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Faculty of Engineering & the Built Environment
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EXPLORING PRIVATISATION AS A PANACEA TO THE CREATION OF VALUE IN SOUTH AFRICA'S PASSENGER RAIL SERVICE

Master of Philosophy in Transport Studies
(MPhil: Transport Studies)

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Exploring privatisation as a panacea to the creation of value in South Africa's passenger rail service

By

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Abstract

Passenger rail in South Africa is deemed to be problematic because of its poor service quality, with various sources (e.g. National Household Travel Surveys 2003, 2013 and 2020) pointing to the service getting progressively worse with the passage of time. To reform passenger rail and change its fate, many governments around the world, beginning in the 1980s, implemented different forms of privatisation, mainly partnerships between governments and private companies. This became the face of passenger rail, and it is what some stakeholders are advocating for in South Africa.

This dissertation, therefore, used four case studies – namely, the United Kingdom, Argentina, Kenya and South Africa (Gautrain) - as well as in-depth interviews with 9 experts and 2 rail users, to explore whether privatisation is a panacea to an ailing railway, and the value it can bring. Assessment of privatisation in the literature, case studies and expert interviews was done using analysis and comparison across a number of indicators, which have been found to influence the outcomes of privatisation. The findings from the three data sources mostly supported each other, in addition to some very interesting insights uncovered from the interviews.

Based on the findings, the dissertation concluded that passenger rail privatisation was not a panacea to improve its poor service quality. However, given the appropriate conditions and processes derived from the matrices used, rail privatisation can result in benefits for the rail user in South Africa. These findings and the recommendations made in the final chapter contribute to the debates and thinking behind passenger rail privatisation in South Africa, and thus help to chart a way forward.

Plagiarism Declaration

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Date: 29 June 2023

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Acronyms and Terms

BCC	Bombela Concession Company
BOT	Build-Operate-Transfer
BRT	Bus Rapid Transit
CA	Concession Agreement
CCTV	Close Circuit Television
COSATU	Congress of South African Trade Unions
COVID-19	Corona Virus Disease 2019
DoT	Department of Transport (South Africa)
EMAs	Emergency Measure Arrangements
ERMAs	Emergency Recovery Measures Agreement
FA	Ferrocarriles Argentinos (Argentinean Railways)
GCEO	Group Chief Executive Officer
GMA	Gauteng Management Agency
GPG	Gauteng Provincial Government
GTIA	Gauteng Transport Infrastructure Act
IEA	Institute of Economic Affairs
IMF	International Monetary Fund
ITMP	Integrated Transport Master Plan
IRJ	International Railway Journal
ISEM	Independent Socio-Economic Monitor
KPA	Key Performance Area
KPI	Key Performance Indicator
KRC	Kenya Railways Corporation
LED	Local Economic Development
MBT	Minibus Taxi
MRTR	Minimum Required Total Revenue
NEC	North-East Corridor
NLTTA	National Land Transport Transition Act
OECD	Organisation for Economic Co-operation and Development
OHTE	Overheard Traction Equipment
OPRAF	Office of Passenger Rail Franchising

ORR	Office of the Rail Regulator
ORTIA	OR Tambo International Airport
PPP	Public-Private Partnership
PRASA	Passenger Rail Agency of South Africa
PRPC	Parastatal Reform Programme Committee
PT	Public Transport
ROSCO	Rolling Stock Leasing Company
RVR	Rift Valley Railways
SARCC	South African Rail Commuter Corporation
SATS	South African Transport Services
SED	Socio-Economic Development
SOE	State-Owned Entity
SPV	Special Purpose Vehicle
SSA	Sub-Saharan Africa
TAC	Argentinean Trains Cargo
TAI	Argentinean Trains Infrastructure
TOC	Train Operating Company
ToD	Transit-Oriented Development
UK	United Kingdom
USA	United States of America
WB	World Bank

Glossary Of Terms

Passenger rail

Passenger rail is a public transport system that has the capacity to move large volumes of passengers. It encompasses a variety of technologies, vehicle sizes, and applications, for example: heavy rail, light rail and high-speed rail (TQSM3, 2013). Passenger rail, unlike its competitors, operates on segregated-rights-of way, giving it an advantage to run at high speeds (Vuchic, 2007; Litman, 2013).

Rail vs railway

The two terms are sometimes used interchangeably in this thesis. Strictly speaking, however, rail is a means/mode of transport and railway is the actual infrastructure (tracks, stations, rolling stock, etc.).

Value

Value is “something which – for whatever reason – is emphasised in reality and desirable and forceful for the one who evaluates, be it an individual, a societal group, or an institution representing individual groups” (Rescher,1982). In this research, value is equivalent to the quality of service. This includes a) performance elements e.g. (reliability and safety) b) service quality (riding comfort, convenience, simplicity of using the system) c) price of using the service (Vuchic, 2007).

Privatisation

The focus of this research is privatisation related to passenger rail, however other utilities/SOEs will also be discussed to have a holistic picture of the concept.

Research timeframe

The research tracks the genesis, implementation and outcomes of passenger rail privatisation in each case study over time. This gives ample time to

observe whether there was a change in service quality and whether that change has been sustainable.

State-Owned Entities

State-owned entities, parastatals, state corporations, public enterprises, and state-owned enterprises, are terms used interchangeably to mean companies or organisations in which the government directly or indirectly owns a majority holding and some control in the board of management (Wall Street Mojo, n.d.). For ease of reference, whenever used in the study, they shall mean the same thing.

Chapter 1. Introduction

The [African] continent is full of railways that can best be described as “walking wounded.” Whether they can be patched up by the appropriate investment medicine and a new exercise regime … is a moot point (World Bank, 2009, p. iii)

1.1 Problem Statement and Rationale for the Research

Everyday across South Africa people use public transport (PT) to go to work, to school or do other activities. They do so to earn a living for themselves and their families, or with the hope of changing their lives for the better. Public transport opens up such opportunities for the majority of the citizens, particularly low-income households. However, a cursory observation at the state of PT shows that things are not as they should be: people walking along highways to get to work; long queues of people waiting for the minibus taxis (MBTs) – some of which are as rickety as they can get - to ferry them to work; the unused and vandalised railways crisscrossing the country – waiting for the appropriate investment medicine?

Rail especially should be a beacon of PT because it is seen as the engine of many economies, giving access to, and opening up, opportunities for the majority of the population while being kind to the environment (Griffin et al, 2005; Vuchic, 2007; TCQSM3, 2013; African Development Bank, 2015; Heyns and Luke, 2018; IEA, 2019). However, available data confirms the poor state and performance of South Africa’s railways. The three National Household Travel Surveys (NHTS) conducted in the country (Statistics South Africa [Stats SA], 2003, 2013 and 2020) show a downward trend in rail’s share compared to the other PT modes (see Figure 1-1). The respondents surveyed for the NHTS 2020 indicated that the main reasons that they are not using trains are that they are not available or that they are not reliable. Additionally, most respondents emphasised crime, overcrowding, delays, train frequencies, and lack of information as some of the reasons for the low usage of trains. In fact, traveller/household dissatisfaction between 2013 and 2020 has gone up in all but one of the attributes, namely cost.

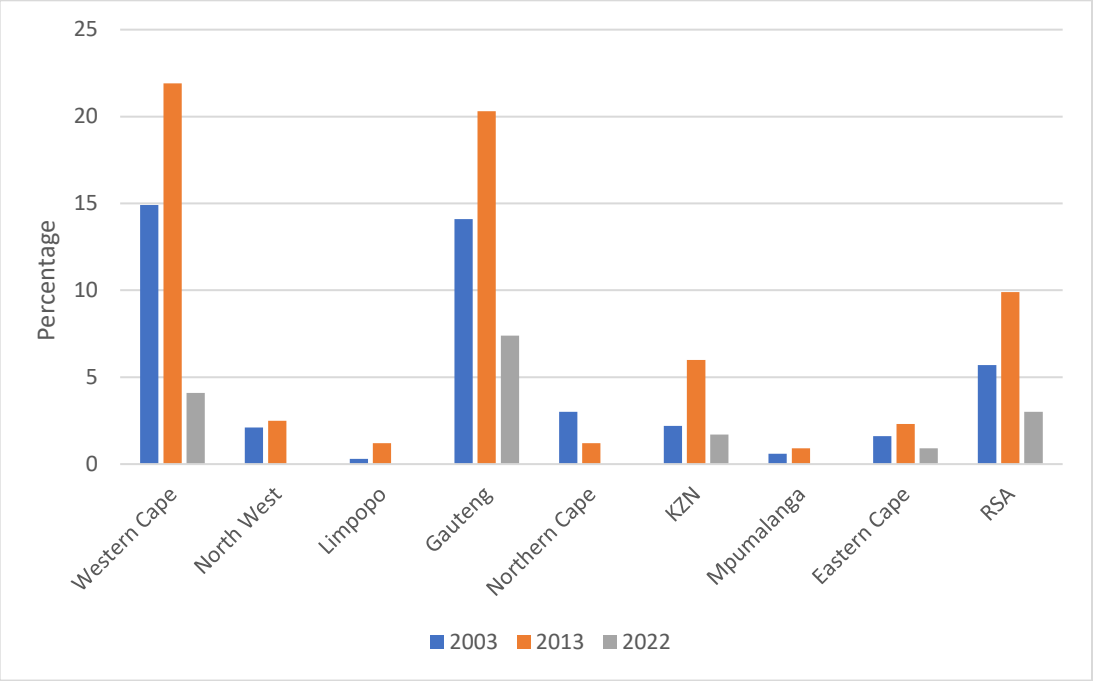


Figure 1-1: Rail modal split between 2003 and 2022

Source : Adapted from the NHTS reports for 2003, 2013 and 2020

The deteriorating rail service is also documented and confirmed by other expert sources such as Heyns and Luke (2018) and Mageto and Luke (2019). Heyns and Luke noted that total rail passenger trips have declined by nearly 20% since 2013/14, concluding that this "suggests that the passenger rail service provider, PRASA [Passenger Rail Agency of South Africa], is not providing the service levels that commuters require" (p.1). GroundUp (2022), which publishes online public interest news, estimated that the demand was approximately 8 million trips in 2022 compared to above 600 million trips in 2009[1]. Part of the reason given by PRASA in media reports for the low patronage of rail service was the implementation of the COVID-19[2] lockdown between 2020 and 2021 and the subsequent vandalism that happened on the railway infrastructure. While this argument is valid, the data by PRASA shows that there was already a huge downward trend in rail patronage even before

[1] GroundUp calculated these trips using data from PRASA and StatsSA.
[2] COVID-19 (Corona Virus Disease of 2019) is a global pandemic that was first detected in the City of Wuhan in China in 2019 and was declared a public health emergency of international concern. This led to a wave of lockdowns in many countries across the world, where movement of people - both internationally and within countries, was restricted (World Health Organization, 2023)

the lockdown (see Figure 1-2), and the railway infrastructure was already in a poor state (George et al., 2018).

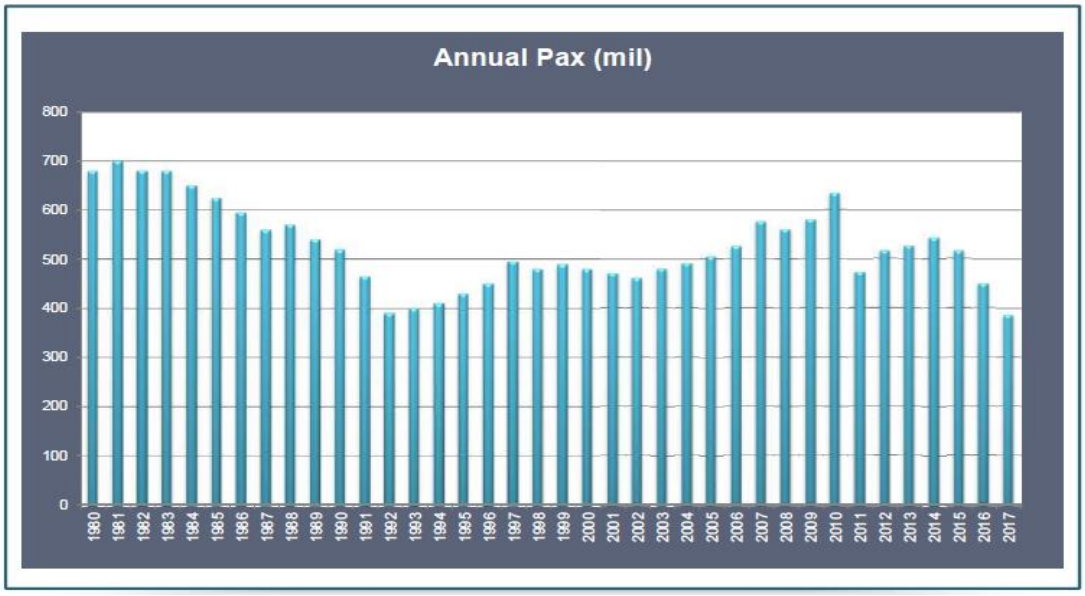


Figure 1-2: Annual rail patronage

Source: PRASA Corporate Plan, 2018

It is against this background that an argument for rail (and other SOEs in South Africa) to be privatised is advanced as a panacea to improve its quality. Public entities are deemed to be technically less efficient and less profitable than private companies (Smallman and Sun, 2004; Garreth Bloor, 2017). The promotion of rail privatisation is also reflected in a series of PT policy in South Africa, as depicted in Figure 1-3. The White Paper on National Transport Policy (Department of Transport [DoT], 2021) and the first rail policy in the country, the White Paper on National Rail Policy (DoT, 2022), encourage the participation of private companies in the provision of passenger rail services.

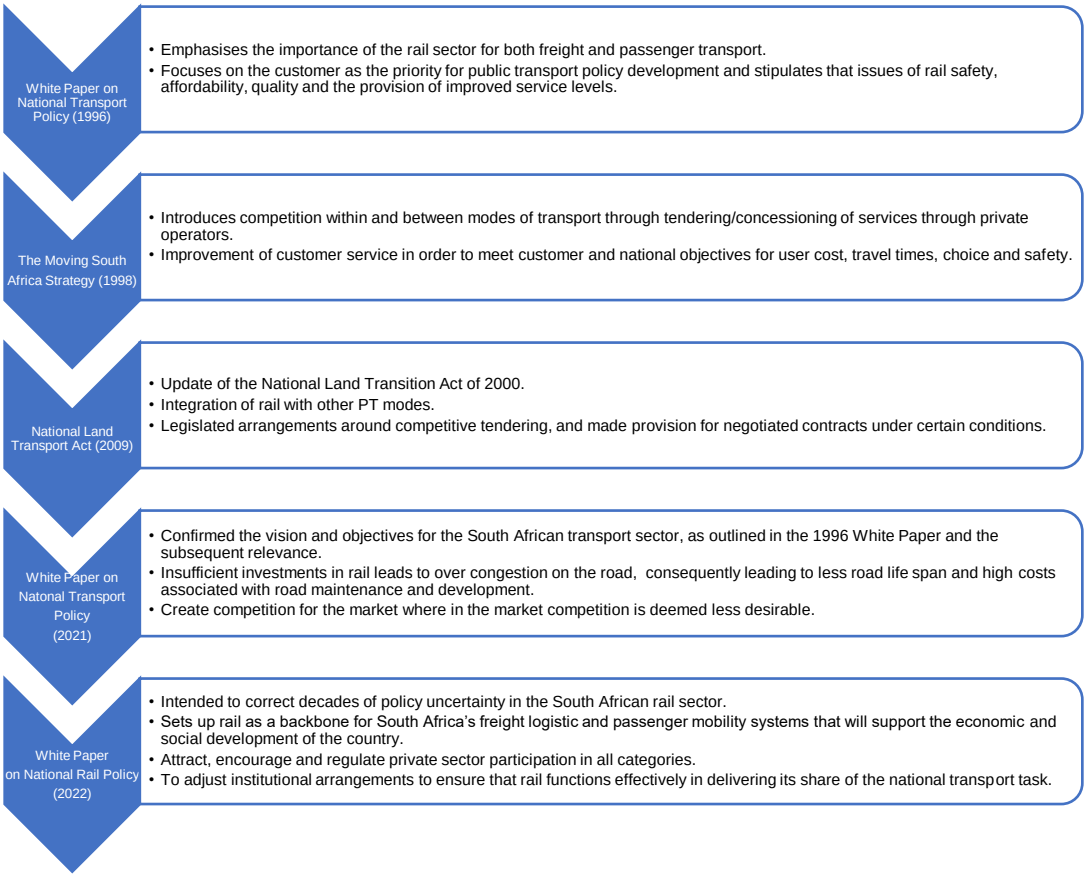


Figure 1-3: Summary of public transport policy in South Africa

Source: Researcher's diagram

Overall, the government seeks a reduced direct involvement in operations and provision of infrastructure and services to allow for a more competitive environment (Van Ryneveld, 2018).

1.2 Research Aim, Objectives and Questions

The research therefore sought to explore the contention that privatisation is a panacea to a failing passenger rail system by comparing the experiences of four case studies, namely the United Kingdom (UK), Argentina, Kenya and South Africa (Gautrain). Following from the main question, the research also sought to explore the feasibility of this concept in the country and the value that rail users can gain from it.

The objectives set and questions posed in the research are thus as follows:

Research objectives	Research questions
To assess the link between privatisation and efficiency.	**Main question** Is passenger rail privatisation a panacea to its deterioration?
To determine the advantages and disadvantages of privatising passenger rail. To assess the value that privatisation can create.	**Sub-question (a)** What value can the South African rail user derive from privatisation?
To uncover lessons for South Africa.	**Sub-question (b)** What has been the experiences of Gautrain and other privatised passenger rail systems in international cities?
To assess the conditions or drivers that determine the outcomes of rail privatisation. To test expert opinion about rail privatisation in South Africa.	**Sub-question (c)** Is passenger rail privatisation feasible in South Africa?

