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Lessons in ownership, regulation and management from 100 years of bus transport in Sri Lanka

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Keywords: Bus transport Sri Lanka, Regulation, Management, Ownership

Abstract

Sri Lanka observes 100 years of bus passenger transport in 2007. During this period the country has seen different forms of service providers ranging from private sector monopolies to state sector monopolies. It also has seen several changes in state policy ranging from welfare orientated service provision to entire market determined without any regulation. The existing regulated mixed competition is also characterized by poorly equipped regulators. In conclusion, the paper traces the different stages of failure that have led to the poor quality of bus transport services existing at present.

1. Background

Sri Lanka’s present transport market has evolved over many years, keeping pace with advances in global technology. In the 16th and 17th centuries it centred around inland water transport and was replaced by the railways in the latter part of the 19th century. Motorized road transport began at the turn of the 20th century, with the first bus operating in 1907. Road transport became popular after the Second World War replacing railways as the primary mode of travel. With the expansion of the road network into rural areas, the omnibus became an affordable mode of transport. Even today 68% of all motorized passenger trips in Sri Lanka are made by bus, even though the share of private vehicles which has been rapidly gaining ground over the last two decades stands at 24%.

Table 1 illustrates the present modal distribution of passenger travel. For a country with a population of only 20 million, this translates to a per capita mobility of around 3500 kms per annum. Since Sri Lanka is also a geographically small (65,000 sq km) and a developing country (per capita income at US$1200) this is comparatively, a high level of mobility which can be attributed to the early introduction of technological advancements in transport provision throughout history followed by a series of policy decisions that ensured personal mobility was kept affordable.

Even though a high level of mobility has been evident, and there were times when bus transport in Sri Lanka was exemplary, the average Sri Lankan bus passenger at present is far from satisfied by the quality of existing bus services. The objective of this paper is to trace the history of bus transport in Sri Lanka, its achievements and its intrinsic problems and other valuable lessons that history provides that have led to the present situation.

2. Development of bus transport

The 100-year-old history of omnibus transport in Sri Lanka has seen four periods of distinctly different service provision in terms of ownership, management and regulatory structures. These four periods may be identified and discussed as

- Formative years of unregulated competition: 1907–1938,
- period of consolidation under regulated private monopolies: 1939–1957,
- period of expansion under a nationalized state monopoly: 1958–1978,
- period of regulated mixed competition: 1979 to date,
- descriptions on the early years of bus transport in Sri Lanka, then known as Ceylon are found in several publications (Committee Report, 1937, 1949, 1954, 1955; Hulugalle, 1975; Ranasinghe, 1992; Wijesinghe, 1961).

2.1. Formative years of unregulated competition: 1907–1938

The early type of bus introduced in 1907 had provision only for five passengers who were seated directly behind the driver. The rear space was for the carriage of goods. There was no regulation at this time. The government enacted the first of a series of regulation...
starting with the Vehicle Ordinance in 1916 which provided for the registration of vehicles and drivers. Therefore the first decade of totally unregulated bus transport ended with the government intervening to ensure basic safety features.

The omnibus services, which were in all other aspects still totally unregulated, expanded after the First World War replacing the by then popular horse-drawn stage coach services. By 1925, there were a total of around 1400 buses in operation mostly plying on routes connecting Colombo – the Capital to provincial centres. In August 1925, a Commission was appointed by the government to ‘report on the means of transport already existing and to assist the government to formulate a policy of economic development of the island by road, rail and waterway’.

The outcome led to the creation in 1928 of the first regulatory institution in the transport sector, the Department of Motor Vehicles and the further specification of the registration and insurance of motor vehicles. The licensing authority for omnibuses which were seen as the revenue collection arm was essentially left in the hands of local authorities. These local authorities, in order to increase revenue, issued multiple route licenses to bus owners to operate any route of their choice for as many buses as possible. Thus the first government intervention in economic regulation of buses was very quickly used for the sole purpose of revenue earning. Thus the first instance of abuse of omnibus regulations can be traced back to a government action.

Within this environment where the government’s only interest being revenue earning, buses ran wherever the owners wished. Consequently, some routes had excess buses leading to cut-throat competition whereas on other routes there were too few or no buses at all. No timetables were observed and the safety and comfort of passengers were never a priority of any agency. However, in accordance to regulations, a licensing authority could withhold a license on the grounds that

- the omnibus cannot safely be used on the road on account of weight, size or construction,
- the route is not suitable for omnibus traffic, and
- the route is already too congested.

