

CHAPTER 7

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

The goal of this study was to develop a strategy for the concessioning of the commuter rail sub-system in South Africa; and the sub-goals therefore to acquire insights into challenges concerning rail concession regime and to find ways of addressing such challenges from an economics perspective. The theories underlying the divide between private sector and public sector enterprises were investigated. The greatest difference between private and public sector enterprises is the objectives pursued by these sectors. Consequent to the difference in the objectives pursued by these two sectors, the provision of rail and commuter rail services by concessionaires presents other challenges, which need to be anticipated and dealt with in developing a strategy for the concessioning of commuter rail.

Despite the challenges identified in the concession-type relationship, rail concessioning has been implemented in many countries. The case studies investigated in this report bear testimony to rail concession regimes. The main advantage of rail concessioning is that it gives the government time to decide on whether to totally liberalise (privatise) the rail system and assists in establishing the comparative advantages that rail enterprise has in the public or the private sector environment.

In this chapter the findings, conclusions and recommendations of this study are provided.

7.2 Private enterprise versus public enterprise theory

7.2.1 Findings

The underlying objective of private sector enterprise is profit maximisation, while

that of the public sector is the maximisation of the economic welfare of the country. The maximisation of the profit objective by a private sector enterprise is achieved because competition exerts the necessary pressure to minimise the cost of the production of both goods and services, thereby contributing to the economic principle through better utilisation of inputs. Public entities are characterised by the existence of economies of scale and scope and therefore there is in most cases no competition in the market in which they operate. In the case of rail, however, a distinction must be made between intra- and inter-rail competition. The non-existence of competition in the rail system refers to intra-rail competition. Because of a lack of intra-rail competition, X-inefficiency (internal inefficiency) often sets in, resulting in suboptimal utilisation of input. Such inefficiencies filter through to users not only in the form of high prices, but also in poor quality of service. In as far as the characteristics of economies of scale are concerned, a rail entity can operate at increasing returns, decreasing returns or constant returns to scale. In discussing economies or diseconomies of scale in rail transport, a distinction must be made between economies of density and size-related economies. The scale economies or diseconomies can only be determined by empirical studies, which in the case of commuter rail transport in South Africa are lacking.

The introduction of competition for the market through a concession regime for the provision of rail services traditionally provided by the state, must therefore address the Xinefficiencies experienced and should result in lower cost and a better quality of rail services provided. The basic hypothesis for the increasing tendency to shift the provision of rail services from the public sector to the private sector through a concession regime is interpreted as a “public failure” resulting in high cost in the provision of rail services.

Taking the characteristics of the rail industry into account, the contestable market theory brought a better understanding of how rail functions should be classified. Rail infrastructure is considered to be a monopoly and rail operations to be a competitive function.

7.2.2 Conclusion

In the commuter rail concessioning environment, rail concessionaires will strive for cost minimisation in order to realise a profit. This striving to reduce costs and realise profits, however, throws the dimension of poor quality of service into the light. Cost minimisation and the realisation of profits must not be achieved at the expense of service quality. This therefore necessitates a strategy in terms of which the concessioning authority will oversee commuter rail concessionaires.

The classification of rail infrastructure as a monopoly and operations as competitive functions must be taken into account when developing a commuter rail strategy, especially with regard to a concession regime.

7.2.3 Recommendations

There are benefits that will be derived from a commuter rail concessioning regime in terms of efficiency gains. As a result, the concessioning regime is supported by this study and should be viewed as a potentially beneficial alternative to the current arrangement for delivering commuter rail services.

To understand the level of economies of scale in the commuter rail industry in South Africa, it is recommended that an empirical study should be undertaken in this area.

7.3 The potential challenges in the railway concession-type relationship

7.3.1 Findings

The incomplete contract approach revealed that in a rail concession relationship, there are challenges that must be anticipated and that such challenges when they occur will be at two levels. The first level is the pre-implementation level or the development of the concession agreement and the second is the implementation level. The main source of challenges, especially at the level of the development

of a concession agreement, is the bounded rationality concept, which is the inability to foresee what will actually happen during the concession implementation phase. The inability to foresee, describe the contingencies that may occur, especially those that result from the loopholes in agreements, are open to exploitation by both parties to the agreement. At the implementation level the loopholes may allow the rail concessionaires not to fulfil their obligations in terms of the agreement especially in areas where they have promised investment.