1.3 Findings of the Study

Backed by the mixed results that rail privatisation has had internationally and the four case studies documented in this research, the study shows that privatisation is not a panacea to an ailing SOE or a poor quality of rail service. This is particularly true for an economy like South Africa where other services besides passenger rail are failing because of its societal, economic and political complexities. The UK, Kenya and Argentina mirrored South Africa's economic crisis in the early 2020s at the time their rail services were privatised. For Kenya and Argentina, this undermined the governments' role in the partnerships with the private companies and affected their viability, eventually contributing to their failures.

This does not mean the private sector does not have a role in South Africa's railways. The research shows that rail privatisation can bring efficiency as well

as other benefits. For the UK, the biggest benefit was the investment brought by the private operators. Argentina and Kenya were also able to attract investment as well as skills and capacity brought by the private companies. For Gautrain, the private sector brought capital investment, new technology, and business-focused management techniques. However, these benefits are dependent on a number of commercial and non-commercial conditions or matrices, which the research assesses.

In terms of the value for the rail user, the findings show that privatisation must result in a better service at lower prices as desired by the rail users (Burns, 2008). Kenya failed to do this from the time its railways were privatised. The UK and Argentina were able to increase customer satisfaction for some time. For Gautrain, customer satisfaction has been consistently high since its implementation, but the service is for a niche market and remains unaffordable to most PT/rail users in South Africa.

Based on the findings of the literature, the case studies and the expert interviews, the research made recommendations on how privatisation can be approached in South Africa.

1.4 Significance of the Study

The challenges facing passenger rail in South Africa, and the push for privatisation as a panacea to reform this mode, showed that there was a case for exploring the feasibility of privatising it. The research therefore sought to gain deeper insights into rail privatisation while simultaneously contribute to the existing body of literature on the subject. The research did this by building on the research done by rail experts such as Johan van der Mescht (2005), Chauke & Maluleke (2005), and Sanders et al. (2011).

Sanders et al. concluded that the private sector could transform the levels of rail investment, efficiency and service delivery if there is a proper framework. For van der Mescht, it makes commercial sense to privatise rail lines while their basic infrastructure is still intact. Part of the reason why Kenya's rail

privatisation projects failed so quickly was because of the very dilapidated state of its railways. In this case, South Africa's advantage can be said to be the modernisation programme that PRASA is implementing to improve and transform the rail infrastructure and operations (PRASA Corporate Plan, 2021/22), although this is currently not going as intended. As to whether rail privatisation is a 'strategic must' as argued by Chauke and Maluleke, the research assesses by investigating the value and the benefits that can be derived by both the country and the rail users from involving the private sector, especially considering the country's economic and political climate.

The greatest strength of the research was in the lessons learnt from the Gautrain and the insights gained from the experts interviewed. As a 'privatised'[3] passenger rail system in South Africa, the Gautrain had many lessons to offer. In the interviews, the lessons were either supported or contradicted by the experts. These are documented in the research as outlined in the following section.

1.5 Report Structure

The research report is divided into seven (7) chapters.

Chapter 1 sets the scene for the research, looking at the debates that have led to the selection of the research topic, and how its findings contribute to the debates about privatising rail in South Africa. The chapter poses four questions about passenger rail privatisation, the main question being whether this method of reform is a panacea to the deteriorating rail service and whether it is a workable option for the country.

This leads to Chapter 2, which attempts to ground privatisation in theory by defining the major factors that affect this process. In doing this, the chapter seeks to examine the link between privatisation and efficiency, thus responding to the main question about privatisation being a panacea for a

[3] As will be seen in the literature review in Chapter 2, Gautrain does not strictly fit the label of a privatised rail system. However, it is taken as such in this dissertation.

failing rail service. The chapter also takes a journey back to the genesis of passenger rail in the UK and the USA. This is done to give the reader a picture of rail and also to demonstrate how policy has shaped the evolution of this PT mode to suit the circumstances and governments of the time. The chapter provides a theoretical framework to understand the case studies and interviews discussed in Chapter 4 and Chapter 6 in answering the research questions highlighted in Chapter 1.

The questions posed in Chapter 1 combined with the results of Chapter 2, lead to the selection of the qualitative method for the research as described in Chapter 3. The qualitative method is not tightly configured and allows for the emergence of themes and their refinement as the research unfolds. The method also allows for comparisons across case studies - which are used as secondary data in the research - and the practical knowledge gained from these. It also allows for in-depth interaction with subjects, the PT experts and the rail users interviewed for the research, in exploring the research questions and understanding their views. The flow of the research is also described in this chapter, taking the reader on a step-by-step process and reasoning behind the approach taken.

Chapter 4 answers the research question on international experience by documenting four case studies where passenger rail privatisation was experienced. These are the UK, Argentina, Kenya and South Africa (Gautrain). Using the themes emerging from Chapter 2, this chapter describes why privatisation was implemented in the case studies and how it was implemented. Each case study closes by answering the question about the value of privatisation for the rail user and confirming Chapter 2's findings about the inconclusiveness of the link between privatisation and efficiency.

A detailed analysis of the results of the previous chapter is presented in Chapter 5. Each theme or criteria that emerged in Chapter 2 is analysed and compared across the case studies for its impact on efficiency. First, the new ownership and operational models adopted are analysed for their impact on performance. Second, a comparison is made of the institutional contexts of

the case studies to see whether it produced any differences in performance. Lastly, the case studies are analysed in terms of how risk was allocated between the governments and the private partners, and the details of the contract agreements. Comparisons are also made between the development contexts of the case studies and South Africa, thus partly responding to the question about the feasibility of rail privatisation in the country.

Up to this point, the findings in the research are taken forward to be tested on the rail/PT experts in the form of interviews. This chapter (6) shows that there is largely consensus amongst the experts (and two rail users) and between the experts and the findings in the previous chapters. This includes the conditions needed for successful outcomes of rail privatisation projects, thus answering the question on South Africa's readiness for the process. The new insights gained from the experts in this chapter are taken forward to Chapter 7 as part of the recommendations.

Chapter 7 concludes the research by summarising the most salient findings. The chapter also makes recommendations based on these findings and suggests further studies based on issues it was not able to answer or fully address.

1.6 Conclusion

The chapter introduced the background from which the research emanated, namely the deteriorating service quality of passenger rail in South Africa. The deterioration in service quality has been most marked in the preceding years, as captured in the available passenger surveys conducted by various government institutions and independent authors. This has led to the call to privatise the service as a panacea to improve its service quality and create value for the rail user.

The idea of private participation in the provision of PT/passenger rail has long been the government's policy position, as evidenced by PT policy documents such as Moving South Africa and more recently, the White Paper on National

Rail (DoT, 2022). However, given the history of privatisation in developing countries, it is not surprising that privatisation has become a tug-of-war in South Africa, not only in passenger rail but in other SOEs. The dissertation asks four questions about passenger rail privatisation, the main ones being whether it is a guaranteed solution (panacea) for a failing rail system, and its feasibility in South Africa. The chapter also highlighted the findings in the research and justified the significance of the study.

Chapter 2. Literature Review and Theoretical Framework

In deciding whether to privatise public services, governments must assess if private companies will bring about the benefits they seek or if these benefits can be acquired from the public entities. Such an assessment must entail a determination of the true cost of providing services, which includes the quality of service, financial benefits of the process and efficiency of the options available to the government. The first section of this chapter examines privatisation theories in an attempt to define major factors affecting this process. This includes the rationale behind privatisation, types of privatisation, how value is meant to be derived from the process, and the role of political and socio-economic context in consideration of privatisation.

The second section of the chapter looks at how privatisation in the rail industry has evolved in the United Kingdom (UK) and the United States of America (USA) from the 19th century after the first Industrial Revolution. The discussion provides a background of the development and defining moments of rail ownership patterns and, more importantly, shows the constant challenge of how best to provide this crucial but expensive mode of PT in a changing world. Although the rail industry originates from the private sector, the discussion of the literature and the historical reflection in this chapter suggests that privatisation is not necessarily a panacea for ailing SOEs. The chapter provides a theoretical framework to understand the case studies and interviews discussed in Chapter 4 and Chapter 6 in answering the research questions highlighted in Chapter 1.

2.1 Theoretical Perspectives on Privatisation

In simple terms, privatisation can be defined as a process of governments allowing private players into state-owned entities (SOEs) – with or without competitive objectives (Smallman and Sun, 2004; World Bank, 2015). It is a relatively recent economic and commercial process that can also be political, involving the exercise of power by the state in restructuring the SOEs (Walker,

2015; Dorfman and Harel, 2016; Mkhize, 2019). According to Hood (1994), privatisation was first used as a 'jargon' term developed in the 1970s along with many other economic 'buzz-words' of that time.

Privatisation is grounded in the 'Austrian School' of neo-liberal economics led by the political philosopher Friedrich Hayek, whose books strongly influenced the conservative governments of Margaret Thatcher in the UK and Ronald Reagan in the USA in their attempt to assert their stance as anti-communist during the 1970s and 1980s (Hopper et al., 2012). This work challenged prevailing beliefs about the benefits of 'welfare' economies, state intervention, and state central planning of commercial enterprises (ibid.).

Despite its importance in public policy and its worldwide application, Reynaers (2016) argues that the question of what privatisation exactly refers to is not an easy one to answer, given the concept's ambiguousness:

> "In academic literature, for example, privatization has been defined in both a narrow and a broad sense. Narrow definitions understand privatization as the transfer of ownership, decision-making authority, and control of state-owned enterprises from federal, state, or municipal governments to the private sector and private investors. Practical examples of privatization in the narrow sense are the transfer of ownership, decision-making authority, and control of public transportation, education, hospital health care, water and energy supply, and mail delivery (p.2)."

When privatisation is defined in a broad sense, it entails much more than just the transfer of ownership, decision-making authority, and control from the public to the private sector. It also entails sale of public assets, contracting out, provision of public services by private firms, deregulation, implementation of public private partnerships (PPPs), and the reduction of subsidies (Graham, 2011; Reynaers, 2016; Amonya, 2017). In the literature, divesture is regarded as a classical form of privatisation. Divesture denotes when private sector buys and takes complete control and ownership of a public good or service. This means that infrastructure meant for public good is developed, owned and maintained by private companies, thus removing any direct influence in the hands of elected officials (NEPAD and OECD, 2005). However, this has since

expanded to include various types of privatisation practiced by different governments around the world.

As such, governments have a wide spectrum of privatisation models to choose from in order to shift the supply and operations of PT to private entities (van der Walt, n.d.). These range from outsourcing, leasing, franchising and concessioning to various options of 'design, finance, construct and maintain' an infrastructure asset. Some of these models are shown in Figure 2-1. The figure shows the realms of the rail, bus and paratransit (e.g. minibus taxis [MBTs]) modes of privatisation (Bayliss, 2002). Public monopolies are located at the left top end of the scale requiring the most public authority involvement, while open market competition sectors, which require the least public authority involvement, are at the right bottom end of the chart. The more the contracts move towards the upper left in the rail domain, the less competition and less risk to the operator. Concessions and franchises fall in the middle where there is controlled competition, characterised by shared risks between the owner and the operator (Walters and Jansson, 2008).

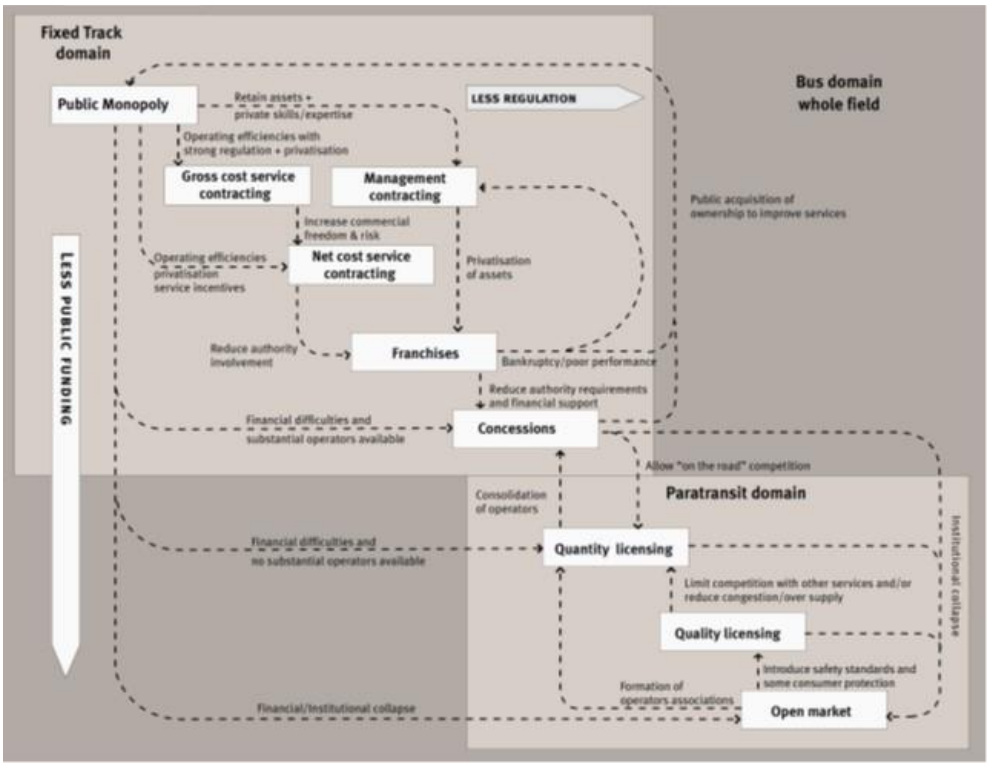


Figure 2-1: Urban public transport competition: regimes and transitions

Source: Bayliss (2002)

According to Borrmann et al. (2013), the choice of the privatisation model is influenced by the nature of the sector, what needs to be privatised (either the whole, a business section or operational requirement), and/or whether the project is new or old (brownfield or greenfield project). Owing to the public monopoly[4] nature of rail (International Energy Agency [IEA], 2019) the most privatisation models practiced in this sector are concessions, franchising, and other public-private partnership (PPP) models. In a concession agreement, the operator/private partner is given an exclusive right to provide a service or set of services within a given area, while different franchises may cover the same area (Bayliss, 2002; Barter, 2008; Schalekamp, 2015).

Many countries across the world have PPP frameworks defining it in various manners (Mkhize, 2019). In simple terms, a PPP can be defined as a long-term partnership between a government entity and private company to provide a public service (Amonya, 2017; Mkhize, ibid.). The partnership can be in terms of a construction of a new asset, existing asset, with clear objectives, financing agreement[5], as well as allocation of risk between/amongst the involved parties (ibid). As it is also shown in the figure above (Figure 2.1), PPP agreements can vary, which also influences the organisational structure, accountability and the manner in which they are run. These, in return, may have an impact on the efficiency and effectiveness of the projects.

Finally, franchising means a contract between a franchisor and a franchisee for the latter to utilise the brand and business processes and methods to customers or in provision of services for the franchisee's benefit (Schalekamp, 2015). Such privatisation contracts often operate on the basis of 'in the market', as opposed to 'for the market' competition[6]. This serves as an incentive for innovation, lower costs, lower prices, and higher operating

[4] Rail is considered a monopoly because its components (infrastructure) are durable and immobile and generally uneconomic to duplicate (Abbott and Cohen, 2017).
[5] For instance, finance can be provided by investors, either the private company, government entity or/and both, depending on the structure of the agreement between the two (Albalate et al., 2014).
[6] 'For the market' competition means competitive bidding for service provision, while 'in the market' denotes when different businesses compete for the same market (Schalekamp, 2015)

efficiency, as the entity competes for a higher market share (Competitions and Markets Authority, 2015).

Empirical research into privatisation is done through various methodologies, including comparisons of samples of SOEs in similar circumstances or 'like-like' studies, before-after or 'pre-post' performance and cost-benefit studies (Pollitt and Smith, 2002; Graham, 2011; Estrin and Pelletier, 2018). Therefore, the findings of any research into privatisation should be studied with caution. For example, cross-sectional studies looking at the performance of firms under public and private ownership, with an assumption of the effects of ownership controls on other determinants of performance, are regarded as inappropriate. This is because ownership is endogenous in a cross-section and difficult to control for all possible determinants of performance (Guriev and Megisson, 2006). Similarly, literature review studies looking at efficiency and effectiveness of privatisation conducted in 2001 and 2013 yielded different findings, and the researchers have pointed at potential flaws of the original research (Megginson and Netter, 2001; Mühlenkamp, 2013)[7]. In 2005, a study looking at bank privatisations in several developing and transitional countries found that some measures of performance improved after privatisation (Estrin and Pelletier, ibid). According to the authors, the results of this study were mixed, showing that local conditions also played a role.

In summary, there are various definitions of privatisation, but what is common in the definitions is that there is a shift from absolute public ownership of a service to private sector's involvement, which can differ in degree. The question is why governments opt to privatise public services - even though a positive outcome is not guaranteed as seen from the empirical research on the subject?

[7] The 2001 study found that privatisation has not resulted in efficiency and effectiveness, while the 2013 study shows not only how the results are mixed, but also that the former research could have influenced by the flaws identified in its research method (Megginson and Netter, 2001; Mühlenkamp; 2013).

2.1.1 The Rationale for Privatisation

It is said that privatisation can be applied as some kind 'omnibus policy' or panacea (Mohan, 2001; Dorfman and Harel, 2016), premised on the fact that there are problems with public ownership of SOEs and it is advanced as a solution to turn around these ailing SOEs in order to improve the service quality offered (Chukwuma et al, 2016; Awuah, 2019). Figure 2-2 below lists the overarching reasons for privatisation (Graham, 2011; Idike et al., 2020). 'Improvement of performance and quality', 'introducing competition', 'efficiency and effectiveness' are among the chief reasons given for pushing for passenger rail to be privatised in South Africa (Bloor, 2017; EWN, 2018; Biz News, 2019).