But in reality local authorities issued licenses for any route requested by an owner. Thus even though regulations were in place – there was very little control. Therefore none of these measures adequately addressed the problems faced by the industry and passengers. The conditions of bus services at this time have been described as having intense rivalry and cut-throat competition among operators, unsafe driving practices, assaults on bus crews, poor vehicle conditions, long working hours for crews, unequal distribution of routes, absence of timetables, lack of passenger comfort and safety, etc. Moreover there were no qualification for entering the industry and the many entered the business by simply hire purchasing buses (Ranasinghe, 1992; Commission Report, 1937) which in turn led to the advent of diverse individuals in to the industry. A total of around 2500 buses had been registered by 1936.

### Table 1

<table>
<thead>
<tr>
<th>Mode</th>
<th>Vehicle kms operated (millions)</th>
<th>Passenger kms carried (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bus</td>
<td>966 (48%)</td>
<td>45,407 (68%)</td>
</tr>
<tr>
<td>Private vehicles</td>
<td>7861 (64%)</td>
<td>15,831 (24%)</td>
</tr>
<tr>
<td>Railways</td>
<td>11 (00%)</td>
<td>3600 (5%)</td>
</tr>
<tr>
<td>Three wheelers</td>
<td>1548 (13%)</td>
<td>1161 (2%)</td>
</tr>
<tr>
<td>Truck/land vehicles</td>
<td>1813 (15%)</td>
<td>907 (1%)</td>
</tr>
<tr>
<td>Water transport</td>
<td>3 (00%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12,202 (100%)</td>
<td>66,906 (100%)</td>
</tr>
</tbody>
</table>

2.2. Period of consolidation under regulated private monopolies: 1939–1957

The second phase of omnibus transport in Sri Lanka began with the introduction of operational regulations arising as the outcome of the Hammond Commission report which recommended central registration, licensing, the fixing of rates and fares, limiting working hours of drivers, third party insurance and encouraged merger scheme for operators. It also led to the creation of a dedicated regulator, the Commissioner of Motor Transport through the Motor Car Ordinance No. 45 of 1938.

Moreover in order to bring some order to the prevailing chaos, one bus was allocated to one route; viz., a main route or a subsidiary route or a main route and a subsidiary route combined. Due to rivalry and cut-throat competition, an interest in some degree of control of bus fares was becoming an issue even among operators by this time resulting in the Commissioner of Motor Traffic attempting to reach a general agreement with operators on maximum fares based on a sliding rate with distance where the per mile fare reduced with distance.

Meanwhile, the government owned railway which had reached the apex of its network development by this time, was facing competition from the rapidly increasing bus fleet. In 1940, the railway after lobbying for protection from buses, forced the government to regulate minimum fares. This in addition to protecting the railway was intended to protect the bus operators from cut-throat competition among themselves. However, it has been observed that in most instances, these regulations were only practiced in the breach.

Even though there was some stability in the granting of route licenses during the period 1939–1941, these measures did not address the core problems of the bus industry and Mr S.W. Nelson was appointed to reorganize the transport system in the entire island. This led to the first ever legislation specifically addressing bus transport in the form of the Omnibus Service Licensing Ordinance No. 47 of 1942, creating controlled territorial monopolies as a measure to stem rivalry. This legislation restricted the granting of Route Licensing for bus operating companies. The system of territorial monopolies that were instituted gave buses the exclusive right of running on a route which overlapped with another only when the uncommon sections were greater than the common section. This also led to greater efficiency in the utilization of buses and the growth in fleet of buses reduced drastically. Fares were further regulated by the government and computed based on the physical state of the route and the number of passengers. Fare revisions were based on applications by the operator, accompanied by financial statements and balance sheets to prove their case. This of course led to ad hoc fares which varied from one route to another. It also introduced a full bus body – similar to a type that was being used in England during that time. With the economic up turn after the war particular that between 1943 and 1947 led to some prosperous bus companies emerging. By 1948 there were 53 such bus companies offering services.

By this time, however, many operators were lobbying for higher fares, since the prosperity of the ‘war economy’ had ended and profits had declined. As a result, the government had discussions with the All Ceylon Bus Companies Association and fixed fares based on a maximum fare as the emphasis now was that the passengers should be protected from the operators.

The criterion adopted for the fares fixing was that bus transport is ‘a public utility where service should be the guiding motive rather than profit’. However, it was held that an adequate return on investment should be allowed to ensure that an efficient service is provided. The government also considered the affordability and per capita income of the travelling public and stated that ‘bus fares should not be allowed to increase unduly the heavy cost of living’.

