing their populist muscle by adding even further concessions just at the time that the basis for their finance was disappearing. In some African countries this has also had the perverse effect that the services which survived were those serving subsidized but relatively affluent sections of the population such as middle class higher education students.¹⁹

In summary, inefficient fare regulation has been a major driver of regulatory collapse and of informal sector development. Whether this can be effectively combated, and how, will be discussed in the concluding section.

The adverse effect of inappropriate fares control in Dakar, Senegal

A state owned bus company, CSTC, was created in the late 1940s to provide public transit services between Plateau and the Medina area. This service was complemented by informal minibuses, or “cars rapides”, operating initially in the suburban areas that were not covered by the formal services. In the early 1970s, CSTC was restructured and renamed SOTRAC. Fares were controlled and the company was obliged to offer concessions to certain groups of favoured travellers (school children, pensioners etc.). The Government was unwilling to adjust fares in line with inflation and, during the Structural Readjustment Programs of the mid-1990s, the problems were compounded by the withdrawal of the tax concessions (on import duty and TVA) that the company had enjoyed. SOTRAC’s financial position deteriorated and the company was unable to replace old vehicles. The fleet declined from 505 vehicles in 1987 to 200 in 1996. By this time SOTRAC was technically bankrupt. The Government therefore decided to privatize the company and a new private company Dakar Dem Dik (DDD)¹ took over the assets of SOTRAC and started operation in 2001. DDD started the operations in 2002 with 60 buses, but the number reduced to less than 40 by 2004, resulting in poor service frequency, long intervals between buses and frequent breakdowns. Over the past two years, additional buses have been procured with bi-lateral assistance, bringing the total number of buses to about 400. The terms of financial arrangements between DDD and government are not publicly available, but the basis of DDD concession is that it will continue to charge the same fares as the predecessor company, SOTRAC. A regular subsidy is currently being paid although the amount is not known.

Source: Kumar and Barrett op.cit

Regulatory capture and corruption

The Thredbo conference series started at the zenith of the concern in the western economies with regulatory capture. The first conference was close to a proselytizing exercise for deregulation, associated with a shift from public sector to private sector supply. Many of the weaknesses of regulatory systems discussed in the general economics literature of the previous decade²⁰ were considered to exist in the bus transport sector. In particular, the padding of costs through the “Averch-Johnson effect”²¹, was seen to offer very large cost savings through deregulation.

¹⁹ Teurnier, P and B Mandon Adolehoume “L’Integration du transport artisanal dans un Service Public de transport Urbain: le Cas de Dakar”. *Transport, Transfert, Developpement* No 8. CODATU/INRETS September, 1994.

²⁰ Bailey, E.E. *economic Theory of Rregulatory Constraint*. Lexington Books. 1973

²¹ Averch, H and L.Johnson. “The Behavior of the Firm under Regulatory Constraint” *American Economic Review*, December, 1962

The actual process of regulatory capture in the bus industry was not deeply discussed at the time. It was generally presumed to consist of slackness in regulatory control resulting largely from the asymmetry of information between regulators and operators. In the UK that was magnified by the fact that regulation on entry to the market and control of fares and subsidy payments were institutionally in different hands. One of the great merits of bus service franchising was that it connected the fares, subsidy and service supply issues in one process and one institution. But recognition of that advantage came rather later as the contest between the “free-entry” and “comprehensive competitive tendering” schools heated up.^{22,23}

The distinction between capture and corruption is not always sharp. Some US literature on regulation in the industrial economics context emphasized a community of interest between regulators and regulated based not only on administrative convenience but also on protecting the possible future return of the regulator to the industrial sector.²⁴ In the developing country context, with limited pools of skill and experience that nexus can be even tighter. For example, in the early stages of reform in Bishkek, capital of the Kyrgyz Republic, the sector regulator was the former General Manager of the public sector supplier, with whom he shared an office. And when the regulator was impeached by the State Anti-Monopoly Commission, he simply exchanged functions and titles with his successor as General Manager.