Another potential challenge during the implementation phase is the need to renegotiate or bargain for the realised results, whether negative or positive. In such a situation, the basic principle is to be honest about the information each party possesses. The parties to the agreement must therefore make available to each other all the information they have. Where information is misrepresented, an agreement on the best way forward to resolve a practical challenge identified will not happen. The temptation to misrepresent information during negotiations will be great especially if the relevant party will be deriving substantial benefits from such misrepresentation.

7.3.2 Conclusion

The approach adopted in this study shows that the rail concession regime is not a perfect policy regime. It is, however, useful to know the various potential challenges that are inherent in the rail concession relationship so that various strategies may be developed to address them. Such strategies must pay attention to the development of the concession agreement, its duration and the nature of the concession authority that will manage the relationship with the commuter rail concessionaires.

7.3.3 Recommendations

As a result of various challenges that must be anticipated in the commuter rail

concession relationship, the task of developing a commuter rail concession strategy should not just be performed by experts familiar with the legalities surrounding rail concession agreements. This study makes a contribution in this regard, and a multi-disciplinary team, comprised of for instance experienced people in rail concessioning, economists and engineers, to mention just a few, must be brought in when developing commuter rail strategy.

7.4 Study cases of concessioned rail systems

7.4.1 Findings

The rationale for bringing in the private sector to provide rail services through a concession regime, as gleaned from the rail case studies provided in this research, is generally the reduction achievable in the inefficiencies experienced by the state-owned rail entities, the declining market share of rail services and the inability of state-owned enterprises to respond to the rapidly changing transport market. This is aggravated by a lack of sufficient funds from the authorities to recapitalise the rail system. In pursuit of efficiency gains, in Britain the rail industry was restructured with a view to realising some of the assumptions that underpin the contestable market theory. Hence, the resultant rail industry structure chosen for passenger rail in Britain is the vertically separated rail option. On-rail competition has so far not been fully implemented.

In Argentina the monolithic rail system was subdivided in terms of rail network and assigned to individual rail concessionaires. The rail industry structural option chosen in Argentina was therefore the vertically integrated rail option. The operational areas of the Japanese Railway Companies were defined geographically. Although the policy tool chosen in Japan was to sell the shares in the relevant rail companies through the stock exchange, the integrated railway structural option was chosen as well. The implementation of the rail strategies adopted by Argentina and Japan was assessed using a similar method. The methodology used in Argentina and Japan provides lessons in terms of which any rail strategy implemented should be evaluated.

The reasons given for concessioning rail systems are similar to the challenges faced by the commuter rail subsystem in South Africa.

7.4.2 Conclusion

There are various policy tools that can be used to involve the private sector in the rail transport system. In South Africa, however, the chosen policy tool is a rail concession regime. In order to involve rail operators through a concession regime, there are two rail structural options open for commuter rail strategy and these are the vertically integrated and vertically separated rail structural option. The commuter rail strategy and the South African commuter rail industry structural option chosen, as was learned from the rail case studies, will require political will to succeed especially under a concession regime.

The methodology used in the rail case studies to assess the results of the rail strategies implemented provides the strategy for evaluating the effectiveness of a commuter rail concession regime.

7.4.3 Recommendations

The development of a commuter rail strategy requires that the various rail industry structural options and their practical implications must be clearly understood. The pros and cons of each structural option must therefore be assessed and analysed within the current transport policy context before a particular structural form is chosen as a vehicle for restructuring commuter rail for a concession regime.