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They also made an observation that 'the result of such increase may well be that total gross revenue under a higher fare may be lower than those under a low fare'. The government also considered load factors stressing that the average load on routes operated by a person should be reasonably high to ensure financial viability. After an initial survey load levels on different routes were estimated. A 12% return on capital was provided for and the resulting fares were decided as follows:

- city routes 3.6 cents per mile,
- non-city routes 3.4 cents per mile,
- non-city high routes 4.4 cents per mile.

Operators were, however, allowed to charge less than the stipulated maximum fare. The government also decided to introduce fare stages on each route.

In the meanwhile, the Ratnam Report completed in 1949, recommended converting all bus operations into public limited liability companies and various other measures were incorporated into the Motor Traffic Act 14 of 1951. As a result, bus companies were required to form themselves into public companies before the 1st of January 1954.

The highest growth in private omnibus operations appears to have occurred during World War II where it is recorded that the period 1948–1953 saw the doubling of passengers carried and the increase of the bus fleet from 1502 to 2560, which is a 70% increase in the bus fleet. As a result, the new regulations came at a time when many companies were making good profit margins illustrated by one operator who had shown a 100% profit. Furthermore, it is reported that in 1953, 26 companies did not apply or refused a fare revision. A total of 73 companies were operating 903 routes at this time.

However, even though new buses had entered the fleet and the issues pertaining to fares and the rivalry between operators had eased off with these new regulations, the management of these companies did not improve the quality of omnibus operations and issues such as overloading or conditions for workers remained unresolved. As a result yet another commission, the Sansoni Commission was appointed in 1954, to resolve these outstanding matters.

This time the problem was identified as a shortage of buses on certain routes. The problem was diagnosed as stemming back to the war years when operating buses became difficult and profits were low, especially since fares were regulated and could not be increased with rising costs. This did not allow for some operators to replenish their fleets with new buses. The problem arose in the post-war years, when with the resurgence of the economy, the number of passengers increased by 100% over 3 years. The omnibus industry was totally unprepared to meet this phenomenal increase. Moreover there were procurement difficulties for new vehicles and the result was that the fleet was in dilapidated condition and unable to meet this growth. The Sansoni Commission reported that in 1954, there was a shortage of 591 buses. It is also revealed that 946 buses had remained unlicensed due either to failure to qualify for certificate of fitness or failure to pay the license fee or both.

It is reported that following a study trip to South India by members of the Commission and the Commissioner of Motor Transport namely Madurai, Trivandrum, Bangalore and Madras, the first ideas of state-sponsored transport had been kindled. It is reported that although Trivandrum and Madras had well organized State transport organizations the Commission did not recommend such a move. It did, however, recommend a state-sponsored corporation similar to what they had seen in Bangalore. The Commission concluded that 'having studied the set up of the Bangalore Transport Corporation and we found that a State Corporation, if worked in the right spirit, can offer an efficient transport system to the travelling public'.

The committee in its report published in February 1955, addressed the growing impact of congestion and inefficient use of road space and suggested that bus services in Colombo and its suburbs be run by a Colombo Transport Corporation formed by both government and private capital. This corporation was to be initially set up using buses of 34 companies that had failed to become viable. The share holding was to be 50% by the state, 25% by the operators who had handed over their routes and buses and 25% contribution by the general public. The Minister of Transport was to be the appointing authority for the Board of Directors.

However, before these recommendations could be implemented, there was a change of government and the new government which had declared a policy of nationalization proceeded to nationalize the entire bus services by which time, i.e. April 1956 it was reported that there were about 80 companies operating around 1200 routes covering 21,000 miles. The schedule bus mileage was 275,000 miles per day, operated by a licensed strength of 2071 buses which when taking into account unlicensed buses, the operational fleet has been estimated at around 2877.

A Sessional Paper published in August 1956 investigated the operational aspects of 'the decision to nationalize bus services in Ceylon'. It did, however, warn that 'too rapid a development can prove to be disastrous and recommend it to be spread over 6–8 years'. It cited the time required to build up operational and technical experience and also to find and train personnel as a reason for doing this over a period. This paper sets out the format which eventually led to the Ceylon Transport Board Act. It did, however, also recommend an upward revision in the fares along with the rectification of the anomalies that existed between operators.

However, with the passing of the Ceylon Transport Board Act No. 48 of 1957 on 24th September 1956, the Central Transport Board was created and began operations with around 1000 buses on 1st January 1958. The government opted for a more politically oriented course of action and nationalized all bus operations across the island overnight.

2.3. Period of expansion under a nationalized state monopoly: 1958–1978

In its early years, the emphasis for the Ceylon Transport Board (CTB) managed as a state agency was to develop its management and operational competence. The first decade of the CTB saw the resulting development of high standards of professionalism, crew training and discipline, vehicle fitness and safety. This in turn led to improvements in a number of operational features such as increased vehicle utilization, improvement of worker rights and welfare measures, increase of financial self-sufficiency, etc.