Those concerns are not restricted to developing countries. One of the origins of the “Loi Sapin”, that reformed the arrangements for urban transport procurement in France in 1993, was a series of scandals over procurement of public services. “The main focus of the courts was on local elected officials who used their elected positions to get richer or to obtain various advantages such as free travel or high priced gifts. Even a Minister of the central government went to jail.”²⁵

Corruption can undermine sector efficiency in many ways. Where bribery rather than operational efficiency is the route to gaining franchises that is the direction in which entrepreneurs will direct their efforts – at the expense of operational efficiency. Where drivers’ licenses can be simply bought, or police can be cheaply bribed to ignore the absence of a driver’s license, safety is the loser. Similarly where vehicle inspection and maintenance is corrupt, environmental quality is the loser. In all these ways corruption can undermine what may appear prima facie to be a satisfactory regulatory structure, and fuel the demand for further regulatory reform.

Structural change in the operating industry

Structural change in the operating industry has been central to the cycles observed both in the post-colonial and the industrialized countries.

In the post-colonial countries, the problem has been excessive fragmentation, which has typically occurred as the informal sector fills in the gaps left by a declining, formal big bus sector. While that has the immediate beneficial effect of preventing the disappearance of public transport service, in the longer term it brings with it problems of discipline and self-regulation, discussed below. Inherent in that situation is the common perception of government that some further structural change to re-establish a more stable formal sector is desirable.

²² Gwilliam, K.M., C.A.Nash and P.J.Mackie “Deregulating the bus industry in the UK – The case against” *Transport Reviews* 5. pp105-122

²³ Beesley M.E. and S.Glaister “Deregulating the bus industry in the UK – A response” *Transport Reviews* 5 pp 133-142

²⁴ Bailey, E.E.(ed) *Public Regulation: New Perspectives on Institutions and Policies*. MIT Press, 1987

²⁵ Duthion,B., P Vincent and J.C.Ziv “The SAPIN legislation and its effects on tendering and competition in public transport in France” *Thredbo 6, Capetown, 1999*

There are a number of ways in which that has been sought. In some of the African countries, as already discussed, there have been attempts to recreate a large bus company either by public sector investment (as in Ghana) or by protection of a selected formal private sector supplier (as in Senegal). In Chile, in the early nineties it was attempted through the introduction of a system of route franchising. Both types of policy have failed, or are in the process of failing. In the African countries this is because there is still no adequate financial basis for a stable formal sector operation given the low fares allowed in the interests of “affordability”. In Chile it was because of the failure of government to enforce the conditions of the franchises by insisting that the franchise holder did actually control the operation of services under his franchise rather than simply sub-letting them to a set of fragmented operators which were beyond his control. In both types of case the outcome of the first response is deemed unsustainable, and so the cycle is rolled forward to some more substantial regulatory reform.

In the industrialized countries, the problem has been perceived as one of excessive concentration. In the UK, while elimination of restrictions of freedom to enter the market, and divestiture of the parastatal National Bus Company in over 50 separate companies under the 1985 Transport Act made fragmentation possible, in practice the outcome was quite different. By 2000, through the process of merger (and a bit of predatory practice) the industry had reconsolidated so that the top five groups controlled over two thirds of the national market.²⁶ In those conurbations where there had previously been a PTE operation and an NBC operation there remained an effective private sector duopoly, usually involving a stand-off from direct competition. Even in London, where a system of comprehensive competitive tendering had been introduced by the Transport, London Act of 1984, the number of independent groups operating in the market has declined, as has the average number of bids per tender.²⁷ It is important in this context to note the essentially local nature of the bus market. In a discussion of the role of the small operator in Sweden it was observed “the bus market was characterized by the existence of a large number of privately and publicly owned enterprises, yet with very little competition between them”.²⁸

A number of factors were perceived to drive market concentration. Some, such as the latent instability of some of the post-privatization companies, the excessive reliance of many management /employee buyouts on loan capital,²⁹ and the aging of the individuals involved in the initial buyouts, were very specific to the particular UK history. Others, relating to the advantages of group scale in purchasing, raising capital, etc are more universal. Whatever the drivers, however, the high degree of concentration post liberalization has led to concerns about the extent to which the market is effectively contestable and even about the long term viability of the competitively tendered franchising arrangements. Certainly it brings in to question the effectiveness of the supporting institutions which are necessary for the continued existence of a competitive market.