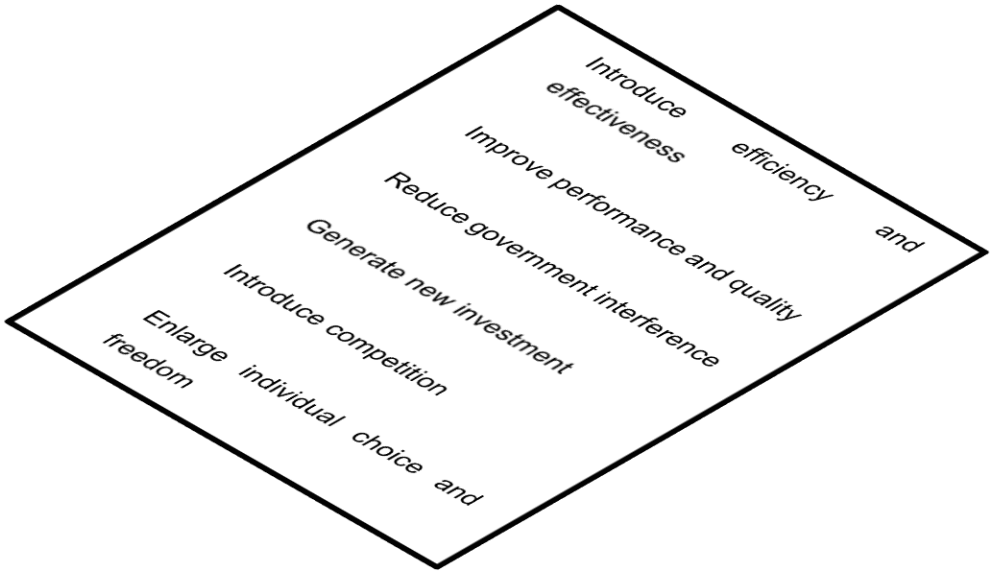


Figure 2-2: General objectives of privatisation identified in privatisation literature
Source: Adapted from Graham (2011) and Idike et al. (2020)

At the heart of privatisation is the idea of efficiency and effectiveness that can be brought by the private sector (Smallman and Sun, 2004; Sānchez et al., 2008; World Bank, 2015). Chukwuma et al. (2016) describe efficiency as the use of resources to maximise the production of goods and services, which means producing more goods and services with minimal resources. An efficient rail system, the argument continues, maximises revenue and minimises costs while providing the desired level of service (Beck et al.; 2013). For the government, privatisation will help to ease their financial burden

(Kopicki and Thompson, 1995; Borrmann et al., 2013; Graham, 2020), and it can take advantage of private incentives and specialised expertise to design, finance, build, and operate the said service so as to gain technical efficiency within the organisation (Albalate et al., 2014). What the private partner gains in the partnership are business opportunities in attractive markets where risks might be controlled under a safe regulatory framework. The value for the user is an improved quality of the service (Amonya, 2017).

Also, it is argued that the private sector's competitiveness serves as a fuel to its efficiency and effectiveness. According to Schalekamp (2015), the opportunity for competition arises when operators can bid to be awarded an available concession – 'for the market' competition. Shaw et al. (1996) add that in some cases concessions or franchises allow suppliers to compete 'in the market' once a facility/service is operating. In the case of 'for the market' competition, the threat of losing the contract in the future ensures that pressure will be maintained throughout the operating period (Warsen et al., 2018). As such, the contract can include basic standards of service, with performance indicators such as reliability and safety; service quality elements such as safety and security; and pricing elements such as ticket fares. The greater the level of service the contracting authority specifies is to be provided, the greater the authority must be prepared to cover the cost of such services (Schalekamp, ibid.).

From the above-mentioned description of efficiency, it is clear that many scholars give a cost-based description of efficiency (Global Centre for Public Service Excellence's, 2015). However, applying this cost-based definition is a challenge when it comes to passenger rail. According to Makovsek et al. (2015), the rail business is complex, which makes it difficult to produce a description of efficiency that is equally relevant from different viewpoints or to all stakeholders.

For some scholars, the definition of efficiency should also encompass issues of welfare or equity for designated groups (Guzman and Oviedo, 2018; Litman, 2018). The measure here is the extent to which "governments can deliver an

equitable distribution of services between citizens within their budget constraints" (Global Centre for Public Service Excellence, 2015, p.8). However, proponents of privatisation see such distribution of services as inefficient, as its existence may encourage users to demand more of the service than they would if they were charged its true cost (Winston, 2000; Gomez-Lobo, 2017). In the case of passenger rail, this could mean building more rail lines even in cases where demand does not justify it. Nevertheless, this would ensure that rail needs are met even in unprofitable areas.

The shift to privatisation can also be explained as a response to some form of market failure or external influence (Gwilliam, 2008; Dementiev and Han, 2020). In his seminal work on PT regulation, Gwilliam (2008) found some evidence of a regulatory cycle in PT. This consists of cycling through private competitive supply, unregulated private monopoly, regulation of the private monopoly, nationalisation and then back, through further regulatory reform to some type of private competitive supply (see the Regulatory Cycle in Figure 2-3).

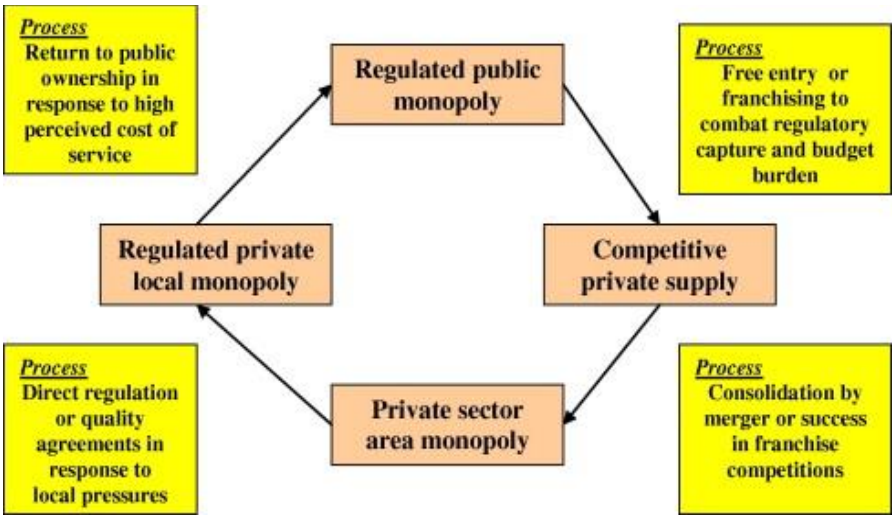


Figure 2-3: The industrialised country regulatory cycle

Source: Gwilliam (2008)

The move from one stage to the next is generated by a crisis of enough significance to demand an administrative response, usually to protect public interests or stabilise the markets (Walters and Jansson, 2008; Dementiev and

Han, 2020). The response to the crisis is thus to reform or redirect the offending behaviour (Foster, 1994; Pengilley, 2022)[8]. Dementiev and Han (ibid.) propose an updated regulatory cycle, one that considers the conditions in developing countries, e.g. budget constraints, spontaneous deregulation and weak regulatory institutions. However, the point of referring to the regulatory cycle in this research is to illustrate the shift that can happen in the provision of PT as a response to external pressures. Gwilliam's regulatory cycle serves this purpose adequately.

Lastly, another factor of why there is a shift from public ownership to private ownership, which privatisation literature sometimes highlights, could be the conditionality of lending institutions such as the World Bank (WB) and the International Monetary Fund (IMF) in developing countries (Nellis, 2003; Josiah et al., 2010). Both institutions carry with them conditional arrangements that make financial assistance depend on the execution of the privatisation programme as part of their Structural Adjustment Programmes (SAPs), (Chukwuma et al., 2016; Estrin and Pelletier, 2018).

Chukwuma et al. (ibid.) and Josiah et al. (2010) contend that this was done without much regard to privatisation's distributional or welfare consequences such as price increases and job reductions because of the belief in the ultimate benefits of the process. The influence of the two institutions is shown by the fact that by the time the 1980s ended, many countries in Africa had received World Bank assistance for privatisation programmes and 67% of all adjustment lending involved the reform of SOEs (Martin, 2002; Berthélemy et al, 2004; Olievschi, 2013). Stories of economic growth after privatisation are given as evidence for the superiority of the process (Josiah et al., ibid.).

2.1.2 Privatisation Theories

It has been argued that the practice of privatisation has run ahead of the theory of privatisation, since the early privatisation programmes were not so much

[8] The regulatory cycle is demonstrated in the rail history section of this chapter and the case studies.

the result of the deliberate implementation of a pre-planned strategy founded on a well-developed theoretical base, but rather were ad hoc policies developed in practice, evolving over time (Walker, 2016). As such, privatisation theory borrows from various disciplines such as economics, accounting, management, law and politics.

2.1.2.1 Theory of the firm

Chief among these theories is the theory of the firm and its variants, namely public choice theory, agency theory and property rights to predict the existence, structure, behaviour and relationships of a business entity within the market (Spulber, 2009; Josiah et al., 2010). The contemporary theory of the firm largely explains the two major ownership models of firms/organisations, namely private vs public, and the objectives of each (Walker, 2016). The objective in the private firm is to save costs and maximise profit in contrast to maximising social welfare in the public firm (Spulber, ibid.).

According to Walker (ibid.), the important difference between the two ownership forms, i.e. the private company and the public company, is who receives the information about cost and demand. The manager is the informed party under private ownership, while the minister or political principal is the informed party under public ownership. Privatisation thus creates an information asymmetry between the private company and the government (ibid). The advantage of this asymmetry is that it limits space through which the government can interfere with the working of the firm (see section 2.3.3 below). The disadvantage is that it makes it more difficult for government to motivate the firm to pursue social welfare objectives. There is thus a trade-off that government might need to make between social welfare and efficiency when deciding to privatise (ibid.).

2.1.2.2 Ownership/property rights and efficiency

Flowing from the theory of the firm is ownership/property rights and how these concepts influence the behaviour of individual participants in government institutions compared to those in private institutions. The absence of a market for shares are said to remove sanctions for bad performance and incentives

to managers in the public sector (Kim and Mahoney, 2005). Civil servants, who are not entitled to the gains due to improved efficiency, have no financial incentive to improve performance of public entities. Members of the public do not have the possibility of shifting their assets away from unprofitable ventures, lowering share prices and informing potential bidders that the companies' assets are not earning the maximum possible return. The absence of shareholders' rebellions or takeovers removes a crucial oversight and accountability aspect on public sector performance, leaving management with far more discretion than in the case of private ownership (Alchian and Demsetz, 1973; Kim and Mahoney, 2005).

Under public ownership, the government is the owner of the SOEs and operations are delegated to appointed managers. In the private company, the owner runs and manages the company, or a manager is appointed on behalf of shareholders (Samson, 1994; Hentz, 2000; Ram Mohan, 2001; Parker, 2009). Firms owned and run by their founding entrepreneur (or his or her successors), are thought by economists to have relatively few problems of enterprise objectives and managerial incentives. The objective of the firm in this case can be thought of as profit maximisation, to be attained either in the short or longer run, while incentive problems do not arise because ownership and control are concentrated in the same individual (Samson, 1994; Hentz, 2000; Berthélemy et al, 2004). The problem of corporate governance arises when ownership and control are separated (Organisation for Economic Co-operation and Development [OECD], 1998; Alsharqawi and Alsharqawi, 2019).

2.1.2.3 The principal-agent theory

This theory posits that partial privatisation is a source of principal-agent relationship, where public service becomes a principal and the private company is an agent to deliver services to the community on behalf of the principal (Müller and Schmitz, 2016). According to this theory, the two main problems arising out of this are underpinned by the opposing interests of the actors, with the government concerned with the community welfare, while the private sector is driven by profit-making incentives (Eisenhardt,1989; Burns,

2008). The first problem in the principal-agent relationship arises when (a) the goals of the principal and agent conflict and (b) it is difficult or expensive for the principal to check what the agent is doing. The problem here is that the principal cannot verify that the agent has behaved appropriately because he/she does not have full information (Eisenhardt, ibid.).

The second problem is that of risk allocation, i.e., who between the agent and the principal carries which risk given their different attitudes toward risk, leading to their varying risk preferences (Eisenhardt,1989; Linder and Foss, 2013; Bendickson et al, 2016; Yusuf et al, 2018). Principal-agent problems are, however, said to be more acute under public ownership. Managers will perform only if they are monitored and incentivised (Frech III, 1976; Borrmann et al., 2013; Müller and Schmitz, 2016; Abbott and Cohen, 2017).

To manage principal-agent relationships, agency theory suggests government should write complete contracts (e.g. laws and regulations) that adequately protect public interests and prevent privatised firms' opportunistic behaviours. Furthermore, relevant existing laws or regulations that apply to the privatised firms should be specified by every privatisation deal, and enforcements of the contracts should be followed (Ramamurti, 2000). However, Eisenhardt (1989) and Williamson (1996) argue that in some cases, it is difficult and costly to identify all potential opportunistic behaviours and write complete contracts. According to the two authors, this is because agency theory assumes that individuals have delimited rationality and therefore cannot cater for all eventualities.

2.1.2.4 Public choice theory

Government decision-making process is influenced by a constellation of interests from various actors such as politicians, trade unions, trade/business associations, consumer groups, who form specialised coalitions interested in government enterprise operations. "These actors pressurise civil servants into directing government-owned bodies to act in manners which are consistent with their own special interests" (Nayar, 1994 quoted in Majumdar and Ahuja, 1997, p.1). According to Walker (2016), this means that regulated private

companies are likely to outperform SOEs in poorly functioning political systems. Also, privatisation is most likely to take place when political benefits of public control are low, and the desire of the treasury to limit subsidies is high (Kouser et al., 2011). This is most likely to occur when the political costs of raising taxes to pay subsides is high and when the political benefits from excess employment are low.

The problems highlighted in the property rights, principal-agent and public choice theories can have an impact on corporate governance. This is when management (as opposed to the owner) is not sufficiently incentivised to ensure the company is responsibly managed and hence are encouraged to take excessive risk (Alsharqawi and Alsharqawi, 2019). An example of this in the rail industry is when ownership and management are vertically separated, the most popular model being infrastructure management separated from train operations (Laabsch and Saner, 2012; Amonya, 2018; IEA, 2019; Preston, 2023). One basic illustration of the problem of corporate governance in this case would be where the party responsible for maintenance of the rolling stock (i.e. the private company) is not incentivised to maintain it (Bouf et al., 2005; Abbott and Cohen, 2017). Chapter 4 highlights the train accidents that occurred in some of the case studies due to such negligence. In such models of ownership, which party should be held liable: the government or the private partner? Such problems can be avoided if the owner/government has oversight over the private partner and is reasonably informed about the activities of this partner (Transport and ICT, 2017). The government must also be clear about its objectives regarding the partnership and be committed to these (Shaw et al., 1996; Kouser et al., 2011; Amonya, 2017). This will help reduce the problems of vested interests discussed in the public choice theory.

2.1.3 Privatisation as a Panacea: Fact or Fallacy?

Apparently something of a panacea for its advocates, privatisation is problem-ridden for its critics (Josiah et al., 2010). Also, according to authors such as Mohan (2001) and Dorfman and Harel (2015) and organisations such as the Global Centre for Public Service Excellence (2015), as opposed to widely held beliefs, neither the theory nor the empirical evidence on privatisation provides

unqualified support for the belief that privatisation leads to outcomes superior to those under public ownership. Instead, the proponents of privatisation are accused of finding private ownership superior to public ownership for illegitimate reasons, i.e. comparing competitive enterprise with monopolistic enterprises like rail (Mohan, ibid.). Even though some privatisation studies have found there were improvements in a privatised company performance, the change of ownership itself may not be the only reason for this improvement (Jayasundara et al., 2020). Increases in efficiency may be attributed, in part, to other factors, i.e. competition, change of technology, and regulation reforms (Megginson and Netter, 2001; Guriev and Megginson, 2006; Bachiller, 2017). For example, Bachiller (ibid.) found a positive correlation between the improvement in performance of privatised companies and institutional reforms in developing countries.

The theoretical literature, while pointing to the potential benefits of private ownership, underlines the many conditions required for such benefits to materialise (Gidadhubli and Kumar, 1993; Nellis, 2005; Dorfman and Harel, 2015). Where unemployment is high and rising, where recession persists, where industrial output is on the decline, where inflation remains unabated, where debt servicing proves painful and where standards of living are low and declining, privatisation is not easy to implement (Gidadhubli and Kumar, 1993; Nellis, 2005; Chukwuma et al., 2016).

In addition, government services are complex, combining transaction costs, managerial concerns, and social/welfare issues - some of which do not burden the private sector (Josiah et al., 2010; Jayasundara et al., 2020). Therefore, privatisation would be different in different sectors. Privatising sectors such as railways presents greater technical and political difficulties than sectors like oil or telephone companies (Ramamurti, 1997; Olievschi, 2013; Abdeldayem and Dulaimi, 2019). The authors add that rail has important non-commercial objectives and does not promise growth or profitability like the latter companies.

Majumdar and Ahuja (1997) state that many other factors, such as management differences, can lead to significant performance variations even between SOEs. The privatisation logic may then apply more to certain sectors than to others. For instance, some SOEs may enjoy better managerial freedom and relative freedom from state intervention. Such SOEs may already be efficient and stand to benefit relatively little from privatisation (Abubakar and Muuka, 2002). On the other hand, there may be enterprises that are performing poorly, and would, therefore, benefit significantly from privatisation (Abubakar and Muuka, 2002; Nellis, 2003; Awuah, 2019). Majumdar and Ahuja (1997) state that this variation in the performance of SOEs is a possibility that existing concepts have not considered.