However, this operational success of a nationalized venture soon became a socio-political tool pursued by successive governments. The implicit 'bus transport policy' that evolved in its wake was characterized by

- ensuring low fares based on the primary criterion of affordability to the passenger rather than financial viability of the operator as an agency (or institution);
- provision of rural accessibility, even though such services were un-remunerative to operate and
- provision of concessionary travel to students without receiving the full reimbursement of the cost of providing such services.

The technical efficiency coupled with the wave of public opinion and political support following these populist measures, enabled the CTB to grow to be one of the world's largest publicly owned bus transport organizations by 1978, operating nearly 6000 buses per day, with nearly 60,000 employees.
However, the welfare-oriented development policies under which the bus services were operated did not increase revenues on par with the rising cost of providing quality bus services. Consequently, keeping bus fares at affordable levels was considered more important that ensuring the long-term viability of the bus services. Consequently, the tide of public opinion was beginning to turn against the CTB, and become intense with increasing vehicle breakdowns and lack of reliability, insufficient capacity, and wild cat strikes led by powerful and politically aligned trade unions. Moreover, its continuity as a state organization had led to frequent political interference, apparent loss of authority and decline in initiative taking by management, trade union volatility and wastage of public resources.

2.4. Period under regulated mixed competition: 1979 to date

In the post-liberalization era that followed the election of a new government in 1977, two alternative proposals were considered to address the problems in the Ceylon Transport Board. One was to expand the state monopoly by increasing the number of buses and making roadworthy the existing buses. The other was to wind up the services as a state monopoly and to permit private operators.

2.5. Private sector

Privately owned and operated buses were re-introduced in 1979. The government, in its enthusiasm to provide adequate buses to speedily close the deficiency that had arisen, gave every encouragement for the unrestricted entry of the private sector. Within a few years, private buses had begun to dominate the market.

Since previous experiences did not recommend either of these options as a convincing solution, the government in 1981 appointed a committee to inquire into and report on the manner in which the private omnibus industry should be regulated. The report published in May 1982, set out the recommendation to permit private bus owners to operate regular bus services on all routes parallel to the services operated by the state operator in all parts of the country. This decision was given effect to not by way of required legislative amendments but administratively. For this reason initially permissions to operate private omnibus services were granted through the state operator – the Ceylon Transport Board and the private sector applied and began operating services to several key destinations. With the enactment of the Private Omnibus Services Act No. 44 of 1983, a Department of Private Omnibus Transport was established on 23rd December 1983. The functions of this department were basically to run a parallel service to the SLTB and to adopt the same policies as those of the SLTB in operational practices.

The report concluded that ‘the history of omnibus transport in Sri Lanka draws the conclusion that a state sector monopoly is as detrimental to the economic and social progress of the country as a private sector monopoly’. However, they also recommended that ‘the Committee did not consider desirable that the Ministry should be directly concerned in the implementation and the administration of its own decisions and policies.’

As a result, instead of setting up a regulatory agency, the Committee recommended that 24 district based operator associations be formed so that any person holding a permit could become a member of the said District Association. It also recommended the setting up of national association called the Federation of Private Omnibus Operators Association. The report recommended that the Ministry of Private Omnibus governs these associations through common policy. These associations where office bearers were to be entirely elected by the membership, were given significant regulatory powers including the power for the formulation of timetables, fixing fares and monitoring of fares levied, ensuring roadworthiness of vehicles, appointment of time keepers, ticket checkers and collection of fees from members for the conduct of the work of the associations. It is also recommended that the creation of a Department of Omnibus Transport to issue route permits in consultation with the District Associations to lay down maximum fares and to supervise the District Associations and National Federation, including the power to remove office bearers from office if necessary. They also concluded that each operator should have a stipulated origin and destination and route of operation and that such a permit should not be transferable.

The unplanned and rapid growth between 1979 and 1983 led to many owner-driven buses entering the industry. Companies which had earlier provided bus transport services were wary of the experience of nationalization and the dominance of the single owners and had kept away from entering the industry. These ‘single-bus’ owners were mostly migrant workers who had returned with their savings, traders with excess cash flow – however, were unable to provide the standards that the state operator had maintained. Moreover, their limited technical know how and lack of management experience, contributed to low vehicle utilization, high cost of operations, loss of revenue, high accident rates, etc. (University of Moratuwa, 1993). They also adopted predatory operating practices that led to the further downfall of the state operator. Intense rivalry also re-entered and passenger needs were again never cared for.