The inherent advantages of the small vehicle

As described above, the informal sector and the small vehicle is represented, at best as that of a necessary evil because they undermine the traditional formal bus service. In particular, emphasis tends to be placed on their unfair or predatory advantages in the form of non-payment of taxes, avoidance of regulatory controls and their use of bribery or intimidation to

²⁶ Roberts, C. “Cross-modal ownership in Passenger transport: the British Experience since 1985” *Thredbo 8, Rio de Janeiro, 2003*

²⁷ Mackie, P.J. “Principles of Public Policy for Bus Services” in Grayling, T. (ed) *Any More Fares?* IPR. London. 2001

²⁸ Nordenlow, L and G Alexandersson. “Standing in the Shadow of the Giants: Conditions for Entry and Survival of Small Businesses on the deregulated Bus and railway Markets in Sweden” *Thredbo 6, Capetown, 1999*

²⁹ Thomas, M. “Veni, Vidi, Vendi” *Thredbo 4, Rotorua, 1995*

bolster their market position. That is an incomplete representation of the reality. Small vehicles may have a legitimate economic advantage arising from differences from the formal large bus in cost structure and in the product characteristics.

The main costs of operation of bus services are labor, fuel and capital. While there is a common perception that there should be economies of scale in vehicle size, in fact each of these major cost elements vary much less per passenger than might be expected. While in industrialized countries labor may account for up to two thirds of total costs, in developing countries where wages are very low, or unemployment rife, the cost of labor may be as little as 20% of the total costs. In those circumstances the labor cost advantage of the large vehicle is undermined. This is especially likely to be the case where unionized formal employment is at wages above a free market rate. The general proposition has been adumbrated that “the kombi-taxi, or its operational equivalent, is an inevitable development in urban public transport markets where there is a great divergence between the earnings (and costs) of workers in regular public transport and the minimum acceptable earnings of people otherwise out of work.”³⁰ Fuel consumption per passenger might also be expected to be an advantage of the large vehicle, but in practice large vehicles require very heavy load factors for this advantage actually to accrue. Finally, the capital costs per passenger do not differ nearly as significantly as might be expected. The capital costs per seat vary very little through the range from 5 to 100 seats per vehicle. While the larger vehicles should have longer lives due to their stronger construction, this does not always happen due to inadequate finance of maintenance. The evidence of world experience is thus that the direct costs of operation per passenger kilometre differ relatively little in many cases, and that inefficient operation by parastatal monopolies or poorly thought out regulation by public authorities may help to undermine the advantage of large vehicles.³¹

There are also a number of characteristics of small vehicle services – speed, frequency, network density, etc. - which may be highly valued by passengers. The evidence worldwide is that where un-served market niches appear the informal sector is likely to start supplying them with small vehicles. Above all, the threat of the small vehicle, actual or potential, may be seen as an important instrument for keeping the formal sector honest by offering a diversity of service responding to market needs.³² For example, one interpretation of the growth of the “clandestinos” in Brazil is that it was a response to the anti-competitive character of existing bus regulation. The regulatory problem, on this interpretation, is not how to suppress the small vehicle to protect the formal sector but how to find an appropriate role for it without losing its stimulating impact on the formal sector.³³

Self regulation

In most of the post colonial economies of Africa, as well as in some of the transitional economies, control and regulation of the urban transport market by operators associations has evolved as an industry response to the regulatory vacuum created by the failure of government. In Accra, it is the Ghana Private Road Transport Union; in Kampala it is the Uganda Taxi Operators and Drivers Association; in Lagos, each danfo and molue is affiliated to a route association (for example, the Self-Employed Commercial Drivers Association of

³⁰ Joy, S. “The kombi-taxi in South African cities” *Thredbo 4, Rotorua, 1995*

³¹ Gwilliam, K.M. “International Experiences with Low Capacity Vehicles in Mass Transit Systems” *Paper presented to the SABOA conference on Public Transport, Pretoria, 2006*

³² Balassiano, R. And M.G.C.Braga “Buses and Vans: Assessing Public Transport Competition in Rio de Janeiro, Brazil” *Thredbo 6, Capetown, 1999*

³³ De Franca Barboza, K.F., R.D.Orrico Filho, and E.M. dos Santos. “Competition or Complementarity: regulatory options for urban road transit in Brazilian Cities” *Thredbo 8, Rio de Janeiro. 2003*