Additionally - see section 2.1.2 - unlike their counterparts in the private sector, managers in the public sector might lack focus because they are expected to pursue a variety of objectives, not all of which are calculated to maximise profit (Buchanan and Tollison, 2009; Warsen et al., 2018). According to Nayar (1994 cited in Majumdar and Ahuja, 1997), one assumption in the literature is that holding ownership constant, private and public sector managers have equal operating freedom. This, however, is not always the case. For instance, managers in the public service are encumbered by bureaucracy and hence have little incentive to innovate, ultimately impacting on the quality of service (Albalate, 2014). Nayar (ibid.) gives an example of India, referring to the complex reality of the institutional and political environment surrounding SOEs. This reality leads to problems anticipated by the public choice theory, which in turn leads to poor performance of SOEs.

In South Africa, for instance, the Congress of South African Trade Unions (COSATU) has resolved that there should be no privatisation in specific sectors. According to Mr Sizwe Pamla, the spokesperson of COSATU:

> "We must make sure, for example, that [PRASA], which is used by eight-million working people, is not privatised. But that cannot be said about SAA, which does not have the same strategic role," Pamla said (Business Live, 2019).

The resistance by labour unions is also based on the fact that privatisation often leads to massive job losses in the public sector (Kenny, 2000; Barton and Fairbrother, 2007). Kangwa (2001) and Juyasundara et al. (2020) argue that privatisation leads to rationalisation of staffing and operations due to the need to make companies more effective and competitive, as seen in Telkom and Iscor amongst the others[9]. This leads to redundancies which leave communities dislocated from what in some cases may be their only means of livelihood (Kenny, 2000; Kangwa, ibid). Therefore, argues the privatisation critics, there is always a powerful combination of interests against privatisation in developing countries, which is less the case in developed countries (Kane-Berman, 2016; Awuah, 2019). The issue here is not whether such opposition is rational because privatisation can be very emotionally charged, but that its existence slows the pace of privatisation and limits its scope even if there is a political commitment to implement the policy (Paul, 1988; Chukwuma et al., 2016).

Furthermore, the correlation between privatisation and efficiency remains unclear. This is because the results from privatisation across sectors and countries have been mixed. These inconsistent results may be due to studies either following a specific underpinning theoretical paradigm or reflecting the advancement of knowledge through a cycle described by Kuhn (1962) and Thwink (2014) as the revolution of thought that occurs within an area of research.

In sum, the section discussed the different forms of privatisation, from full divestiture to introducing some form of controlled competition. In rail, this has largely been in the form of PPPs, where government retains ownership and responsibility of a public service but contracts the running of the service to a private partner. The quest for efficiency and the improvement in service quality, need for investment and belief in managerial efficiency of privatisation

[9] In 2019, it was reported that TELKOM seemed to be doing well for its investors (Daily Maverick, 2019). Meanwhile, it cut its employment by half between 1999 and 2005 after it was privatised in 1997 Greenberg, 2005). Similarly, Iscor, whose privatisation affected the entire steel value chain in South Africa, led to closure of most companies that were dependent on it, resulting in considerable job losses (News24, 2018).

seems to drive privatisation of SOEs. This, however, should not eclipse the fact that privatisation may come as a result of the regulatory cycle which is normal in many economies. The section also showed that privatisation and its effects can be drawn from various theories, from the principal-agent theory to the public choice theory. What, then, can be learnt from the history of privatisation in the UK and USA, which were at the forefront of railway development since the 1800s? What can also be learnt with South Africa's own experience in providing rail services?

2.2 History of Rail in the UK, the USA and South Africa

Built by wealthy industrialists during the Industrial Revolution in Europe, the rail network was not strategically planned as a passenger network but to link factories and ports, as well as large urban market centres (History, 2022). When private companies realised that they could easily move passengers from one location to another, and at a profit, they started to build railway tracks in competition with one another (Roth and Divall, 2015). Each new line needed legislative approval, very few of which were granted because the government of the time had little interest in the emerging railway network (Glaister et al., 2006).

The pseudo-competition of the beginning years of railway later made way for a more amalgamated industry as the weaker rail companies were taken over by the more successful ones. This reduced the number of privately-owned rail companies, thereby creating a monopoly situation for passengers and freight users in many areas (Wellings, 2014). The new rail companies also owned both infrastructure and rolling stock, further entrenching the monopoly situation (Gourvish, 2002). One such a company is Stockton and Darlington Railway in England, which built 12.9 km line from Stockton to Darlington for transportation of coal, and later expanded into passenger rail business (Jupe, 2010; Williams Rail Review, 2019).

After the realisation of potential socio-economic benefits of the railway network, governments started to initiate regulatory frameworks for the

business. In the UK, the government started to intervene as early as the 1840s through the Railway Regulation Act, which sought to regulate the monopolies in each area and insisting on specific health and safety measures for the passengers (Shaoul, 2004). Such interventions by the government in those pioneering years focused on a concern for the customer, especially the low-income customer, by making it easier for rail to be accessed by all (The Railway Regulation Act, 1842).

In the 1940s, there was a shift from private ownership of rail to public ownership in England (Roth and Divall, 2015). Martin (2002), states that this was because private ownership proved incapable of developing freight and passenger services in ways needed either to serve the economy as a whole or to meet social needs. For national interest purpose, on the other hand, the government sought to produce a system that could satisfy both public and commercial interests, which seemed like an impossible task at the beginning (Gourvish, 2002).

Monopoly ownership of rail by governments was the norm for much of the 20th century, until growing competition from cars and restrained financial resources forced governments to consider fundamental restructuring of their rail systems (Thompson, 2003; Shaoul, 2004; Roth and Divall, 2015). As also outlined in the UK's Beeching Report published in 1992 (Gourvish, 2002), Thomas (2013) adds that such restructuring was necessitated by a need to introduce more innovative and efficient management, reduce railway deficits and public subsidies, increase competition with other transport modes, and make rail more responsive to the needs of its customers.

This pattern of rail ownership is also mirrored in the USA, which had its first railway for steam-powered trains built by a private company in the 1930s (Müller and Aragonés, 2012). At first, the federal government was only involved in the railway industry through granting of land rights and authorisation of rail construction. In 1887, though, Congress passed the Interstate Commerce Act to regulate 'monopolistic practices' in the railway industry. The biggest amongst these practices were the runaway rail price

rates negatively affecting both small businesses and passengers. This triggered a rising public outcry for regulation (Brown, 2013; Wilson, 2013).

As it was the case in the UK, the industry was to be interrupted by building of roads and the rise in car ownership, which resulted in reduced rail patronage (Spychalski, 1997). By the 1950s, US urban passenger travel began to shift to newly built, and highly subsidised, highways and airways – a reflection of what was happening in other countries (Roth and Divall, 2015). For the first time in its history, rail faced competition from substitutes, especially for freight and intercity passenger services (Kessides, 2004; Müller and Aragonés, 2012). The pattern of decommissioning rail lines continued. For example, by 1971, when the government-owned passenger rail corporation - Amtrak- was created in the USA, about 500 of the 2500 daily urban trains that ran in 1954 remained in service (Renner and Gardner, 2010). Doughty et al. (2021) state that making trains worth traveling in again thus became a mission in 1971.

All these challenges facing rail in the 1960s to the 1980s culminated with the re-emergence of private rail operations in the 1990s (van der Mescht, 2005; Parker, 2012). Bullock (2005) argues that the reason for this is that conventional rail companies do not have the tools needed and find it difficult to be sufficiently operationally and commercially flexible to respond to both technical (e.g. scheduling) and non-technical issues (i.e. customer service). This view is supported by Kopicki and Thompson (1995) and Borrmann et al. (2013), who state that monopolistic rail companies are not able to change their culture and to respond quickly to emerging market forces. Cost structures are distorted through controls, entitlements, and cross-subsidies. Incentives for efficient resource allocation are hampered by red tape and political interference. Ultimately, the authors argue, private rail companies offer a superior service to rail users than public companies.

The UK went on to privatise its rail system in the early 1990s (Bowman et al., 2013). As detailed in Chapter 4 of this research, the country did this through franchising its rail system to private operators (ibid.). There have been heated debates throughout the years about whether privatisation has been beneficial

to the country and the rail users (The Competition and Markets Authority, 2015; Johansson and Bickel, 2020). Currently, the UK government has replaced the franchising model with emergency contracts and intends to implement a concession-type model going forward (International Railway Journal [IRJ], 2022). The intention is to respond more to the needs of the rail user.

Like its privatised UK counterpart, the results of the publicly owned Amtrak have also been mixed. Over fifty years since its creation, Amtrak has not had stable leadership. According to Doughty et al. (2021), the SOE has seen a succession of CEOs, some of whom were in an acting capacity, which can be said to be a symptom of a leadership problem. Added to this, government continued to fund highways that connected all the major American cities, some of which closely ran alongside the rail network and further drew passenger and freight traffic away from rail. Like with PRASA, there are calls from some quarters to privatise Amtrak, with the loss in revenue cited as the main reason (Cato Institute, 2019).

Meanwhile, in 2021, following a job creation policy announcement by the US president, the Amtrak CEO outlined a proposal called Amtrak Connects US, which would expand intercity corridors with capital funding from government (Smith, 2022). These corridors will serve travel outside the popular North-East Corridor (NEC), which serves movement along Washington D.C., New York, and Boston (Doughty et al., 2021). The US government is justifying this proposed rail modernisation and expansion in accordance with its environmental goals and economic goals. These include energy efficiency and support for domestic manufacturing.

To reiterate, the section traced the history of rail from over a century ago during the Industrial Revolution up to more recent times. The intention was to show how, as envisaged by the regulatory cycle (Gwilliam, 2008), the evolving socio-economic conditions across the world have had an impact on the ownership and operations of rail: from private ownership and operations during the Industrial Revolution to monopoly ownership when nationalism

swept across the western world, and back again when the industry came to be challenged by the growth and the competition from another, cheaper technology: the car. Part of this instability is because rail is expensive, yet it is expected to fulfill a social role to a largely captive market[10] (Burns, 2008; van Ryneveld, 2010; African Development Bank, 2015). As a result, governments around the world have searched for an ideal ownership model that would best suit this PT mode in providing a quality service to its customers.

South Africa has also faced its own challenges in the provision of rail. In 1860, passenger rail in the country was born with the opening of a 3,2 km rail corridor in Durban. Three years later, the Western Cape got its own rail service with the introduction of the Cape Town - Wellington section. The first passenger commuter train to operate in the Gauteng area was introduced in 1890, running on the 20km stretch between Braamfontein and Boksburg in Gauteng (Transnet Freight Rail, n.d.; Bullock, 2005).

Beginning in 1910, rail was managed by different government-owned entities. Firstly, both freight and passenger rail services were merged into the South African Railways and Harbours, which was later renamed the South African Transport Services (SATS) (Transnet Freight Rail, n.d.; PRASA Strategic Plan, 2012; PRASA Corporate Plan, 2013/15). In 1990, there was some degree of horizontal separation when passenger services and freight services were separated. Transnet was created to take over most of the operations of the SATS, except for passenger rail which was transferred to the newly formed South African Rail Commuter Corporation (SARCC). Vertical separation was also applied between the management and the operations of passenger rail: while the SARCC independently managed and owned commuter rail-related assets, including stations and surrounding land, infrastructure and rolling stock, services were operated by Metrorail - which remained under Transnet (PRASA Strategic Plan, 2012). The current PRASA was formed in 2006 and renamed in 2008. The main reason for the restructuring was to integrate the

[10] A captive market is where customers have limited choice, either because of the scarcity of the product/service or the cost of alternatives (PRASA Strategic Plan, 2012).

management of infrastructure and operations under one organisation - which at that time was managed by the SARCC and Transnet – in order to improve the accessibility, safety and cost to the customer (ibid.). The government observed that the separation of ownership between SARCC and Transnet caused problems, particularly with disputes over the responsibility for maintenance and investment (PRASA Strategic Plan, 2012; PRASA Corporate Plan, 2014/17).

The change in management did not improve the passenger rail service, as shown by the continued downward trend in demand (see Figure 1-2 in Chapter 1). The downward trend continued despite the modernisation programme, worth R97 billion, that government announced in 2011. Modernisation was envisaged to transform rail over a period of 20 years and came after years of poor investment in the system. The improvements outlined in the plan included:

- New rolling stock
- New depots
- Modern stations
- Modern signalling and train control systems
- Operations / Service improvements.

The plan came with a ‘guarantee’ of job creation and industrialisation (PRASA Strategic Plan, ibid.; PRASA Corporate Plan, 2011/14).

Regardless of the huge investment in PRASA, the SOE’s annual reports and financial statements (2016/17; 2018/19) show a decline in revenue even though there has been a rise in the subsidy from the government (GroundUp, 2022). The Auditor-General (PRASA Annual Report, 2021/22) reported that the audit outcome of the PRASA had regressed to a disclaimer, after two years of qualified opinions with findings. Controls at the entity had broken down, and PRASA only achieved 26% of its performance targets.

GroudUp (ibid.) argues that the declining passenger numbers and unrealised revenue targets demonstrates that the entity is in a downward spiral with

regards to its service offering to rail users and its overall performance. There are also issues regarding internal policy compliance and monitoring processes. This corroborates the Public Protectors' findings in 2015 about alleged procurement irregularities amounting to more than R2.8 billion (Public Protector South Africa, 2015).

Despite this, government still sees rail as the backbone of PT (White Paper on National Rail Policy, 2022). Thus, in 2022, the former Minister of Transport, Mr. Fikile Mbalula, announced that capital transfers to PRASA would rise to R13.5 billion in 2024/25 from R12.6 billion in 2022/23, to restore the rail network after it was heavily vandalised during the Covid-19 lockdown (IRJ, 2022). According to the minister, the timescales for restoring rail services on heavily vandalised sections of the network had been extended due to factors beyond PRASA's control, for example, "protracted procurement processes for infrastructure such as substations". The funds would also be used to towards completing the entity's modernisation programme.

In the meantime, PRASA's shareholder, the Department of Transport, is drafting a rail devolution strategy as part of Rail Policy. The strategy will provide for the devolution of passenger rail to local government (Mining Weekly, 2022).

2.3 Conclusion

To ground the concept in theory, the chapter first reviewed the literature on privatisation, and then reflected on the history of privatisation looking particularly at the two major champion countries of privatisation – the UK and USA. It is shown that privatisation is embedded in neo-liberal thought that gained traction in the 1970s and 1980s through conservative governments of Margaret Thatcher and Ronald Reagan in the UK and USA respectively. Although divesture can be regarded as the classical privatisation model, there are various forms of privatisation, but concessions, PPP and franchising seems to be the ones mainly practiced in the rail industry. It was demonstrated that historically, the rail industry is a brainchild of the private sector. True to

the regulatory cycle discussed under section 2.2, the governments of the two countries reviewed here got to be involved in the industry, albeit as a result of some political and socio-economic factors.

In addition to the regulatory cycle, it was shown that some countries, particularly in the developing world, engaged in privatisation of provision of public goods because of the structural adjustment conditions imposed by international development institutions such as IMF and WB, and because private ownership is seen as a solution for ailing SOEs. The involvement of the private sector is believed to bring about efficiency and effectiveness because it is competitive, cost effective, reduces risk and brings about investment in the SOEs. These, in turn, would help to turn the SOEs around, improve services to the end-users and increase revenue collection for the government. Nonetheless, the critics of privatisation question this logic based on that there is no conclusive evidence to support the argument and that there are very complex dynamics underpinning performance of privatised government entities. On the theoretical front, the chapter has shown that drawing from different fields, privatisation can be studied through various theories, including the theory of the firm and its variants, the ownership/property rights theory, the principal-agent theory, and the public choice theory.

The chapter also documented how rail has unfolded in South Africa, from its ownership and management to its performance in the preceding years.

The next chapter looks at the methodology used for this research.

Chapter 3. Research Methodology

This research explores whether passenger rail privatisation is a panacea to deteriorating SOEs. It does this by looking at case studies in four countries, namely the UK, Argentina, Kenya, and South Africa (Gautrain). To triangulate this, the study also considers the views of nine experts and two users of passenger rail in South Africa. The interview questions were based on the findings and themes emerging from Chapter 2 and Chapter 4. Additional questions were asked about South Africa's readiness for privatisation and the lessons that could be learnt from the Gautrain rail system. Given all these intentions, the qualitative research method was deemed to be the most appropriate to gain insights into privatisation and respond to the research questions.

Therefore, this chapter gives a detailed discussion of the method used to collect data for the research, the research process, sampling method, data analysis and ethical considerations.

3.1 Data Collection Method

A qualitative research method was used in this research to collect the data, considering that the very nature of qualitative research is that it is emergent rather than tightly preconfigured (Miles and Huberman (1994). This means that some of the questions posed to answer the research questions and focus changed and/or were refined as new themes emerged during the data collection process.

Since the study looks at case studies of privatisation in four countries, the main method used was the comparative case study. Data was gathered from the four case studies, in order to benchmark passenger rail privatisation. Even though the case study method accepts that certain phenomena cannot be generalised, it allows for outcomes to be verified and compared across cases (Flyvberg, 2006).

Thus, grey literature and white literature[11] around the identified entities were analysed to gain insights and generate themes and patterns of the unfolding privatisation processes, and what value, if any, they created. In collecting the data, the main focus was on various privatisation periods for the chosen passenger rails as well as the status currently.

Search engines such as Google Scholar and academic sites such as Science Direct, Academia, ResearchGate and Jstor were utilised to find published sources on these case studies. Also, published reports from the last ten years of the South African Transport Conference convened by the CSIR (Council for Scientific and Industrial Research) were used as part of data collection. A systematic review of the documents provided background information that helped in understanding the social, political, and economic contexts in which passenger rail privatisation was conceived and implemented in these cases.

During the data collection stage, it was discovered that most of the available literature on passenger rail privatisation was written in the 1990s – 2000s (Figure 3-1 provides an example). This is because this period saw a marked increase in the liberalisation of transport policies and strengthening of the role of private operators and investors in transport infrastructure globally (Bullock, 2005; Wellings, 2014). Therefore, there was a surge of writings to try and explain or justify this phenomenon. However, the UK and South Africa had more current writings compared to the other two case studies - possibly because the concessions are still active. Additionally, the debates surrounding rail in general and the future of PRASA in particular, are current. Where available, more current literature on privatisation, passenger rail privatisation and PT regulation was used.