Thus private operators also did not have the capacity to provide any development of the industry. In addition the District Associations that were vested with regulatory powers did nothing to provide the development of the industry on professional lines. In fact even though it was intended for the government to manage both sectors on the same policy, this never took place as the private sector followed a completely different set of operating practices.

The Department of Private Omnibus Transport also did not exercise any noteworthy control over the District Associations and the general standard of passenger transport diminished very quickly. There were no entry qualifications for operators or bus crews. Thus people with dubious backgrounds and intentions entered the industry. With little or no training, discipline and anti-social activities such as speeding, overloading, rough handling of passengers, lingering at bus halts, not departing till bus is full, obstructing traffic, touting for passengers became generic features of such operations. Generally, travel times increased and quality of service reduced. The absence of bus depots, garages, terminals, etc. also contributed towards excessive roadside parking and congestion at most urban centres.

In 1990 the District Associations were dissolved following evidence of large scale corruption involving the ‘sale’ of lucrative routes and time slots and the inability of the Ministry and the Department of Private Omnibus Transport to adequately supervise these associations.

There was in fact no regulator till 1991. The enactment of the National Transport Commission Act No. 44 of 1991 saw the creation of a dedicated regulator for the private bus transport. Even then the National Transport Commission Act did not adequately deal with offences, service monitoring, route planning, fare determination, etc. Moreover it only issued licenses on the basis of a permit for a single bus. Even though, the act provided for specific regulatory instruments, the National Transport Commission did not develop all these regulatory measures and saw its role mostly as an issuing office for route permits. Some of these regulating powers for private buses were later transferred to the Provincial Councils under a constitutional amendment where the regulation of intra-provincial bus transport was made a devolved subject with planning and policy formulation being made a national subject.

However, both the NTC and the Provincial Transport Authorities (PTAs) were set up so that the Board of Directors are appointed by
have made large investments (though mostly by single bus owners) and have seen mixed results over the last 28 years. On the credit side, they have brought in a considerable amount of bus capacity, which the state was not willing to provide and was not able to manage. Therefore the entry of the private sector in the bus industry has been expected from it. Although regulated fares and the single operator as an operator as well as a regulator, a fares policy within this framework was introduced only in 2002 which led to a formula by law, quasi-controls continued under the direction of the Ministry. The Minister also had to deal with conflict of interest issues, since the state-owned operator which directly came under the ministry was an operator. Thus in effect the Ministry became both an operator as well as a regulator. A fares policy within this system has decreased. These factors have combined to cause sharp increases in overloading of buses as fares have been fixed.

Presently, most owners have little control over their own buses. Some are leased for the day to third parties, crew are untrained and often unlicensed. Productivity is low and costs high. Worker conditions are dismal and many work 13–15 hours, competition between buses leads to dangerous driving. Accident rates have doubled. Also there is no assurance on quality of service and as such regulation by both the national and provincial authorities is ineffective. For example, timetables are not observed and overcrowding not controlled at present.

Clearly the benefits of the private sector investment and management of services have not brought the desired result as is obvious to the bus passenger today. In addition, the private sector entry has fragmented the integration of the bus network and transfers have become difficult. The services provided by the single bus private operator has clearly demonstrated that they would only operate where and when it is profitable to do so. As such the routes and times of the day that is not financially remunerative are not operated. The regulator is unable to enforce a timetable and this has resulted in severe consequences in constraining the mobility of labor and distorting land use development especially in suburban areas.

Generally and except for a few exceptions, it could be held that the private sector has failed to provide the quality of service that has been expected from it. Although regulated fares and the single bus ownership have been the most quoted reasons for this state of affairs, the host of regulatory lapses discussed earlier is in fact the primary causes of this situation.

2.6. State operations

On the other hand, the state operator, which was decentralized to the Regional Transport Boards (RTBs), by the time of the re-introduction of private buses in 1979, was burdened with aging buses and high overheads. They were entrenched in their social obligations and continued to be subject to political interventions from the respective Ministers. These statutes also have a clause that the Minister can direct the functions of these institutions. As such, these institutions never developed to become independent regulators functioning on economic regulatory principles. Instead they became directed on political expediencies and interventions from time to time. In addition to the lack of independence as an impediment to proper function, this form of external control also did not motivate the regulatory agencies to develop any in-house technical competence to effectively regulate the industry. It became a viscous cycle of resultant incapacity and political intervention.