Nigeria or the Lagos State Urban Bus Owners Association).³⁴ In Faisalabad, Pakistan, this was formalized through an ostensibly open organization in which any member of the public, as well as the proliferation of minibuses owners could participate.³⁵

In most cases these associations effectively become self regulating monopolies, it being relatively rare for governments to limit the number of vehicles in any association as in Addis Ababa, where a maximum of 750 vehicles per association is set. In those circumstances they are even able to undermine government efforts to re-establish a formal bus sector (see Box 1 on experience in Kampala)

The power of the informal sector in Kampala, Uganda

In Kampala, the privately owned Uganda Transport Company (UTC) held the exclusive franchise for bus services until its nationalization in 1972. At that time its only competition came from shared taxis based on saloon or estate cars. Following its nationalization, and the period of national chaos prior to the establishment of the present Government in 1986, UTC both contracted and focused more closely on its long-distance services. The market for urban transport services in Kampala became open to private sector operators, mostly using small minibuses though a few Kenyan sourced midi-buses were also deployed. Early market entrants earned high returns that then attracted additional investment until the market saturated. At that stage, the Uganda Taxi Operators and Drivers Association (UTODA) emerged to bring order to the market through self-regulation and control of the terminals. The UTODA benefits from strong political patronage and some senior officials are major fleet owners. Individual vehicle owners have been marginalized and the Taxi Owners Association is no longer active in Kampala. In 1994 a commercial vehicle distributor established City Link as a private-sector large bus operation. This had some 40 vehicles in service, with finance committed for a further 80 buses. However UTODA was able to organize effective competition to this initiative and City Link shortly collapsed.

Source: Kumar and Barrett, 2007. op cit

Despite the dangers of monopoly exploitation, self-regulation of the sector has often resulted in a more orderly market in which the worst consequences of ‘competition on the route’ have been avoided. Route terminals are well managed, within the constraints of their infrastructure, and overloading and fare gouging is largely avoided.

But there still remain some serious adverse consequences of union control. The route network tends to be rigidly defined by the location of the terminals which the unions control rather than by the patten of passenger demand. As a consequence a high proportion of passenger journeys involve one or more interchanges, and the final point of alighting is often at some distance from the desired destination particularly in the central business district. Further, in order to enforce an “equitable” distribution of revenue among their members, unions adopt the principle of waiting for the assembly of a full load before commencing operation on the route. Except at peak times, this imposes high waiting times at terminals, both for vehicles and for passengers. and makes it very difficult for intending passengers to access the service along the route. This, in turn, requires an extended walking leg from the point of journey origin to the route terminal to ensure access. It is also normal practice to force the waiting passengers to sit in the vehicle in the full sun. By loading vehicles in strict rotation, the unions also prevent intending passengers from rejecting vehicles that fail to meet expected standards

³⁴ Kumar, A and I Barrett. “Urban transport in Sub-Saharan Africa: a Case Study of Large Cities” Unpublished first draft. World Bank, 2007

³⁵ Russell, J. and G.Abbas Anjum “Optimising Urban Public Transport Regulation in Pakistan: the Faisalabad NGO Model” *Thredbo 5*, Leeds, 1997

of cleanliness or physical condition, thus lowering the incentive for vehicle owners to improve vehicle quality.³⁶ It is these inherent weaknesses of self regulation that tend to stimulate governments eventually to take back regulatory control.

Quality concerns: Partnership and competition

Early attempts to avoid a competitive process which was portrayed as likely to encourage a reduction in quality concentrated on performance based contracts.³⁷ What is not clear, however, is why the conditions that are to be embodied in such contracts could not be equally embodied in the tendering system without any loss of competitive impact.³⁸ That is certainly the direction in which tendering of services has moved in Scandinavia.