3.2 Research Process

The research was divided into two phases. In the first phase, a search was made to identify case studies around the globe where passenger rail

[11] Grey literature refers to documents produced by the studied entity (such as strategic plans, annual reports or quarterly reports) and media reports, while white literature means academic literature like published research, books and journals ((Higgins et al., 2019).

privatisation was implemented, and that had similar demographic and/or institutional conditions to South Africa. The availability of published literature was also a deciding factor in the selection of the cases. The four case studies were thus identified and selected.

Keeping the case studies at this number assisted in maintaining the balance between giving rich detail of the cases while at the same time keeping them manageable. The data gathered from the case studies was then used to generate themes which literature suggested were important in the outcomes of passenger rail privatisation. The ideas and themes developed were interpreted to get a deeper meaning of the information. The information was then compared to conditions in South Africa.

The next phase involved identifying experts in the rail and PT industry. Nine experts in the passenger rail and PT sectors were interviewed using semi-structured interviews. The questionnaire sought to elicit the experts' opinions on the general themes identified in the case studies and privatisation literature. During the interview process, it became clear that passenger rail privatisation is a partnership involving mainly three participants: government, the private sector and the rail users/community, as Amonya (2017), emphasises. Therefore, two users of rail were also interviewed to get their perspectives on privatisation and the value they thought it would bring for them.

3.3 Case Study and Research Interviewees Sampling

This section details how the case studies and the interviewees were selected.

3.3.1 The Case Studies

The main reason for selecting the UK and Argentina was that, besides being some of the pioneers of privatisation, they provided two varying models of rail reform, which resulted from the restructuring processes undertaken by the governments concerned (Chauke and Maluleke, 2005; Műller and Aragonés, 2012). The UK also presented a test on the importance of institutions in the outcomes of privatisation since it had the most mature institutions out of all the

case studies (Kessides, 2004; Tan, 2011). Additionally, the transition of the UK to private operations in the 1990s was very quick (Williams Rail Review, 2019). This provided a good measure - or a cautionary tale - on the pace and sequencing of rail privatisation. Literature on the privatisation of rail in the UK was also readily available and accessible, making it easier to gather the relevant information. Gautrain was selected because it is a concession in South Africa and therefore expected to provide important lessons (van Der Merwe et al., 2012), more so than the other case studies. Kenya was selected for context similarity such as low per capita income, highly distorted markets and relatively weak institutional capabilities. The selected cases thus enhanced the generalisability of the findings and allowed the researcher to explore the limits to which privatisation could be pushed in developing countries and the consequences of doing so.

Unlike the other rail systems, Gautrain is relatively new and was a greenfield project (Thomas, 2013). Hence, it does not fulfil the criteria of privatisation in the strictest sense, i.e. transfer of ownership or control from government to the private sector. As such, there was no data on service conditions, which would allow for the tracking of performance before and after 'privatisation'. However, the performance from when the system started operating to the 2021 served the purpose of the research and made for lessons learnt. Pertaining to Kenya, the privatisation of rail in that country came a decade after the first rail concession in Africa (see Figure 3-1) and would have been expected to be less challenging since it would benefit from the lessons learnt from the earlier concessions.

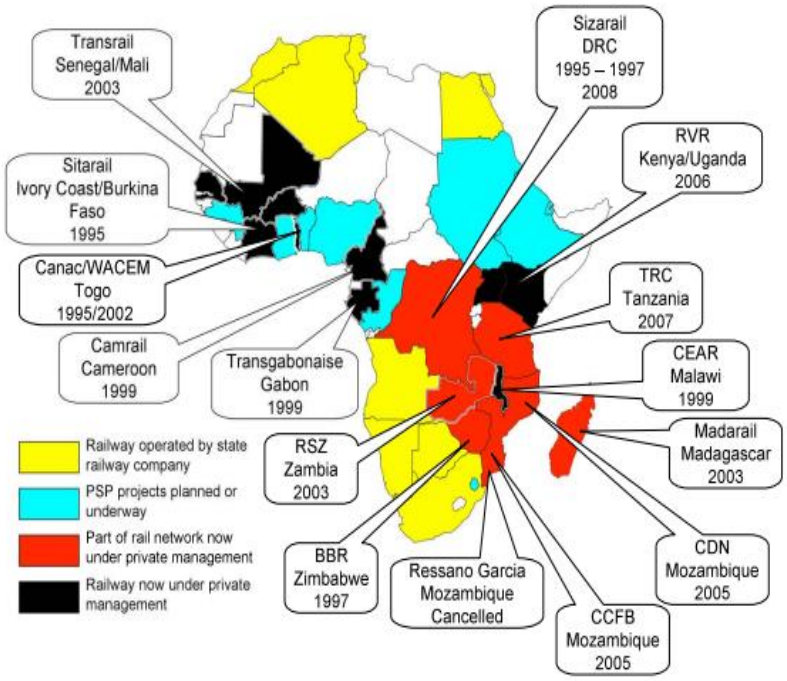


Figure 3-1: First-wave railway concessions in Africa

Source: Bullock, 2005

The challenge of including Kenya, which is also the case in other African countries - was the limited literature available on rail privatisation. According to the Global Centre for Public Service Excellence (2015), evidence from less developed countries was limited. The impact of privatisation has not been researched comprehensively in many developing countries, particularly in Sub Saharan Africa (SSA). The literature available was mostly research done by institutions such as the WB – which some may accuse of bias - and was largely on freight rail, since most rail infrastructure was built in the colonial era and was geared towards freight. However, the literature was an invaluable source of information, tracing the history, structures and processes followed in countries such as Kenya in implementing rail privatisation – be it on freight rail or passenger rail.

None of these cases offered a perfect model. As it is expected from qualitative research, there were tangible differences between the different countries, different PT sectors, and between different operators. It was not possible to conduct a laboratory experiment of the effects of introducing a significantly

increased degree of privatisation in passenger rail services but, allowing for these shortcomings, the evidence in these cases taken together was richly suggestive of answering the research questions.

3.3.2 Research Participants

To triangulate the data, and to guard against researcher bias, interviews were conducted with rail/PT experts to solicit their views on the questions posed in this research. In conducting the interviews, a qualitative approach, which included semi-structured and in-depth questions of identified experts and rail users, was employed. The recurring probing process, where the data presented by the experts and the rail users, was continually questioned, led to the discovery of practical knowledge of privatisation in passenger rail and PT. The experts were asked twelve main questions each - focusing on the applicability of privatising passenger rail in South Africa, the drivers of success in rail/PT privatisation projects and the country's readiness for the process - with the intention to solicit their views in line with the research questions (See Appendix B). The same line of questioning was employed with the rail users, but the questions were tailored to solicit their experiences of using rail and their opinions on the value they thought privatisation would create.

A purposive and snowball sampling methods were used, where experts with at least ten years' experience in the rail and PT sphere were identified. The researcher had worked with some of these experts previously and requested to be referred to other possible interviewees. To try and get a representative sample, the experts were selected across a broad spectrum of the rail and PT industry, including research, policy and operations. After interviewing about five experts across the spectrum, it became clear that the expert opinions had reached saturation point as the researcher kept getting similar views. The researcher deemed that the nine experts interviewed formed a reasonable representative sample and suited the qualitative nature of this study. Interviewing more experts would not have elicited additional insights, save for the international expert who did not respond to the researcher's request for an interview.

3.4 Data Analysis

There were two sets of data to be analysed in this research, namely, secondary data published on the case studies, and primary data gathered through the interviews conducted with the identified experts and consumers. The analysis of the documents allowed one to track changes and developments in the four case studies, post privatisation and as far as the availability of literature allowed. The challenge of author bias in some of the documents was reduced by using data/literature from multiple sources of literature/documents per case study. These included books and journals by experts in the rail, transport, and economics fields. Newspaper articles, press releases, government reports, and company reports were also used as secondary sources.

The analysis of the documents involved an iterative process, which combined elements of content analysis and the analysis of themes. The inquiry process entailed finding, selecting, interpreting, and synthesising data contained in these documents. The researcher went back and forth to check and cross check information, and to group these into categories. The categories were developed as a researcher would in an interview process. In this case, the researcher treated the documents like respondents or informants that provided relevant information. The 'asked' questions – using the categories – then highlighted the answers with text. These categories were then used to develop themes on privatisation, which were in turn used to compare case studies (Creswell, 2009).

The themes/categories emerging from the literature review included the following:

- Political and socio-economic context of privatisation
- Ownership/operation structure after privatisation;
- Risk allocation and contract design;
- Governance and institutions; and
- Value Creation

These were also used to guide the discussions in Chapter 5 and Chapter 6. For Chapter 6, primary data was collected by interviewing experts or professionals in the passenger rail and/or PT industry, including two rail users. Questions were asked in accordance with the themes in order to compare and contrast these with the experts' views.

It became clear during the data collection process that it would have been ideal to hear the customers' experiences where privatisation was implemented as they formed a crucial part of the answer about whether passenger rail privatisation had any value for them. Although hardly representative, a decision was taken to interview two train users in Gauteng, South Africa to get a sense of their perception of the privatisation process. Where available, customer surveys done by either government or the private rail companies were used in an attempt to complement the rail users' views on value creation.

3.5 Ethical Considerations

McFarlane (2009) states that ethical considerations have been gaining in importance across the research community. As a result of the modern shift and emphasis on observation of human rights, research processes need to heed observance of human rights and data protection. Consequently, various ethical issues arise during a research process, from the way the data is collected and treated to the rights of the research subjects (Parveen and Showkat, 2017).

Data collection in this research was, therefore, conducted under strict ethical considerations, as also required by the university's Ethics Committee. The primary data was collected through interviews. All the participants gave their consent to the interviews, to being recorded and that the information gathered be published in the research (Appendix B). All the interviews were recorded in order to maintain the integrity of the information. Before commencing with the interviews, the participants were informed of the purpose of the interviews and their right to stop the interview at any time if they felt uncomfortable with the

questions asked or the style of the interview, as well as the fact that their non-participation would not result in any penalty or sanctions against them.

There was no harm expected to befall the interviewees during the interview process. Nonetheless, the interviewees were told to make follow-ups with the researcher should they feel aggrieved or uncomfortable with anything about the interview, such as erroneous divulging of information to the researcher.

As per the participants' wishes, their personal information was kept confidential (see Appendix C and Appendix D). Only their work experience, job designation and their PT field of specialty (refer to Appendix A) was revealed in the research. Keeping personal information confidential worked out positively for the research because the participants felt free to give their honest opinions without any fear of possible damage to their professional reputations. General information about the participants was published in the annexures to show their experience.

In terms of the use and collection of secondary data, acknowledgement of sources was done throughout the dissertation using the Harvard-style of referencing. A reference list of all books/papers/articles used was published under the Reference list.

3.6 Potential Limitations of the Research

International experience where privatisation was experienced was drawn from four case studies, namely the UK, Argentina, Kenya including Gautrain. The sample of case studies was not statistical. Many more countries have implemented passenger rail privatisation in the last two to three decades, but the research did not examine all these cases as it would not have been practical. Countries that have certain similar characteristics to South Africa, e.g. population size or institutional structure and capacity, were selected instead.

Given the extent of privatisation in the UK, the quality of available data was different to that in Argentina, Kenya and South Africa. In the UK, researchers have been able to produce detailed investigations that provide persuasive

academic responses to some of the main criticisms raised (ResearchGate, 2018). The availability of information in a desktop case study method such as in this research was also a limitation regarding case selection.

The sample size means that the views expressed by the interviewed professionals and the two rail users may not be fully representative of their counterparts. Eight of the nine rail experts sampled had only local experience of rail while one had both local and international experience. The researcher failed to get a response from another international expert she was referred to. This expert had extensive experience in both the research and applied fields of rail and PT. The opinions expressed by the interviewed experts, therefore, are mostly based on local conditions.

The research limited itself to privatisation and did not consider other possible forms of rail restructuring. Also, the research was limited to the methods of privatisation that were implemented in the selected case studies. The researcher was aware that there were other forms of passenger rail privatisation in other countries, but these were considered only as far as to demonstrate certain concepts or phenomena.

The research was limited to the passenger rail system. Freight rail was used in the case of Kenya where privatisation involved a joint contract for both freight and passenger rail. It was also referred to when instances of passenger rail were not available, but the example of freight rail could be applied to passenger rail. The same reasoning applied to the use of the concept of PT in the research.

The diagram below shows a summary of the research method used in this dissertation.

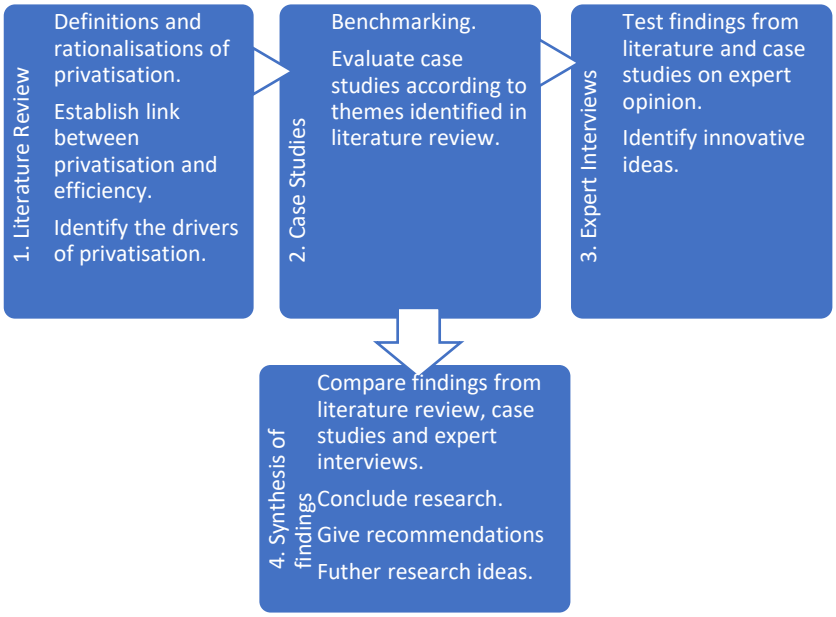


Figure 3-2: Research Process

Source: Researcher's diagram

Chapter 4. Description of Case Studies

Chapter 2 has shown that franchising and various types of privatisation are the most common privatisation models in the railway industry, mainly underpinned by a need to exploit efficiency and effectiveness in creation of value believed to be synonymous to the private sector. This view is fiercely contested by the critics of privatisation based on the lack of conclusive evidence to that argument. Nonetheless, privatisation of SOEs can happen because of the political and socio-economic pressures of a country, some of which may be associated with economic regulatory cycles. It can also take place because of the conditionalities imposed by international lending institutions.

In reviewing the theories of privatisation, we have seen that private ownership has a potential to facilitate effectiveness, investment and improvement management, but government must be willing to cede the ability to have an influence in the running of a privatised entity – which may widen the principal-agent gap to the detriment of the public or rail users. The government must also be ready to shoulder part of the risk inherent in such agreements. Furthermore, it is important to be aware of the various interest groups contesting the public sector, particularly SOEs and labour movements, and how these can have a devastating effect on the success or failure of the privatisation project.

To explore these issues, this study uses qualitative research approach, triangulating four case studies – namely, UK, Argentina, Kenya and SA (Gautrain) as captured in Figure 4-1 – with interviews with nine experts and two rail users in South Africa. It is shown that, as it is also suggested by Chapter 2, privatisation is not a panacea in the railway industry. Nonetheless, the case studies show different outcomes as a result of various dynamics including political and socio-economic context, ownership/operation structure, governance and government institutions found in the country, and so forth. As a result, privatisation in the UK has survived for over 3 decades despite the

challenges it continues to face, it was revoked after 25 years in Argentina, collapsed only after 11 years in Kenya, and thriving in South Africa after 11 years.

The chapter ends with a question as to whether privatisation is good for SA passenger rail and how, given the lessons learned in the reviewed countries, it can be implemented better in the country.

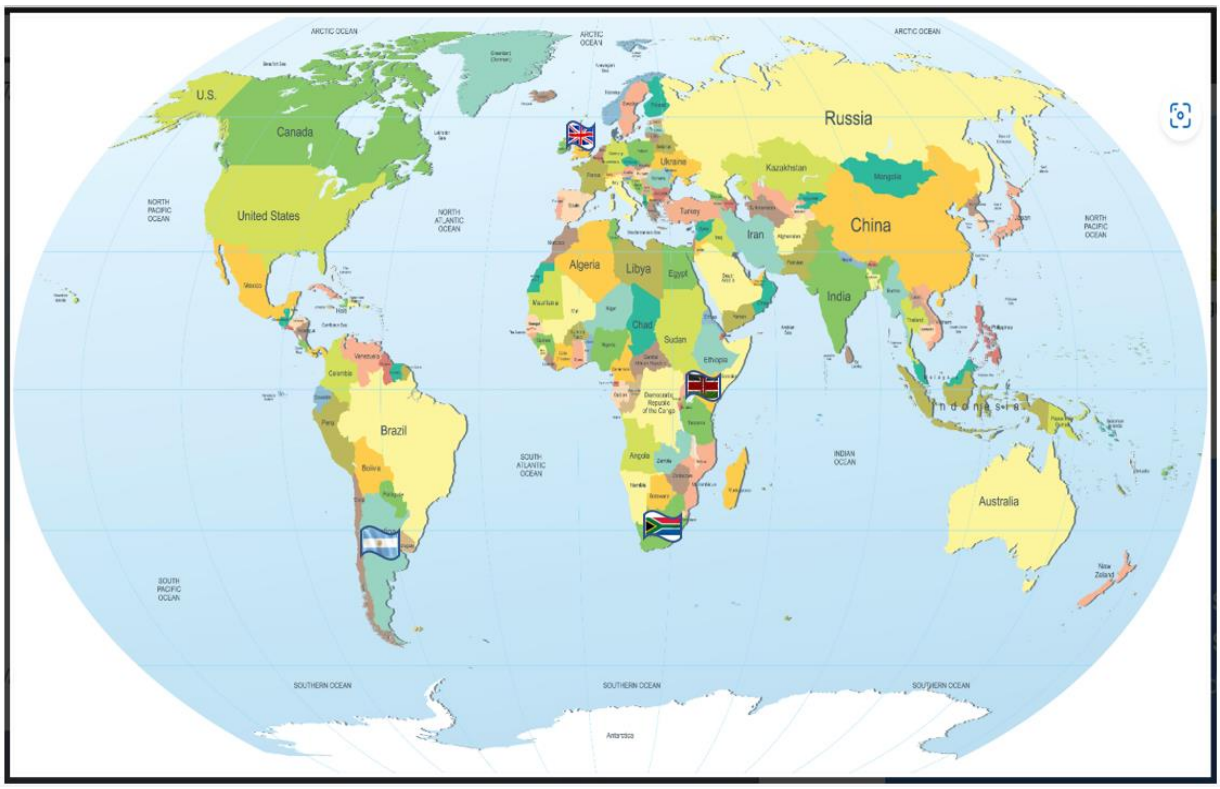


Figure 4-1: Case study locations

Source: Adapted from PixelsTalk (n.d.)