7.5 The rail transport economic regulatory environment

7.5.1 Findings

The various characteristics of the rail industry influence the economic regulatory

framework ultimately adopted. There are various mechanisms that can be used such as the rate of return (ROR) and price-capping to regulate the prices of rail operators under a concession regime. These price mechanisms have their advantages and disadvantages. The choice of a particular price mechanism depends on the availability of the skills required to implement the price mechanism chosen as well as the macro monetary policy objective. Owing to the shortcomings of price mechanisms, rail service quality is enhanced by specifying minimum quality requirements in the concession agreement. The agreement makes provision for penalising concessionaires that fail to meet minimum quality requirements and provides incentives for concessionaires that exceed them.

7.5.2 Conclusions

The rail economic regulatory environment has characteristics that have to be taken into account when dealing with the economic regulation of rail transport. Various price mechanisms are used to regulate prices of rail operators under a concession regime. The efficient component pricing rule provides the basis for determining access prices to a rail network. This rule is applicable whether the strategy chooses the vertically integrated or the vertically separated rail industry structural option.

7.5.3 Recommendations

The ROR and price capping mechanisms must be adequately understood before a particular price mechanism is chosen. In a situation where overall monetary policy of inflation targeting is implemented, such as in South Africa, the use of a price capping mechanism to regulate commuter rail concessionaires should go a long way in complementing the macro monetary policy of inflation targeting.

In as far as the determination of prices for rail infrastructure is concerned, more work at the empirical level will provide answers to the feasibility of the efficient

component pricing rule. This means that in the case of South Africa a more practical approach is needed to test the this rule

7.6 Strategy for concessioning the commuter rail subsystem in South Africa

7.6.1 Findings

International experience shows that the implementation of rail strategy under a concession regime achieves fiscal, internal or X-efficiency and social equity objectives.

There are two options for restructuring the commuter rail subsystem under a concession regime and they are the vertically integrated and the vertically separated railway option. Both structural options have advantages and disadvantages. The principle, however, is that where intra-rail competition is not envisaged, such as in South Africa, the vertically integrated rail option should be considered for the concessioning regime.

The principle underpinning the strategy for a concession agreement is that the agreement must be clear and comprehensive. This principle calls for the proper allocation of roles between rail concessionaires and the concessioning authority. This allocation of roles is in practice associated with risks. The various risks that are involved include production, commercial, public policy and legislative risks.

The concession agreement is also affected by the size and the duration of the concession.

For the purpose of overseeing the activities of commuter rail concessionaires during the implementation phase of the concession agreement in South Africa, there will be a need for the rail economic regulatory body to be established in terms of the legislation.

The implementation of a commuter rail concession regime will have implications for the workers. As a result, the impact of labour legislation on the restructuring of commuter rail will need to be taken into account.

The implementation of a commuter rail concession regime will also impact on the users and authorities. In order to provide policy makers with measurable results on the impact of a concessioning regime, a strategy for undertaking an assessment is provided.

7.6.2 Conclusions

The commuter rail system in South Africa is state owned. Consequently, a commuter rail strategy should be developed in close collaboration with political decision-makers, as the strategy will in the end need their ratification. This does not mean that the involvement of other stakeholders is not necessary; it is in fact essential.

7.6.3 Recommendations

The structural option that is argued for the strategy in terms of this study and which should be considered for the commuter rail sub-system under a concession regime is the vertically integrated rail option. This is based on the advantages of the vertically integrated option and the disadvantages that might emanate under the vertically separated option.

To realise value for money in terms of the subsidies that will be provided by the authorities and the out-of-pocket costs that will be incurred by users, the roles and risks in a concession regime must be allocated as provided for in terms of Table 6.2 and the strategy for risk-sharing arrangements.

An empirical study to determine the level of economies of scale in the commuter rail industry should be undertaken. In the absence of such an empirical study, the

number of commuter rail concessions that are offered under a concession regime must be based on a feasibility study.

The capital requirements of the commuter rail subsystem should be determined and the duration of the concession agreement based on the payback period that will be required. Different contract durations should therefore be considered for different concession agreements, contingent on the investment requirements of each concession.

The South African Rail Commuter Corporation should be given an opportunity to fulfil the role of the economic regulatory body under a commuter rail concession regime. The Legal Succession Act should therefore be considered for amendment to bring the role of the South African Rail Commuter Corporation in line with what will be required under a concession regime.