Therefore even though regulatory institutions and statutes were in place, regulation itself was minimal with new permits issued on an individual basis with no pre-requisites for qualification to operate such services. Also, even though fares were not regulated by law, quasi-controls continued under the direction of the Minister. The Minister also had to deal with conflict of interest issues, since the state-owned operator which directly came under the ministry was an operator. Thus in effect the Ministry became both an operator as well as a regulator. A fares policy within this framework was introduced only in 2002 which led to a formula by which the annual fare revisions based on cost of inputs and quality of output were reviewed.

However, this lacuna did not prevent bus owners from applying for route permits. Since the regulators had not developed any procedures, issue of permits were seen as revenue generating opportunities. However, in the late 1990s most routes were getting congested and operators themselves were agitating for curbing new issues. With the imposition of some controls, a premium value for permits was created in the informal market and owners started illegally transferring permits to new operators for large financial considerations. Moreover, corruption entered the issue of new permits since no mechanism was developed for selecting new entrants. Only one of the provincial regulators called for bids from prospective service providers.

Notwithstanding any of the above deficiencies in bus operations, the private sector fleet increased year by year to nearly 18,000 vehicles owned by around 15,000 individuals by the year 2000. This has brought in a considerable amount of bus capacity, which the state was not willing to provide and was not able to manage. Therefore the entry of the private sector into the bus industry has seen mixed results over the last 28 years. On the credit side, they have made large investments (though mostly by single bus owners as opposed to corporate bodies), they have also responded to the introduction of higher quality (air-conditioned) services and new services. On the negative side, reliability of services has deteriorated, idling of buses at terminals and stops has increased, accident-risk factors have increased, productivity of crew and buses have decreased. These factors have combined to cause sharp increases in overloading of buses as fares have been fixed.

Presently, most owners have little control over their own buses. Some are leased for the day to third parties, crew are untrained and often unlicensed. Productivity is low and costs high. Worker conditions are dismal and many work 13–15 hours, competition between buses leads to dangerous driving. Accident rates have doubled. Also there is no assurance on quality of service and as such regulation by both the national and provincial authorities is ineffective. For example, timetables are not observed and overcrowding not controlled at present.

Clearly the benefits of the private sector investment and management of services have not brought the desired result as is obvious to the bus passenger today. In addition, the private sector entry has fragmented the integration of the bus network and transfers have become difficult. The services provided by the single bus private operator has clearly demonstrated that they would only operate where and when it is profitable to do so. As such the routes and times of the day that is not financially remunerative are not operated. The regulator is unable to enforce a timetable and this has resulted in severe consequences in constraining the mobility of labor and distorting land use development especially in suburban areas.

Generally and except for a few exceptions, it could be held that the private sector has failed to provide the quality of service that has been expected from it. Although regulated fares and the single bus ownership have been the most quoted reasons for this state of affairs, the host of regulatory lapses discussed earlier is in fact the primary causes of this situation.
time to time. This led to the withdrawal of more and more services, thereby plunging the entire bus industry into an abysmal reduction in terms of quality of service.

In 1980, under assistance from the World Bank for the improvement of bus services in Sri Lanka, there were recommendations that the state should withdraw altogether from providing bus services. The government following this advice re-structured the Regional Transport Boards into Peoplised Transport Services (PTS) companies in 1992. Peoplisation meant that every bus depot was made a limited liability company with the Secretary to the Treasury holding 50% of the shares and balance shares vested with the employees. Furthermore, a Cabinet approved transport policy publication (Ministry of Transport and Highways, 1992) and the National Transport Commission Act No. 44 of 1990, specifically prohibited any government or government agency to own or operate omnibuses. However, the bus industry suffered further with the PTSs unable to become financially viable in the face of district private sector. The market share by this time had decreased to 22% of the market and quality of services had depleted further in spite of the Treasury subsidizing costs by up to 50% in some years.

Finally, in 2005, the Sri Lanka Transport Board was created on the subsequent failure of the Peoplisation ventures, the Treasury had to again purchase buses and pump in funds periodically, thereby depleting the share holding of the employees. Following the change of government in 1994, a committee was set up to address the issues of the Peoplised Transport Services and as a result 11 Regional Transport Companies (RTCs) were formed in 1996 to consolidate the position of the state bus operations. However, these Regional Transport Companies also proved to be incapable of improving management or in competing with the private sector. The market share by this time had decreased to 22% of the market and quality of services had depleted further in spite of the Treasury subsidizing costs by up to 50% in some years.

Finally, in 2005, the Sri Lanka Transport Board was created on the lines of the state organization created in 1958 (and later dissolved in 1978). This organization which was created by amalgamating the resources in the 11 RTCs were to be brought under a central management and at present moves are underway to stabilize the operations and curb losses while improving the service to the public.