4.1 United Kingdom (UK)

4.1.1 Background

From 1948, railway services in the UK had been provided exclusively by British Rail, the state-owned rail company, through nationalisation of “the big four” regional private railway companies, namely the Great Western Railway; London, Midland and Scottish Railway; London and North Eastern Railway; and Southern Railway (Shaoul, 2004; Parker, 2009). According to Shaoul (2004), the four companies were formed following a merger, in 1923, of about 123 private railway companies that sprung up for the most part towards the end of the 19th century.

The main reason the railway companies were nationalised was because they had largely failed to provide satisfactory profits for their investors (Gourvish, 2002; Shaoul, 2004; Parker, 2012). One reason for this was that rail became unable to keep up with the fast development of motorised road transport (Pollitt and Smith 2002). Added to this, the two world wars left rail with damaged infrastructure, as well as slowed down the much-needed maintenance and new investment. The poor finances of the railways and their dilapidated physical condition reinforced the political commitment of the ruling party, the Labour Government, and others to nationalise the system (Gourvish, 2002; Ramanadhan, 2002; Parker 2009).

Under British Rail, UK’s railways had been operated as a monopoly, including a suite of typical rail services such as track maintenance and train operations (Wellings, 2014). However, from 1980 a decision was taken to sell some supportive activities to the private sector. These included hotels, ferry services, and a considerable rolling stock manufacturing business (Kopicki and Thompson, 1995; Parker, 2013). Influenced by Thatcherite and Reagan neo-liberal ideology, SOEs in the UK were seen as wasteful, inefficient and ineffective.

Thus, between 1980 and 1985, a debate over the private provision of public services rose to the top of the British political agenda. According to Ascher

(1987), from its origins in a small number of Conservative-controlled local authorities, it spread rapidly to both the central government and the National Health Service. Ascher adds that because rail shouldered welfare obligations and was viewed as politically sensitive, it trailed behind the privatisation of the other SOEs, which government prioritised in their restructuring programme.

Consequently, during the early 1980s, rail policy focused on the reduction of operating costs as a strategy to improve efficiency. In 1992, however, the Conservative Party committed to privatising rail. This was fiercely contested by the government-owned British Rail and the opposition political party, citing rail's social obligations (Jupe and Funnell, 2017). The government, however, went ahead with the unbundling of the British Rail (Gourvish, 2002; Modubu, 2003; Parker, 2012). Privatisation was expected to result in better use of the railways, delivery of greater efficiency, reduction of operational costs, and delivery of value for the rail user by bringing an improved quality of service (Jupe and Funnell, 2017).

Without a doubt, privatisation was viewed by the government as a great success story because it had succeeded in other sectors of the economy and had the support of the electorate. Examples of the sectors of the economy where privatisation had shown impressive results included British Airways, the British Airports Authority, bus companies, and ports (Kopicki and Thompson, 1995; Parker, 2012).

4.1.2 Franchising the UK Rail

In July 1992, the government published its White Paper outlining proposals for privatising British Rail (Preston, 2008; Wellings, ibid.). Bowman et al. (2013) state that this brief document detailed a number of promises about what rail privatisation would achieve. It made promises on competition, management freedom and increasing the focus on customers' needs. A significant measurable promise was the total transfer of costs and financial risks to the private sector in the long-term, thus resulting in welfare gains by the government (Jupe and Funnell, 2017).

The Railways Act of 1993 provided the legal framework for the privatisation of British Rail (Competition and Markets Authority, 2015). Similar to rail and PT legislation in South Africa, the Railways Act mainly promoted the role of competition in bringing about rail efficiency and effectiveness. This included making better use of infrastructure, improving the quality of service for customers and to obtain a fair return from providing the rail services. The act also separated ownership of railway infrastructure from train operations, as well as permitting the franchising of passenger services that had previously been operated by the British Rail (Rail Value for Money Scoping Study Report, 2010).

The method employed for privatising passenger rail in the UK was franchising. Twenty-five (25) train operating companies (TOCs) were established "as shadow companies" and these formed the base for franchising rail passenger units (Wellings, 2014; Jupe and Funnell, 2017). The responsibilities of the TOCs included operation and marketing of passenger services, employment of train drivers and station staff such as ticket sellers, and undertaking of standard maintenance on trains. The TOCs would not own most of the assets and the rolling stock. Instead, they would lease the rolling stock from the Rolling Stock Companies (ROSCOs) and would purchase infrastructure access rights from the new infrastructure owner, Railtrack (Kopicki and Thompson, 1995; Chauke and Maluleke, 2005; Smith et al., 2009; Robins, 2011; Competition and Markets Authority, 2015).

Preston (2008) says that Railtrack was viewed as a natural monopoly because of its scale and operational economies. Separating infrastructure from operations allowed the condition for the contestable market to be created[12]. This arrangement, for instance, disposed of the barriers associated with the sunk costs of rail infrastructure. Franchises usually lasted for a minimum of seven years and covered a defined geographic area or service type (Jupe,

[12] Contestable markets occur when firms can enter and leave a market freely without any sunk costs (i.e. costs that have been incurred and cannot be recovered) (Amavilah, 2012).

2010; Wellings, 2014). By design, franchises were not awarded on an exclusive basis: 'in the market' competition with other franchises and operators serving other niche markets was possible, although it was very limited, owing to the complex nature of railway operations (Jupe, ibid.).

Several arguments were given for choosing the franchise model for reforming passenger rail instead of total divestiture. The first argument was about preventing the rise of perpetual local monopolies by having the franchises operate for a finite period. The second argument given was that passenger services comprised of both profitable and unprofitable services and it was not possible to unbundle such services. The third argument was that franchising would act as the first step towards the total sale of passenger rail. This gradual process would, in turn, allow for careful policy change during the early phases of franchising. The fourth argument was that the franchisees would bear the cost and revenue risks and the government the political risk. The last argument advanced for choosing the franchise model was that the franchising authority could fix the prices charged and the nature of the services offered (Preston, 2008; Competition and Markets Authority, 2015).

Cracks soon began to appear in the new model. Robins (2011), and Wellings (2014) report that following Railtrack's financial difficulties in the wake of the Hatfield rail accident of October 2000[13] and the subsequent costly asset assessments and reports, Railtrack went into administration in 2001. Subsequently, Network Rail was established to take over the assets and liabilities of Railtrack and its role as the network owner (Parker, 2012; Jupe and Funnell, 2017). Unlike Railtrack, Network Rail was a publicly owned company (Jupe and Funnell, ibid.).

As part of restructuring, a regulator - named the Office of the Rail Regulator (ORR) – was appointed in 2004 to protect rail users and to promote rail use

[13] This is a railway accident that happened in 2000 killing at least 4 people and resulting in over 70 injuries. The accident happened because of a train derailment allegedly caused by the driver's mental fatigue and issues on maintenance, throwing a spotlight on privatisation, which resulted in administration of Railtrack and subsequence replacement by Network Rail (Parker, 2012).

and its development. The ORR was also meant to promote efficiency and competition as well as to facilitate integrated ticketing and other rail network benefits (Kopicki and Thompson, 1995; Smith et al., 2009; Preston, 2008; Robins, 2011; Competition and Markets Authority, 2015).

According to Robins (2011), to prevent the franchisees from merely benefitting financially from running the operations, a lot of time was spent on specifying the service levels required and incorporating them into the contract agreements. The service descriptions included the standard key performance indicators (KPIs) such as train punctuality, reliability, comfort and the requirements for customer surveys. The KPIs were enforced through a reward and penalty system in which the private operator was penalised when minimum service levels were not met or rewarded when service levels were exceeded. Restrictions on fare increases were also written into the contracts (Robins, 2011).

4.1.3 Efficiency at the Expense of Effectiveness: Mixed Results

The assessment of service quality and improvement, along with other variables, is dependent on who you ask. To some, the privatisation of UK rail has been a huge success whilst others see it as a failure.

Jones (2000) states that passenger rail in the UK experienced many years of negative growth but since 1994, when rail was reformed through franchising, there was a marked and lasting increase in rail passenger volumes and income. Preston (2016), states that between 1995/6 and 2013/14, demand doubled, and growth was resilient to shocks such as the 2000 Hatfield accident and the 2008 economic meltdown. Johansson and Bickel (2020) state that there were improvements in capacity, performance, safety and passenger comfort. Franchising has also produced some innovations and product development for passengers. These include automated ticket machines, mobile and online travel information and ticket sales (Competition and Markets Authority, 2015).

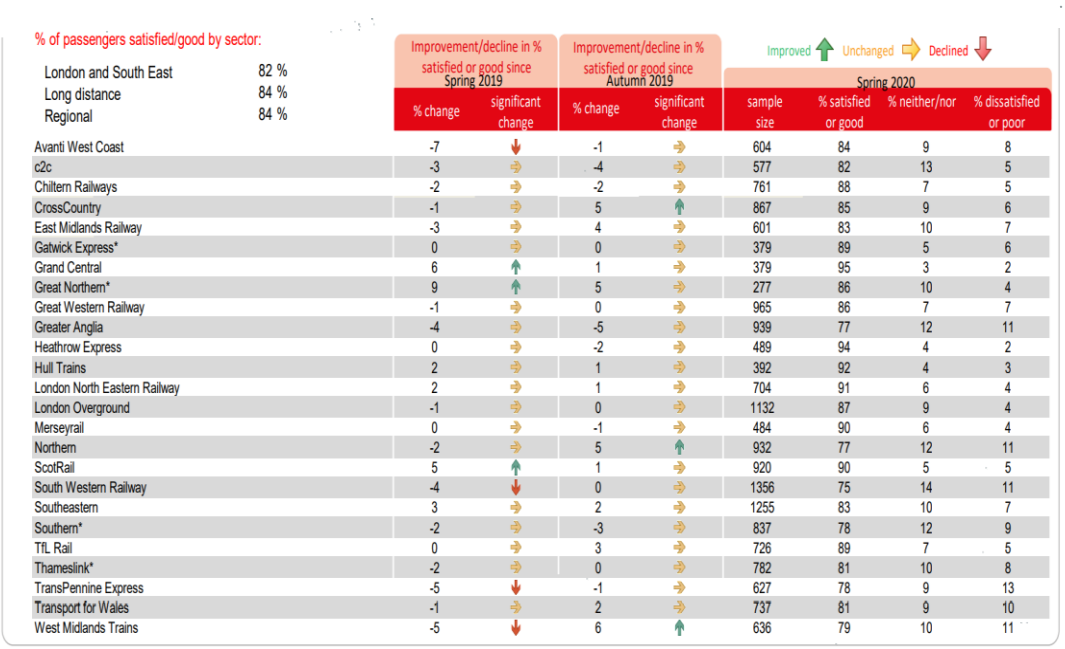
Not everyone agrees with the stories of success of rail in the UK since privatisation. According to researchers like Bowman et al. (2013) and Johansson and Bickel (2020), the rhetorical approach employed by politicians and the Association of TOCs, is identical: highlighting past failures allegedly brought about by state mismanagement and under-financing, while using a barrage of statistics to demonstrate the unmatched growth and improvements since privatisation (ATOC, 2013). Emphasis is placed on patronage, which had risen at a rate of just under 4% per year from 1997 to 2012. This compared favourably to a 60-year average of 0.58% and is well ahead of passenger growth figures achieved in France, Germany and the Netherlands (ibid.). Bowman et al. (2013) disparagingly state that these claims constituted fanciful thinking – a discursive construction of what a successful privatised rail system should look like – that forms the core of the rail sector's trade tale.

While data on patronage supports one story of success delivered by private enterprise, the accounts of Network Rail – the company responsible for railway infrastructure after the collapse of Railtrack in 2001 – painted a different picture. According to Bowman et al. (2013), the then Transport Secretary (Patrick McGloughlin)'s speech and ATOC's flagship report released the same month do not mention the significant growth in the debt burden shouldered by Network Rail to fund infrastructure improvements – from just under £9,636 million (approximately R197 561 000) in 2002/2003 (Network Rail's first full year of operations), to £30,358 million (approximately R622 044 000), as of March 2012. This rise in the debt burden is also cited by McCartney and Stittle (2017) in their analysis of the operating costs of Network Rail between 1997 and 2014. Furthermore, Johansson and Bickel (2020) postulated that users have been increasingly critical of the privatised rail network, pointing to dirty and overcrowded trains, an inadequate public information system, long delays and cancellation of scheduled trains, and poor integration of timetables across services.

Generally, the flaws in the Railtrack business model can be said to have been exposed by the series of rail accidents that took place between 1996 and 2003. Subsequent official inquiries into the fatal rail accidents exposed serious

under-investment in track and signalling, and an aggressive outsourcing strategy which raised the real-terms costs of new investment projects to two times the levels paid by British Rail (Gourvish, 2002; Shaoul 2004; Johansson and Bickel, 2020). Johansson and Bickel (ibid.) further state that the protracted period of disruption across the industry that followed the Hatfield derailment in 2000 identified significant backlogs of maintenance and renewals, as well as deficiencies in working practices, which could not be addressed within Railtrack's available income.

Some experts highlight both the positives and the negatives of privatisation in UK's rail system. The Competition and Markets Authority (2015), argues that the system has produced notable successes. Competition 'for the market' has been intense, with franchise competitions attracting a significant number of credible bidders. There appear to have been real benefits, as evidenced by the reverse of the previous low intake in usage of UK's railways before privatisation, and a material increase in passenger satisfaction – see Figure 4-2.



% of passengers satisfied/good by sector:

London and South East	82 %
Long distance	84 %
Regional	84 %

Improved ↑ Unchanged → Declined ↓

	Improvement/decline in % satisfied or good since Spring 2019		Improvement/decline in % satisfied or good since Autumn 2019		Spring 2020			
	% change	significant change	% change	significant change	sample size	% satisfied or good	% neither/nor	% dissatisfied or poor
Avanti West Coast	-7	↓	-1	→	604	84	9	8
c2c	-3	→	-4	→	577	82	13	5
Chiltern Railways	-2	→	-2	→	761	88	7	5
CrossCountry	-1	→	5	↑	867	85	9	6
East Midlands Railway	-3	→	4	→	601	83	10	7
Gatwick Express*	0	→	0	→	379	89	5	6
Grand Central	6	↑	1	→	379	95	3	2
Great Northern*	9	↑	5	→	277	86	10	4
Great Western Railway	-1	→	0	→	965	86	7	7
Greater Anglia	-4	→	-5	→	939	77	12	11
Heathrow Express	0	→	-2	→	489	94	4	2
Hull Trains	2	→	1	→	392	92	4	3
London North Eastern Railway	2	→	1	→	704	91	6	4
London Overground	-1	→	0	→	1132	87	9	4
Merseyrail	0	→	-1	→	484	90	6	4
Northern	-2	→	5	↑	932	77	12	11
ScotRail	5	↑	1	→	920	90	5	5
South Western Railway	-4	↓	0	→	1356	75	14	11
Southeastern	3	→	2	→	1255	83	10	7
Southern*	-2	→	-3	→	837	78	12	9
TfL Rail	0	→	3	→	726	89	7	5
Thameslink*	-2	→	0	→	782	81	10	8
TransPennine Express	-5	↓	-1	→	627	78	9	13
Transport for Wales	-1	→	2	→	737	81	9	10
West Midlands Trains	-5	↓	6	↑	636	79	10	11

Figure 4-2: National rail passenger survey – UK

Source: Transport Focus (2020)

However, all the real gains from privatisation are said to have been eclipsed by the fact that the system has not yielded all the benefits that were initially hoped for:

- the scale of in-the-market competition envisaged at privatisation has not materialised;
- the post-privatisation period has seen a significant rise in costs, only part of which can be directly attributed to the increase in outputs, and is in contradiction to privatisation's cost savings rationale; and
- the inflexibility of the contracts as well as risk allocation have resulted in franchisees having limited ability, and muted incentives, to respond to customer preferences (Jupe, 2010; Parker, 2013; Preston, 2016).

Consequently, there are growing calls by both the unions and the public for rail to be re-nationalised (Railway Magazine, 2019). Government is urging for a revision of the franchising model to possibly a concession model; a model that will result in cheaper fares, timely delivery of infrastructure and increased accountability (Williams Rail Review, 2019). These challenges are despite government's subsidy increase for rail[14].

Although franchising appears competitive, it has - in certain instances - been ineffective. Two possible reasons relate to lack of clarity in terms of objectives (with implications for contract design) and the impact of strategic bidding (with implications for contract award) (Preston, 2016). In an interview with Railway News (2020), railway engineer Gareth Denis explained that franchising the rail system has always presented a challenge. He argued that one of the main issues with it is the extreme breaking down of the network, which leaves the company franchising with little control. Some other experts are calling for a change to the franchising model so that the private companies no longer shoulder the revenue risk. This is more so after the COVID-19 lockdowns, with government covering the losses by the TOCs (Railway Technology, 2020).