A rather different problem arises where there is free entry into the local bus industry. In those circumstances local political authorities appear to lose influence over public transport supply, though they still have the power, through their infrastructure investment and traffic management functions, to significantly mold the profitability of private supply of public transport. Hence where, by consolidation or competitive advantage, effective local monopoly of supply has re-emerged, there also tends to emerge a community of interest between the local transport authority and the operator. This led to a concern for some “light touch regulation” to address quality issues through improving entry standards to the industry on the one side and more positive actions by local authorities to promote public transport on the other.³⁹

This generates the beguiling idea of a “quality bus partnership” (QBP) in which the operator responds to the expressed wishes of the authority as a quid pro quo for actions by the authority to increase the attractiveness of the sector they are supplying. This has been elegantly (but vaguely) depicted as “A facilitation partnership between all stakeholders in the supply chain, identifying the gaps between enablers and processes and moving the exclusive foci on the operator to a more holistic focus under which individual and aggregate system performance should be assessed”.⁴⁰

There is already some evidence of such partnerships. In the UK, following a Bus and Coach Council campaign to secure government support for measures to increase bus patronage, local authorities were given access to Supplementary Credit Approvals and Transport Supplementary Grant for such projects under a Special Funding Initiative. In two thirds of the cases there were no collateral commitments made by the bus operators 70 bus-based capital schemes were funded, mostly for traffic priority measures. Proposals under this initiative became models for the generation of QBPs that have followed. By 1999, 63% of major bus operators and authorities had committed themselves to some sort of QBP. Two thirds of these involved a co-ordinated set of measures in a specific corridor or area. It has been suggested that such partnerships need to be multifaceted, including an “umbrella” partnership with all operators and a set of agreements on concessionary fares, inter-availability of tickets, information provision, etc., supplemented by agreements with specific operators on specific corridors.⁴¹

³⁶ Kumar and Barret, *op cit*.

³⁷ Goebel, G “Performance Based Contracts as a Substitute for Competition Models” *Thredbo 5, Rotorua, 1999*.

³⁸ Macario, R. “Quality Criteria Applied to the Tendering Life Cycle” *Thredbo 6, Capetown, 1999*

³⁹ Carr, J.D. “Light touch regulation for the privatized bus industry” *Thredbo 5, Leeds, 1997*

⁴⁰ Hensher, D.A. and R.Macario “Organization and Ownership of Public transport Services: report on Theme C” *Thredbo 8, Rio de Janeiro, 2003*

⁴¹ Huntley P. “ Better bus services: partnerships for the future” in Grayling, T. (ed) *Any More Fares?IPR*. London. 2001

Some theoretical justification has been offered for such partnerships.⁴² In a modelling exercise which incorporated competitive response and dynamics in the assessment of the effects of a QBP in the context of the QBP sufficiently increasing the attractiveness of a corridor to stimulate competitive entry on a hypothetical route, both price and frequency competitive strategies were assessed.⁴³ The conclusion was that, at least in the short term, there would be an increase in consumer surplus, with or without competitive entry. However, with service competition the incumbent profit on the hypothetical route fell to such an extent that overall welfare (the sum of consumer and producer surplus) also fell.

What this modelling did not address was the longer term effects of the QBP on competitive pressures in an open market. The critical question at this stage is whether the immediate potential gain from mutually beneficial collaboration outweighs the long term loss of possible competitive pressure.

The alternative, also provided for in the UK in the Transport Act 2000, is a Quality Bus Contract (QBC). In its simplest form this is little more than a route operating franchise including clearly specified quality of service obligations on the supplier. The objections to this are that it reserves for the authority a monopoly of initiative. There is no reason in principle, however, why it should not be extended to a corridor or area basis, and give much wider commercial freedom to the operator. This would effectively involve contracting out the tactical function in bus sector management – producing a system looking more like the traditional French delegatory contractual arrangement.⁴⁴ This is particularly a context in which a concern for trust between the partners becomes crucial. ⁴⁵The difficulty with that structure – as exemplified in the history of French public transport since about 1982 – is that of maintaining some effective competitive pressure and avoiding a high degree of capture, if not corruption.

Institutional inadequacy

Regulatory failure is almost by definition institutional failure. But so is market failure, as it implies that the general conditions in which the market operates are not incentive compatible with economic efficiency. In that sense the transition through the stages of a regulatory cycle has been fuelled by the inadequacy of the institutions. It is germane therefore to look a little more closely at the nature of the various categories of institutional failure and how they contribute to the regulatory cycles.