3. Analysis

This section analyses the historical development of the bus industry in Sri Lanka. The analysis looks into issues of investment and ownership; regulation and industry structure and fare levels, and quality of service have changed over the years and what effects these have had in the industry (Bus Transport Policy, 1998; Kumarage, 1996, 1998; Commission Report, 1982; Roth, 1994).

3.1. Investment and ownership

The four periods of bus transport in Sri Lanka discussed earlier, have had particular investment and ownership trends. This is well illustrated in Fig. 1, in terms of the growth of the bus fleet and the passenger demand. In the unregulated growth phase it is evident that investment increases under private ownership without state interventions. However, passenger volumes did not increase as ridership was confined to a small market at a higher price. Once regulation entered in 1940s the passenger demand increased with
some improvements to services also boosted by the post-war economy. However, the reinvestment declined and total number of buses operating also declined.

Nationalization of the industry in 1958 saw a virtual explosion in ridership under operational expansion and the low fares policy adopted by the government. However, the bus fleet was not able to meet demand and demand exceeded supply for the first time. The re-entry of the private sector in 1979 which is the final period under study shows a sharp growth under virtual unregulated conditions. This ended up with excess capacity in the industry, where even though ridership increases, but bus supplies increase faster.

3.2. Regulation and industry status

Regulation may be described as a means of imposing greater regulation through a framework of public control over private operations. Public transport world-wide has undergone changes from time to time with respect to the degree of regulation and state intervention (Howe, 1997). Some countries have experiences similar to that of Sri Lanka, where bus transport has evolved from being fully privately owned to public monopolies and thereafter to numerous contemporary forms of mixed competitions.

As shown in Table 2, the role of the state has also changed in keeping with these organizational changes. For example, under total state ownership, the Ceylon Transport Board was a self-regulator. It also had monopoly of route operations, and formulated its own standards for passenger quality and safety. However, the weaknesses of self-regulation were evident when passenger quality was unresistingly compromised in the face of the political desire to keep fares low and (b) reluctance to meet the resulting financial obligations. Furthermore, the long-term sustainability of the institution as an independent body was not considered. It was only seen as an extended arm of the state in providing welfare-oriented services. The period wise changes in state interventions and outcomes are shown in Fig. 2.

3.3. Fare levels and quality of service

The Government during the 100-year history of bus transport has taken widely differing view points on control of bus fares. These range from the totally unregulated beginnings to state subsidized services as a welfare measure. Different period has also led to different motivations for control of bus fares. These have ranged from the need to protect the railways, to protect the bus industry, to protect the passenger, etc. Moreover, fare control has been exercised as a public utility and service rather than profit should be the motivation. Therefore, in consultation with operators, fixed maximum fare levels in order to protect bus operators from each other as well as to protect the public. Government policy stated, bus fares should not be allowed to increase unduly the heavy cost of living.

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Fig. 2. Spiral of regulation and industry status (1907–2006).

Table 3

<table>
<thead>
<tr>
<th>Year</th>
<th>State control</th>
<th>Industry status</th>
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<tbody>
<tr>
<td>1907</td>
<td>No controls</td>
<td>High fares</td>
</tr>
<tr>
<td>1938</td>
<td>Regulatory powers for fare control was instituted</td>
<td>Not introduced</td>
</tr>
<tr>
<td>1940</td>
<td>Government introduces minimum fares for buses in order to ‘protect the railways’</td>
<td>Though government imposes minimum fares, mostly practiced in the breach</td>
</tr>
<tr>
<td>1948</td>
<td>Government considers that bus transport is a public utility and service rather than profit should be the motivation. Therefore, in consultation with operators, fixed maximum fare levels in order to protect bus operators from each other as well as to protect the public. Government policy stated, bus fares should not be allowed to increase unduly the heavy cost of living.</td>
<td></td>
</tr>
<tr>
<td>1953</td>
<td>Fare revisions given on applications made by operators</td>
<td>Due to post-war prosperity, many operators did not even request increases</td>
</tr>
<tr>
<td>1958</td>
<td>Under nationalization Governments follow affordability based, ‘low fares’ policy</td>
<td>Ridership increases, but reinvestment low and service conditions including load factors deteriorate</td>
</tr>
<tr>
<td>1981</td>
<td>After re-introduction of private sector, bus owners and association leads demand for fare increases</td>
<td>Associations were usually very successful in obtaining favorable increases through trade union action and strikes. Fare increases become irregular and ad hoc</td>
</tr>
<tr>
<td>1990</td>
<td>NTC Act remains silent of fare regulation</td>
<td>Government continues regulation through in direct means</td>
</tr>
<tr>
<td>2002</td>
<td>A fares policy introduced which led to a formula by which the annual fare revisions based on cost of inputs and quality of output were reviewed</td>
<td>In force as at present</td>
</tr>
</tbody>
</table>
about by technical and management innovations. However, thereafter with the increase in fuel prices there were gradual increases in load factors climbing from 0.6 in 1973 to 1.1 in 1980.