[14] Since 1998-99 the proportion of public transport spending allocated to rail has increased from 16% to 55% (Williams Railway Review, 2019, p. 28).

As an interim measure to respond to the drastic reduction in passenger trips due to the Covid-19, the government introduced Emergency Measure Arrangements (EMAs) (Johansson and Bickel, 2020). These effectively replaced the franchise system and ran at no risk to the operator under a central contract. These contracts were in turn replaced by the Emergency Recovery Measures Agreement (ERMAs) in 2020 for a duration of six to eighteen months (Johansson and Bickel, ibid.). The ERMAs are similar to the EMA but have more stringent performance targets. Ultimately, these emergency measures will be replaced by new direct award contracts, the precursor to a new system for train operation in the UK (IRJ, 2021). The new contracts will place an improved focus on customers, a shift in accountability, and more collaboration, as detailed in the Williams Rail Review (2019).

According to Preston (IRJ, 2023), the key organisational change is the establishment of Great British Railways to vertically integrate the planning of infrastructure and train services. The author added that operations will remain vertically and horizontally separated but with franchising replaced by Passenger Service Contracts.

These changes can be said to represent a turn in the regulatory cycle.

4.2 Argentina

4.2.1 Background

Railway concessioning in Argentina dates back to over 140 years, beginning with limited kilometres of a standard gauge network that connected the centre of Buenos Aires to its suburbs (IPS [Inter Press Service], 2017). Fast-forward to the 1930s, the upward rise in railway patronage was permanently curtailed (Rebelo, 2006). Like the UK, this period showed network growth stabilising and subsequently declining steeply as other PT modal competitors challenged rail's prime market position. According to Rebelo (2006) and Preston (2008), the end of World War II also marked the beginning of an economic period dominated by the ideology of the erstwhile Argentine ruler, Juan Peron, which was characterised by policies of nationalisation and other forms of state

control. During this period, the Argentine government re-nationalised most public services that had been privately operated.

By 1957, Ferrocarriles Argentinos (FA), the rail SOE, had begun a steep decline in financial performance: service qualities such as reliability and punctuality were decreasing, insufficient revenues to recover even operating expenses, needed capital expenditure was deferred and the system was overstaffed. Between 1965 and 1990, intercity passengers declined by 26% and metropolitan passengers by 35% (Kopicki and Thompson, 1995; Estache et al, 1999). With 35 000 kilometres of both passenger and freight rail lines, FA had 95 000 employees, 70 000 more than when the railways were nationalised (Chauke and Maluleke, 2005). Attempts to arrest this decline, such as the 1961 Larkin Plan, triggered the wrath of trade unions with resultant conflict seen after that[15] . Like Apartheid South Africa, the "railway problem" had become more than just a PT issue.

The economic chaos only got worse. In April 1989, inflation was 45%; by the next month it was 98%; and in June it had risen by about 100% (Menckhoff and Zegras, 1999). Consequently, the president, Raul Alfonsín, lost the presidential race in 1989 and was forced to leave office before the end of his term. Carlos Menem, from the populist Peronism Party, took over as president. Thus, Argentina's reform in general, particularly its rail restructuring, cannot be explained without an appreciation of the fear that the excessive inflation caused, and the way this fear significantly influenced the population and institutions to accept radical change (Kopicki and Thompson, 1995; Menckhoff and Zegras, 1999; Műller and Aragonés, 2012).

Like in the UK, the push towards rail privatisation in Argentina was shaped by politics and the economic crisis. Both governments faced financial losses if they did not reform their railways (and other SOEs). However, while the

[15] The 1961 Larkin Plan called for closure of some lines and reduction of staff. This resulted in one of the most hostile strikes ever seen in the country, marked by government's enlisting of soldiers to operate trains and imprison some of the union leaders, as well as the Catholic Church's mediation of the conflict (Estache et al., 1995; Müller and Aragonés, 2012).

process in the UK was more considered, with appropriate foundations laid out before embarking on the process, the Argentine case was a hastier arrangement, largely motivated by fear of bankruptcy due to the hyperinflation in the 1980s. One would, therefore, expect that the 'considered vs the hastier' processes in the two countries resulted in different outcomes.

4.2.2 Constellation of Powerful Interests in a Unionised Rail

In 1990, at the time of its privatisation, FA had to confront the issues regarding its size and its monopoly in the market. In addition, from the standpoint of private investors, the SOE was a financial and political risk. With 35,000 kilometres of rail track, FA was the largest railway in Latin America and the sixth largest in the world, after those in China, France, India, the former Soviet Union, and the USA (Kopicki and Thompson, 1995; Ramamurti, 1997).

Notwithstanding the above, the severe economic downturn experienced in Argentina in the late 1980s made the rail service appear first on the government's agenda for privatising SOEs, unlike in other countries where rail appeared last (Rebelo, 2006). The greatest hurdle to FA privatisation was the challenge by the powerful trade unions that represented the FA workers. Prior to restructuring, these unions had obstructed even moderate plans to restructure the Argentine railways. Eventually, the Argentine government went ahead with the retrenchments when they received an enormous World Bank loan to radically reduce the staff at FA.

Here, Argentina's experience was different to that of the UK. Although the main railway unions in the UK made it clear they were in principle opposed to rail privatisation from the outset, privatisation was achieved from the 1980s without substantial labour unrest. This might be because any changes in employment contracts had to be worked out through the channels provided in existing labour policies, either by British Rail (before privatisation) or by the new business owner after privatisation (Kopicki and Thompson, 1995).

The privatisation process in Argentina was initiated through the State Reform and Public Enterprise Restructuring Law of 1989, which aimed to reduce the

public deficit, privatise SOEs and revitalise the economy. Furthermore, several agencies were created to regulate and monitor the activities of private concessionaires (Menckhoff and Zegras, 1999; Műller and Aragonés, 2012). A viability study that was undertaken before privatisation concluded that the regional passenger service was financially sustainable in one corridor only.

As such, the government decided not to subsidise the rest of the regional services and instead offered them to the provinces through which they operated, at the provinces' own expense. The offer was made because the state recognised the external benefits generated by those regional rail services, such as providing rail services to rural areas and helping to integrate these areas with the major city of Buenos Aires. To this end, the national government offered the affected provinces branch lines and equipment at no cost, to use for operations. Faced with this choice, only four provinces took up the offer and subsidised their regional passenger services. More than 70% of regional passenger trains were cancelled (Ramamurti, 1997; Chauke and Maluleke, 2005; Rebelo, 2006; Műller and Aragonés, 2012). Thus, at the start of the concessions, the active railway network was but a shadow of its capacity, with regional operations disappearing almost entirely.

Before implementing privatisation, the government surveyed the population to assess their support for rail restructuring. Kopicki and Thompson (1995) report that almost 3000 rail users participated, and the results were used as a benchmark against which succeeding service improvements (or deterioration) could be measured. The main results of the survey found that the number of participants in favour of privatisation was almost equal among different socio-economic groups: middle income gave 57% approval; high income gave 56% approval; and low income gave 45% approval (Kopicki and Thompson, ibid.).

4.2.3 Privatisation's New Operating Structure

As with the UK, Argentina's rail privatisation reform plan involved the unbundling of the organisational structure of the rail SOE to resolve the challenges arising from the size of the organisation. According to Ramamurti

(1997) and Menckhoff and Zegras (1999), the reform strategy involved, for instance:

- The horizontal separation of FA into three main businesses: freight, regional passenger services and suburban passenger services;
- Dividing each business into about seven units geographically and concessioning each unit separately;
- Concessioning, rather than full divestiture, of FA assets for periods of between 10 to 30 years;
- Rationalising some of FA's assets and services and transferring the viable ones to the provincial governments;
- Placing the rest of the assets and services in a new state enterprise pending eventual privatisation.

The reason the FA was broken up into monopoly concessions was to put it within the financial reach of private investors, especially Argentine investors (Ramamurti, 1997). Simultaneously, the government allowed investors to pick up the FA concessions that fitted best with their capacities, interests and business strategies.

Unlike in the UK, the government was to maintain ownership of the rolling stock and infrastructure, all of which would be assigned to the concessionaire. Like in the UK, however, the concessionaires were given full responsibility for all operations activities, ranging from marketing to maintenance of rolling stock and infrastructure (Menckhoff and Zegras, 1999; Preston, 2006). A key design feature in the concessions was that monthly payments (for both operating subsidies and infrastructure investment funds) were to be made to each concessionaire over the entire term of the concession contracts, whereby the concessionaire had to assume all risks related to both demand levels and construction costs. The subsidies were quite a surprise considering the financial weight rail had placed on the government before privatisation, thus attracting a contingent of investors to the concessions[16].

[16] As part of the marketing strategy, the government briefed potential bidders both in Argentina and abroad, which saw a bigger response to the offers than expected. For instance, there

According to Ramamurti (1997) and Műller and Aragonés (2012), the models used for freight rail and passenger rail in Argentina differed in two important areas. The first difference is that the freight concessionaires were expected to make profit whereas the passenger concessionaires needed public subsidies to continue operations, rehabilitation and investment in the passenger systems. Carbajo and Estache (1996) report that instead of raising fares, government decided to continue subsidising urban passenger rail services including the Buenos Aires underground services. It was believed that fare increases would have discouraged rail use and as a result worsened externalities such as traffic congestion. Therefore, for each passenger rail line, the government identified the type and the amount of investment needed and the concessionaires were contracted to undertake such investment.

The second difference between the two types of concessions was that passenger concessions were awarded on the basis of a single criterion: the lowest subsidy required to operate the line and undertake the specified investment and rehabilitation programme (Modubu, 2003). Bidders for the freight concessions had faced a complicated set of weights attached to the criteria used to select the winning bid - experience, investment plan, employment pledge, local investor participation, fees and rent, and the access toll. The method for the freight concessions was more transparent, and probably induced more rational bidding behaviour from potential concessionaires (Carbajo and Estache, 1996). Again, this shows the complex nature of passenger rail.

The government's new role was to oversee the performance of the concessionaires. This role comprised of the monitoring of the quality of services, routes and fares and also to supervise the implementation of the investment in infrastructure in accordance with set targets. To carry out these functions, the government created several economic regulatory institutions:

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were seven consortia comprised of local and foreign companies submitting qualifying bids on the 31st of January 1992 (Kopicki and Thompson, 1995).

one to regulate the national railways, another to regulate PT in the Buenos Aires region and a third to focus on rail safety.

One problem facing the Argentine government was how to cope with the need to periodically renegotiate or modify the concession contracts. Renegotiation or modification may seem incompatible to the whole idea of concession contracting, as the contract system is meant to protect both the public and the concessionaire by specifying all the terms of the concession in advance, which on the other hand leads to its inflexibility. The prospect of renegotiation could undermine potential concessionaires' incentives to bid honestly and open the door to political interference, as highlighted by the Public Choice Theory in Chapter 2. Regardless, Argentina's transport concessions showed that it is probably impossible to specify all the conditions in advance, especially in an economic environment changing as rapidly as that country's (Carbajo and Estache, 1996). The COVID-19 pandemic confirms this reality (Casady and Baxter, 2020).

In 1998-99, most of the contracts had to be renegotiated. According to Estache et al. (1999), this stemmed from the unmet expectations promoted at the time of privatisation. Generally, this confirms literature's findings that a solid foundation needs to be laid before embarking on privatisation projects. This is more important in services like rail which are complex, capital intensive but at the same time have non-commercial objectives.

4.2.4 Value for the Argentine Rail Customer

Literature on the Argentine rail privatisation shows mixed results at first. The most immediate and painful change for the Argentine rail system was the reduction of workforce by 81.5% from 92,000 workers before privatisation to about 17,000 in 1998 (Estache, et al., 1999). Politically, this proved to be a tough sell for many years after privatisation, mainly because the financial goals were not fully achieved as expected. Substantial government subsidies continued in order to keep the system from collapsing, hence the state continued losing money on the railways (Műller and Aragonés, 2012). The government was still spending approximately US$400 million per year in

subsidies, in addition to a commitment to pay for US$6 billion in investment over the 20 years period from when privatisation was rolled out in 1998. Also, although nationalised industries are reportedly over staffed in the main (Hood, 1994; Kane-Berman, 2016), cutting about 80% of staff eventually had an impact on customer service, which hampered the benefits of privatisation in some of the privatised lines (Modubu, 2003).

According to Carbajo and Estache (1996), however, the overall result of privatisation was positive as many services improved. Patronage increased by 33% from 167 million in 1995 to 217 million trips a year in 1998. Initial ridership increases during the first three to four months of concessions ranged from 12% to 102% in some corridors, owing in part to improved controls that reduced fare evasion which had reached about 35% of all trips during state operations.

These initial improvements continued, providing strong evidence that new users had been attracted to the system. By the end of 1998, ridership continued to increase significantly. In five of the eight corridors, actual ridership levels were higher than those predicted in the concessionaires' original bids – see Figure 4-3 - with the Buenos Aires subway line showing the most dramatic difference (Menckhoff and Zegras, 1999). Estache et al. (1999) report that in 1998, over 85% of the users of the urban trains and of the subway considered that the service offered had improved since privatisation, while 10% thought it was similar and less than 5% thought it got worse. The rail users benefited from extended rail services, lower ticket fares, more reliability and greater punctuality. In fact, most service quality indicators improved as demanded by the contracts (Modubu, 2003).

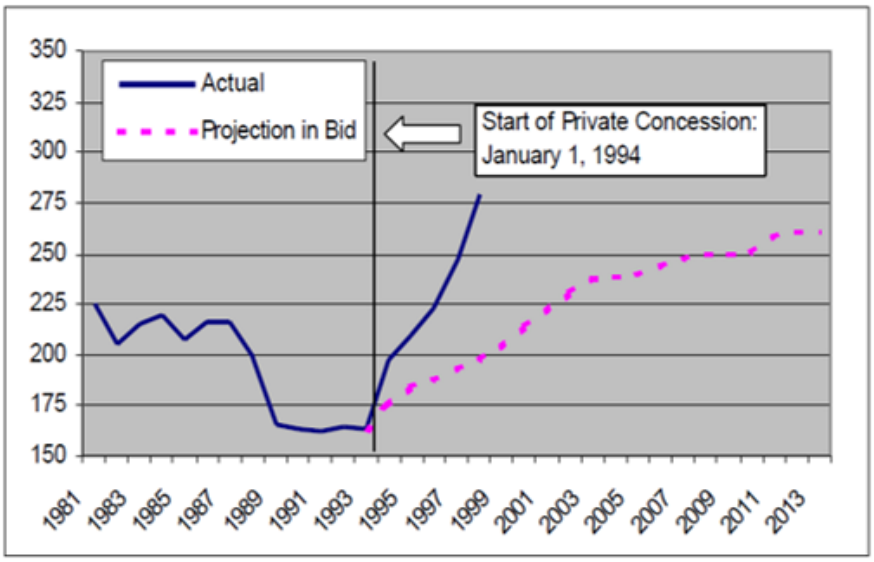

Figure 4-3: Actual ridership levels vs those predicted in the original bids
Source: Menckhoff and Zegras (1999)

Despite the growth in ridership, however, by 1998 the burden of the costs was shifting from the government to the passengers. According to Estache et al. (1999), the concessionaires were asking for an increase in the subsidy levels for the subway service to cover operating expenses and some investment. As more rolling stock was needed, the private companies became increasingly reluctant to make the investment required to increase capacity and thus service quality and passenger numbers declined. In loss making concession services, the price increase was basically designed to keep the agreed investment plan alive and to progressively reduce the operating subsidy. According to Menckhoff and Zegras (1999), the process was hotly debated in the country and for the users exposed to the higher initial tariffs, the increase represented an increase in monthly travel costs significant enough to raise some concern about affordability.

Like the UK, Argentina experienced increasingly frequent and tragic rail accidents. For example, there were more than two train accidents in 6 months in Buenos Aires in 2012 . The system was said to be plagued by negligence, mismanagement, a lack of maintenance, and "connivance" between the concessionaires and government officials in charge of oversight (IPS, 2012).

A rail users' group said they had filed "all kinds of complaints" between 2006 and 2010, to draw attention to the serious flaws in the system. Overcrowding, lack of safety, lighting and hygiene, and broken barrier arms were some of the most serious problems listed with regard some of the rail lines (ibid.).

The accidents and problems experienced prompted the Argentine government to revoke some concession agreements and put the lines under the Trenes Argentinos Operadora Ferroviaria, which was formed in 2008 to manage some freight and passenger lines in the country (International Railway Journal, 2013). Additionally, the government announced that it was re-nationalising some freight railways citing "serious breaches of contract" by the operators (Common Dreams, 2012). This trend continued in the following years where government slowly re-opened and took over some of the once private services using completely new rolling stock. Some regional services were also re-opened. This modernisation of the railways has not been limited to rolling stock. In many cases, the state has completely replaced, or is in the process of replacing, the existing infrastructure.

Norberto Rosendo, a rail engineer who is the president of the Comisión Nacional Salvemos al Tren (Save the Train National Commission) acknowledged that under the current transport secretary, Juan Pablo Schiavi, there has been a great improvement:

> "Now there is an overall plan for the railways and a lot of investment, but it's not enough. There is a structure of corruption, and powerful underlying interests that involve government officials, the companies, and trade union leaders." (IPS, 2012).

In summary, the road to rail privatisation in Argentina was precipitated by the decline of the industry after a prolonged tussle between the government and powerful interest groups in the country, which was exacerbated by the huge debt crisis, as well as inflation seen in the country in the 1980s. Thus, rail in Argentina was among the first government services to be privatised because of the extraordinary financial pressure faced by that government.