In the post-colonial countries the weakness is often in the transport regulatory arrangements themselves. First, there is often no appropriate focal institution to handle the problems of bus regulation. This may be because of an overlap of jurisdiction between national, state and municipal levels of government (as in Accra, Ghana and most Brazilian conurbations where it frequently causes conflict over policy towards the informal sector) or between authorities at the same hierarchical level as in Manila, Philippines or Lima, Peru). It may be because of a separation of responsibility for regulating the private and public sectors (as happened in the development of the private sector in Sri Lanka), or parts of the system (as in the case of Transmilenio and the rest of the bus system in Bogota, Colombia).

⁴² Toner, J. "Analysis of Quality Partnerships." *Thredbo 8, Rio de Janeiro. 2003*

⁴³ Whelan, G.A., J.P.Toner, P.J.Mackie and J.M.Preston. "Modelling Bus Quality Partnerships" *Paper presented to the world Conference on Transport Research. Seoul, Korea. 2001*

⁴⁴ Preston, J. "Contracting out Public transport Planning: options and prospects" *Thredbo 9, Lisbon, 2005*

⁴⁵ Stanley, J., J.Betts and S.Lucas "Tactical level partnerships: A context of trust for successful operation" *Thredbo 9, Lisbon, 2005*

Second, there may be a focal institution, but wrongly located. It is quite common for central governments to take a special interest in their capital city, and hence to keep the regulatory power for that city in central government hands. That has been the case in Santiago Chile and, in a rather different way in Bangkok, Thailand. While there is no reason why a central government ministry should not be a competent regulator there will be a tendency for this arrangement to undermine co-ordination of public transport development with other functions which are exercised locally (land-use planning, traffic management, etc.). Moreover, the exclusive concern of the central government with the capital city may result in neglect of the issues of secondary cities.

Third, even where there are appropriate institutions, they may be too weak for the tasks which they have to perform. For example, in many multi-municipality conurbations the regulatory power rests with the individual municipality which does not have the requisite skills to perform the function adequately.

Whatever the origin of the issue, the absence of a metropolitan multi-modal passenger transport agency makes it difficult for any stable regulatory regime to emerge. Moreover, in the context of rapidly expanding cities with vastly differing political institutions and histories, the design of an appropriate authority presents severe philosophical as well as practical problems.⁴⁶ While the metropolitan planning organizations in the US cover an even wider spectrum and tasks than many European Metropolitan Transport Planning Authorities they do offer one possible pattern for developing country institutions.⁴⁷ Similar types of body are now being established in some African cities such as Lagos and Dakar.

In the industrialized countries where there are large corporate bus operators the institutional weaknesses often lie at a higher level. Competition requires competitors behaving in a non-predatory fashion, subject to constraints both on structure and competitive practice. The structural difficulty of defining and maintaining an acceptable degree of competition at the local level has been discussed above. And there are similar difficulties with regard to competitive behavior. For example, in the UK the 1985 Transport Act extended the general law on restrictive practices to cover the bus industry. But in the immediate post deregulation period, a good deal of fairly obvious predatory practice escaped effective control. Under a subsequent Competition Act the nature of an unacceptable practice has been more fully expounded.⁴⁸ However, there are many issues which might appear to be restrictive of trade, such as timetable co-ordination, inter-availability of tickets, etc., which have continued to be difficult to deal with in practice. The European institutions have taken over five years in trying to frame an appropriate regulation in the period since 2000, and look like finishing with an instrument which is very weak and allows almost any system which a country chooses. ⁴⁹ Even in the relatively simpler case of bidding for rail service tenders in Sweden, there has been considerable difficulty of determining whether a bid was predatory or not.⁵⁰

Is the regulatory cycle inevitable?

In conclusion, let us discuss whether the process of continuing regulatory change that I have described is inevitable or even desirable.

⁴⁶ Macario, R. "Restructuring, Regulation and Institutional Design: A Fitness Problem" *Thredbo 9, Lisbon. 2005*

⁴⁷ Plumeau, P.E. "Metropolitan Planning Organizations in the United States – Issues and Challenges" *Thredbo 9, Lisbon. 2005*

⁴⁸ Hoban, M. "The July, 1998 White Paper and the Competition Bill" *Paper presented to the seminar on Integrated Transport: Implications for Regulation and Competition. Hertford College, Oxford. 1998.*

⁴⁹ van de Velde, D. "Regulation and Competition in the European Land transport Industry: Recent Evolutions" *Thredbo 9, Lisbon. 2003*