However, the implicit ‘low fares’ policy could not be sustained after the oil crisis in the early to mid-1970s. The ‘low fares’ policy was seemingly abandoned in 1980 with a phenomenal increase in fares by 113% in a single year. This in turn led to the rapid increase of private operators from 1418 permit holders in 1979 to 3811 by the end of 1980. Although load factors were anticipated to reduce, they continued to increase steadily. This was, however, due to the absence of adequate regulatory controls, which was discussed earlier in this paper.

Fig. 3 also shows the effect of reducing fares, when the state operator was not allowed to raise fares till 1970, which in turn sets off an increase in load factors as reinvestment becomes difficult especially when operational costs increase with increases in oil prices. As noted earlier, even though the price increase in early 1980s was intended to attract the private sector, it did not bring down load factors, although the number of buses increased.

This is a classic case of market failure in the form of collusion where more operators enter and remain in the market without inefficient operators being forced to exit. This leads to collusive behavior which in turn leads to increased cost and then agitation for increased fares without improving resource utilization. Therefore from 1991 to 1996, regular fare increases were denied leading to even higher load factors. Only thereafter did agitation by private operators lead to a turn in events. However, the period 1996–2001 saw increases in fares without any significant improvement to quality. This led to the introduction of the fares policy, which from 2002 has allowed for annual fare increases keeping in line with cost of inputs and quality of outputs. The rising cost of fuel during this period has not allowed rapid changes to this situation in order to reverse previous trends. However, the policy is well accepted by industry and considered to provide some degree of stability to investors who are assured of a regular fares review.

4. Conclusions and summary

This paper traces the 100-year historical development of bus transport in Sri Lanka as the Government intervened to change its regulatory, ownership and management structure from time to time. The early years were characterized by unregulated entry, the influx of individual owner-operators and competition between them which eventually became hostile and unhealthy. Government interventions started with vehicle and diver registration in 1916 and then became increasingly more regulated with safety, insurance, fares and route licensing being included. With none of these measures adequately addressing the problems ingrained in the system from the beginning, attention turned towards more corporate forms of operators. In the 1940s territorial monopolies for private bus operating companies were formulated in order to change the ownership and management structure. While these created some profitable companies there were some other companies that failed. Basically, it was held that private sector monopolies were not in the best interest of the passenger. The paper also discusses how fares were considered during this period and the effect these had on the development of the industry.

The paper also investigates the contrasting performance of the industry after nationalization in 1958. The improvements in technical performance and worker conditions were offset with failures in management and the problems of self-regulation when short-term socio-political considerations are considered more important that long-term viability and sector development. The legacy of the state-owned monopoly left higher load factors, shortage of capacity and unreliable service and disruptive trade union interventions, in the negative column, while in the positive columns they had achieved network integration, introduced best practices in operations and management, etc. The low fares policy adopted during this period also has been studied and its outcomes in terms of poor reinvestment levels has been discussed earlier in this paper.

The present phase of bus operations in a mixed competitive environment also has seen many changes since 1978. The state operator was decentralized then made into small companies and thereafter the process was reversed with them been aggregated back to regional companies and then in 2005 into a single-institution. In the meanwhile, the private operators continue without proper regulation even though regulators have been appointed. The lack of capacity of these regulators as well as emphasis on revenue orientation instead of sector development is identified as the major concerns why both the national and provincial regulators have not fulfilled their roles justifiably. This has created a number of regulatory lacunas, as well as problems in areas where regulations have been framed.
This paper analyses the ill-effects that such regulatory lapses created and identifies this as the primary reason for the market failures that have occurred with over crowding, over supply and poor quality of service as major problems of the industry.

Thus in conclusion, it can be said that each regulatory form has its associated problems and solutions. Simply changing the regulatory environment without clearly understanding the reason for a previous failure is in itself only leads to another failure as has been amply demonstrated in several such changes carried out in Sri Lanka over its 100 years of bus transport. The paper also concludes the ill-effects of fare control as well as the effects of no control.

Acknowledgements

The authors gratefully acknowledge the assistance provided by the National Transport Commission in making data on annual operations available to us, as well as Transit Systems Australia for the sponsorship to attend the Thredbo Conference in Hamilton Island, Australia in order to present this paper.

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