⁵⁰ Alexandersson, G. and S Hulten "The Problem of Predatory Bidding in Competitive Tenders: A Swedish Case Study" *Thredbo 8, Rio de Janeiro. 2003*

In a sense, of course, change is both desirable and inevitable. As incomes and car ownership increase the patterns of demand for public transport and willingness to pay for public transport also inevitably change. Suppliers, regulators, and the passengers in whose interest regulation is ostensibly exercised, adjust their behaviour continuously to the currently perceived constraints and opportunities. In those circumstances any regulatory system that merely attempts to ossify traditional service arrangements carries the seeds of its own downfall. Greater differentiation of service quality and fare may be the necessary response to this. And where that widens the market, as in the development of the commuter van services in Bangkok, this must be included within a broadened regulatory framework.⁵¹ Indeed it has been argued that an optimal state may be one of “delicately balanced chaos”.⁵² But that does not preclude a form of regulation (some would call it “light touch regulation”) that facilitates response to changes in the underlying market demand conditions.

Whether the process of change is cyclical or not is another matter. It should be noted, that I have argued that the cycles that I discern are only almost complete cycles. In neither the industrial nor the post-colonial cycles is the observed completion point exactly the same as the starting point. The post-colonial economies have typically come round to the point at which they would like to see the re-establishment of the traditional formal large bus service, but without effective willingness to pay either through the fare box or the budget. The industrialized country cities have returned to recognize the necessary role of authorities as well as operators, but without any blind faith either in the capability of regulators to adapt supply appropriately to demand or in the ability of an unregulated market to supply the mix of service cost and quality that is necessarily socially optimal. In both cases a number of very simple lessons of experience are there to be learned, which generate a set of continuing issues.

- ***Expectations must be realistic:*** Aspirations to high quality public transport must be backed either by the fare box or the public budget. But someone has to pay. Failure to assure financial backing usually results in an outcome even less desirable than the available resources can support. The continuing issue is how to align expectations with resource availability.
- ***Incentives matter:*** Suppliers and regulators have their own objectives and interests, which they will pursue (usually, though not always within the limits of the law). It should never be presumed that either is necessarily acting in the sole interests of passengers. In particular, it should be expected that suppliers will usually have a strong self interest in the reduction of competitive pressure. The continuing issue is how to mould those private incentives in support of a publicly desirable outcome.
- ***Competitive pressure works:*** Recent experience has shown not only that costs can be reduced through competitive pressure (either in the market or for the market) but also that it is possible to design competitive structures which are directed at qualitative as well as pure cost reduction objectives. The continuing issue is how to maintain the competitive impulse as suppliers adjust to eliminate it.
- ***Public sector involvement is inevitable:*** Because of the prevalence of externality and spill-over effects, unregulated private behaviour is very unlikely to coincide with any generally acceptable concept of the public good. The continuing issue is not whether the public sector has a role, but where and how that public sector involvement is best placed.
- ***Supply structure is important:*** Fragmentation of supply is not unacceptable *per se*, but makes many things (service co-ordination, monitoring and enforcement of

⁵¹ Leopairojna, S.K. and S.Hanaoka “Market Analysis of Passenger Vans in Bangkok” *Thredbo 9, Lisbon, 2003*

⁵² By Ian Scott in discussion at *Thredbo 6, Capetown, 1999*

supply discipline, etc) more difficult. The continuing issue is how to keep the market contestable, without losing scale and scope economies.

- ***Government institutions must be adequate and effective:*** Poor design of franchises, or inability to control collusion, will inevitably get franchising a bad name. The continuing issue is whether those institutions can be developed to the degree necessary to prevent breakdown of managed competitive arrangements.

My own preferences in response to those continuing issues are fairly well known. I believe that the competitively tendered franchising concept enforces a degree of reality of expectation by bringing the public costs of different expectations to the forefront of the process. And in doing that it is sufficiently general and flexible to accommodate changing demand patterns, to mobilize private incentives, to identify the proper limits of public sector intervention and to reconcile demonstrated scale and scope economies with competitive pressure.

So, to summarize, there is a cyclical tendency, but one which is neither complete nor endless. In that cyclical process many things have been tried and will be tried. Hopefully we will have learned some lessons, and be better able to confront the continuing issues.