As in the UK, the Argentine government could not do away with funding rail after privatisation even though the private partners that were running the rail lines seemed very effective in trimming unnecessary expenditure as anticipated by the theory of the firm and property/ownership theory. For a while, the performance of rail seemed to improve after privatisation as measured by passenger satisfaction. However, as in the UK, this satisfaction seemed to come at a huge financial cost to both the government and the private partners. The response from the private partners was either to cut down on maintenance, resulting in train accidents, or to pass on the cost to the rail user in the form of fare increases.

According to Barrow (IRJ, 2015), renationalisation was formalised in May 2015, when a bill reviving FA as a state company was signed by the president of Argentina. The bill brought infrastructure and operations together under one brand. The country then went into a rail modernisation drive with loans from Chinese companies, e.g. a $4.7 billion loan for the rehabilitation of freight railways, and the supply of new trains (IRJ, ibid.). Similar to the UK, government policy in Argentina has now shifted to improving the quality of service for the rail user, going as far as to re-open the services that were previously closed (New Civil Engineer, 2021; IRJ, 2023).

The government of Argentina has not completely done away with working with private operators. In January 2021, the Buenos Aires regional government awarded a private partner a new 12-year contract to operate the city's Subte metro system (IRJ, 2021). Under the new contract, the private partner is paid per metro car-km operated, incentivising not only the operation of the full timetable but also the provision of full-length trains. Significant investment in the existing maintenance depots was planned to enhance capacity and effectiveness. A wide range of customer facing innovations were also promised, including improved passenger information, ticket machines, new ticket barriers and passenger smart phone apps.

Similarly, Argentina's Minister of Transport, Mr Alexis Guerrera, has decided not to renew the concessions for the Sarmiento, Mitre and Roca freight lines,

instead bringing them under public management after 30 years. Burroughs (IRJ, 2021) states that freight operations will be transferred to Argentinean Trains Cargo (TAC), which will look to work with private operators through open-access and public-private partnerships (PPP), while Argentinean Trains Infrastructure (TAI) will take over management of the lines.

The only concession that is still active after thirty years of privatisation is that for the Belgrano North line. According to the Fender (IRJ, 2023), the concessionaire has consistently achieved high levels of punctuality and reliability compared with other commuter services in the Buenos Aires region. Nevertheless, the government rejected its request for a new 10-year concession in 2018. All of the other former commuter concessions are run by the state-owned FA, which was steadily directed by the government over the last decade to replace concession holders following poor performance (ibid.).

Like in the UK, it seems that there is a turn in the regulatory cycle of rail in Argentina. The management of rail has now reverted to the government, with private companies being awarded contracts for operations. The two governments have also realised the benefits of investing in infrastructure and focusing on the needs of the rail user, and are using loans form countries like China to achieve this.

This brings up the question of whether quality of service in rail can ever be attained without significant funding from the government. What do we have in Kenya?

4.3 Kenya

4.3.1 Background

Privatisation of Kenyan Rail Corporation (KRC) was done under the concession agreement with Rift Valley Railway (RVR) - which was responsible to manage the main railway in the Eastern African region, Kenya-Uganda railway - in 2006 (Kenya Institute of Economic Affairs [IEA], 2014). According to Ndoye et al. (2008), the decision to privatise rail in Kenya was taken in the

1990s following the profound changes that were taking place in rail transport, particularly in Europe. The privatisation also came a decade after the first rail concession in Africa and would have been expected to be less challenging since it would benefit from the lessons learnt from the earlier concessions. Like in Argentina, the process was financed by the WB and the IMF as part of their Structural Reform Programmes.

The reasons for Kenya and Uganda to cede their railways to a single concession were similar and intertwined (Ndoye, ibid.; Kenya IEA, 2014). Firstly, despite a fast-growing population in the East African region, and expansion in trade, the Kenya–Uganda Railway was carrying less freight and passengers in the 1980s than was the case in the 1960s when independence swept across Africa (Republic of Kenya, 1994).

Like what was happening in South Africa in the early 2020s, hundreds of kilometres of rail lines were vandalised after vandals saw the network lying idle for decades (Bullock, 2005; World Bank, 2015). Where passenger trains did operate, “the schedules were as rickety as the trains” Aduwo (1990) quoted in Wahome (2013, p. 3) – conditions illustrated by Figure 4-4. In terms of freight, regional industries gave up on them, even though road transport was very expensive. Problems such as delays, theft and damages to goods in transit were simply not worth the savings. Consequently, the highway between Mombasa and Uganda resembled a convoy as thousands of trucks ferried containers in every direction. This dramatically increased the rate of accidents and severely damaged the road network (ibid.).

Figure 4-4: Condition of railways in Kenya

Source: Market Screener (2019)

Secondly, Africa's railway system is not integrated, as architects of the colonial-era lines had little regard for integration. They adopted a variety of gauges and standards that separated the continent and deepened its technological isolation (African Economic History Network, 2016)[17]. Therefore, the two countries wanted to act in tandem in order to address this situation (African Development Bank, 2011).

In addition to these challenges, there were several problems to be resolved prior to privatisation (Ongolo, 2006). The rail utilities in both countries were insolvent and heavily indebted, which meant that the concessionaire had to inherit the commercial risk of debts owed to the suppliers, creditors, local authorities, utility service providers and clients. It also meant that it had to meet the retirement, terminal and other benefits for the downsized and retired railway employees (Joint Concessioning of Kenyan and Ugandan Railways, 2005; Bullock, 2005).

[17] For example, the metropolitan rail transport passenger service in Kenya was introduced by the Kenya Railways in 1992 to help ease transportation from the city centre to the suburbs. However, no exclusive network was developed for mass rail transport within Nairobi city and its environs. Rather, the passenger rail network was, and has been run on the sections of the main lines and branch lines radiating from the city to the outlying areas, and this has neither changed nor improved (Wahome, 2013).

Furthermore, there was an enormous need for infrastructure investment as well as other operational challenges such as institutional corruption and political interference, again a challenge highlighted by the Public Choice Theory (Wanjiru, 2011)[18]. Public institutions became part of the political spoils geared toward ensuring the political survival of the ruling party (Wanjiru, ibid.).

4.3.2 Planning for Failure in a Contested Privatisation Space

It was against this background that the two governments entered into a concession agreement with Rift Valley Railways (RVR) consortium in November 2006, under a Build-Operate-Transfer (BOT) type of PPP financing framework. This means that the consortium was granted rights to re-build the railway infrastructure, lease to operate it before handing over to the government. To this end, pertinent directives were issued for the privatisation of the Kenyan railways by way of separating infrastructure management from rail operations in the 2000s (Malago and Jonyo, 2015).

Prior to this, though, the governance and administration issues identified above in Kenya had to be addressed. Measures to do this included attempt to improve public institutions, enhancement of accountability and transparency, strengthening oversight and control institutions, improving public expenditure management and liberating the private sector to drive the economy (Irandu, 2000; Njeremani, 2003; Ongolo, 2006). Also, a high-level policy-making Committee, Parastatal Reform Programme Committee (PRPC), was established under the leadership of the Vice President and Minister of Finance to provide political backing and facilitate awareness and support for the programme.

Following the Kenya Railways (Amendment) Act of 2005 that made it possible for the Board of Directors to enter into concession agreements or other forms of management for the provision of rail transport services, the KRC conceded railway operations to Rift Valley Railways (RVR) in 2006. The concession was

[18] According to Njeremani (2003), the death of President Jomo Kenyatta in 1978 resulted in the systematic undermining of public institutions. As happens more so in many less developed countries, political priorities had taken precedence over the public interest.

for 25 years for freight services and 5 years for passenger services, which lapsed in June 2012. RVR ran passenger trains within Kenya only, primarily from Nairobi to Mombasa but also to local towns such as Kisumu. Passenger services on these lines were offered on peak periods only. Freight services were the bulk of RVR's operations (Wahome, 2013; World Bank, 2015).

Typically, the concessions were meant to recover costs from services, to reduce reliance on Treasury and to improve the quality in service delivery of freight and passenger rail services. Much was expected of the concessionaire than was the case in the UK and Argentina. The concessionaire was tasked to rehabilitate and maintain rail networks to enhance safety of trains, improve the management and financial performance of the railways in addition to running operations. The agreement further mandated the concessionaire to upgrade and modernise locomotive fleet; rehabilitate the rolling stock, purchase new locomotives and wagons; renovate buildings, workshops and machinery; as well as install new information technology systems (Bullock, 2005; Ndonye et al., 2008; African Development Bank, 2011). Like in Argentina and the UK, the governments of Kenya and Uganda retained regulatory authority and ownership of the railway infrastructure and facilities (African Development Bank, 2011; Ministry of Transport, Kenya, 2014).

On the surface, the concession was a good plan because both governments had neither the funds nor the political will to rehabilitate their railway systems. However, from the start, the plan was bound to fail, mainly due to the contested nature of the process and the nature of powerful interests fighting over access to the control of the funds from the deal for political patronage purposes. The selection of the concessionaire ran into difficulties as influential forces sought to force their way into the potentially lucrative contracts (Wahome, 2013). For instance, technical reports indicated that an Indian firm that had also bid ought to have won the concession. However, the Kenyan and Ugandan governments dithered over the matter before finally settling on RVR. In the ensuing years, the concessionaire has also had to deal with political and civil unrest, and vandalism of some parts of the rail network (Nairobi Chronicle, 2008).

According to Njeremani (2003), in the Western world, countries with a tradition of strong public institutions have generally engendered transparent privatisation processes. Several Latin American countries in the 1990s have had a reasonably transparent privatisation process. The author adds that this is because privatisation has been part of a comprehensive change in regime, institution building, and re-orientation of the economy towards the market. However, where there has been limited oversight from other branches of government, corrupt practices associated with privatisation have been reported (Chukwuma et al., 2016).

Again, this section shows that rail privatisation is not only a technical matter of contract design and ownership model. The social, political and economic conditions of a country heavily influence how the process unfolds and its outcomes. This suggests that all relevant institutions need to be strengthened and measures put in place to guard the integrity of the process, from bid selection right through to the monitoring of the private partners' performance.

4.3.3 What Value did the Kenyan Rail User Derive?

The privatisation of KRC was expected to rehabilitate rail transport in Kenya and generate revenue for Treasury for national development through improving efficiency in service delivery, increasing profits and reducing public debt. The concession initiative brought regenerated optimism that rail transport would once again contribute significantly to national economic growth (Ndonye et al., 2008). However, nearly a decade into the concession agreement, regulators' periodical performance review reports and media business reports revealed that the concessionaire failed to achieve performance and investment targets as well as meet concessional obligations, due to what stakeholders perceived as financing challenges and inadequate technical capacity (Kenya Railways Corporation [KRC], 2012; Mwiti, 2013; Institute of Economic Affairs [IEA], 2014). This contrasted with both the UK and Argentine experiences where performance improved in the initial years following privatisation.

Data sourced by the 2013/14 National Economic Survey shows that both freight and passenger volumes dropped further by 30.7% between the 2007/08 and 2011/12 financial years. This suggests that the concessionaire failed to meet performance targets (Kenya National Bureau of Statistics, 2014). After criticism from the KRC, RVR made a show of improving performance by doubling the frequency of service, and imposed restrictions to reduce derailments on the archaic infrastructure.

Added to this, about 6000 (approximately 41%) KRC employees out of 14 500 were laid off in the lead up to the concession (Mwiti, 2013). Instead of improving efficiency as envisaged by the theory of the firm and property/ownership theory, this reduction did not result in improved performance of the rail system. For instance, the concessionaire was not able to sustain its fixed costs or to maintain its rolling stock (Chukwuma et al., 2016). On the other hand, as the government did not have money for subsidies, the railway had to privatise or face extinction (Mwiti, 2013). According to this author, if the company was not privatised at that time, it would have failed immediately, and the remaining 8,500 workers would have lost their jobs.

As happened with some of the concessions in both the UK and Argentina, in 2017, KRC revoked the 25-year contract for freight that it had signed with the RVR Kenya. The Concession Agreement, which was signed on January 23, 2006, was supposed to run until the year 2031. The termination order was put into effect following RVR's failure to meet the set service level targets and agreements. KRC issued a termination notice to end the concession to RVR following discussions to resolve the disputes failed (Kenya Ministry of Transport, 2017).

According to Mwiti (2013), although the concessionaire did not meet the expectations of its users nor its owners, especially during the concession period, the Kenyan government went on to gain financially from concessioning – the financial flows reversed, with fees and taxes paid by the concessionaire exceeding the subsidies that previously went in the opposite direction, as is

the case in most African countries that concessioned their railways. This was a significant disadvantage of concessioning, as it became a cash cow for vested interests. Lowe (2014) also points out that with the concessions in developing countries came a loss of independence resulting from financial support from lending institutions such as the WB and IMF. The loans from these institutions came with conditions for trade liberalisation and privatisation, which included labour retrenchments (Muhumed and Gaas, 2016). However, this view may be a one-sided in that it does not consider the possibility that some of the austerity measures from the lending institutions may have been a result of the unfavourable credit ratings of countries like Kenya (Clemens and Kramer, 2016).

One explanation of why rail privatisation in Kenya failed so quickly, is provided by Amonya (2016; 2018). According to the author, privatisation - or more specifically, PPPs - need an environment where they are strongly valued and understood. The RVR project was the first attempt in gaining this appreciation. However, the Kenyan government was not a competent partner (Bullock, 2005; Amonya, 2018). Amonya (ibid.) argues that this is understandable, considering the state, sentiment and capacity of the country at that time rendered it inefficient. This confirmed the view expressed by Gidadhubli and Kumar (1993), Nellis (2005) and Chukwuma et al. (2016) that where unemployment is high and rising, where recession persists, where industrial output is on the decline, where inflation remains unabated, where debt servicing proves painful and where standards of living are low and declining, privatisation is not easy to implement. It also confirmed Njeremani (2003)'s argument that in the Western world, countries with a tradition of strong public institutions have generally engendered transparent privatisation processes.

To sum, similar to the UK and Argentina, the motive behind privatising rail in Kenya was to reduce the burden on the fiscus and creating value for the rail users in terms of an improved quality of service. Privatisation in Kenya was barely able to achieve either objective, unlike in UK and Argentina where there was a marked improvement for a time after the process was implemented. In addition to the retrenchment of workers, the concessionaire was not able to

meet targets, resulting in the eventual termination of the agreement. There was some improvement in the financial status, but this was because the government stopped paying subsidies and was boosted by the funds from the lending institutions. All this emphasises the need for a capable state in planning for and implementing privatisation projects. Additionally, the RVR contract put too much risk and responsibility on the private party, from rehabilitating, modernising and maintaining the rail network to running operations. From the case studies reviewed so far, it is not clear which privatisation or separation model works best. What is clear so far is that risk identification, allocation and management must be part of a comprehensive strategy (Omwenga and Nasieku, 2016; Amonya, 2017) in any rail privatisation project.

In the meantime, the landscape of infrastructure investment in Kenya and other developing countries such as Argentina seems to be changing. First, the management of the rail systems has gone back to the government. Secondly, these countries are now securing loans mostly from Chinese companies to modernise their rail systems. In 2017, the Kenyan government signed an agreement with a Chinese company to construct a 578km standard-gauge railway line linking the port city of Mombasa to the Kenyan capital Nairobi (IRJ, 2017; The Conversation, 2022). According to this IRJ article, the Chinese contractor was appointed without competitive bidding after Kenya agreed to this as a condition for Chinese funding. In 2019, the president of Kenya announced that a rail link between central Nairobi and Jomo Kenyatta International Airport would be completed in 2021 – this time with finance from France (IRJ, 2019). According to the president:

> "Our target is to have 500,000 urban commuters moving freely daily within the next 12 months. This number will grow to over a million commuters daily within the next five years."

However, the projects have run into problems. According to Smith (IRJ, 2022), African governments, desperate to improve infrastructure and show progress to their voters, were attracted by the quick execution and favourable financing

conditions offered by Chinese companies and quickly signed loan agreements. As such, the outcome has been far from optimal. Cuenca (IRJ, 2020) reports that Kenya's procurement laws were flouted. Competitive bidding for the Standard Gauge Railway feasibility study was not permitted (Smith, ibid.). Also, the new line was completed in 2019 but it is only carrying a small part of the projected traffic.

Regardless, some rail experts (IRJ, 2020) believe that the tides for African infrastructure are turning. "The need to improve African infrastructure is as strong now as ever, particularly in the fight against climate change and in the face of rapid urbanisation". The financial support from China and other countries is therefore necessary. With western governments joining China to provide the financial support necessary to get projects off the ground, an exciting time for African infrastructure development might be on the horizon. However, countries like Kenya must learn to guard their own interests by enforcing their own laws and regulations.

4.4 Gautrain (South Africa)

4.4.1 Background

Gautrain is a rapid rail link between two major cities of Pretoria and Johannesburg in Gauteng Province, South Africa (Engineering News, 2019). The first rapid rail system in Africa, the project was first announced in February 2000 after a completion of feasibility studies conducted in the late 1990s by the new democratic government[19]. With a projected price tag of R30 million, the South African government knew from the outset that this project would not be funded by the government alone. Hence, there was a need for a PPP agreement (Gautrain Management Agency [GMA], 2014).

[19] This announcement was made by the former Premier of Gauteng Province, Mr. Mbazhima Shilowa after his predecessor, Mr. Tokyo Sexwale, visited Munich, Germany, in 1997 with the future Gautrain Management Agency CEO, Jack van der Merwe to investigate the possibility of construction of a rapid rail system in Gauteng (Thomas, 2013)

The Gautrain project was justified on PT grounds, that it would help ease traffic congestion on the N1 Freeway between Pretoria and Johannesburg (Gauteng Department of Roads and Transport [GDRT], 2013; Gautrain Management Agency, 2014). Figure 4-5 shows typical traffic conditions on this highway during the morning and evening peak periods, and Figure 4-5 shows that Johannesburg is rated as one of the worst cities when it comes to traffic congestion after Mexico City, Shenzhen, Beijing and Nairobi (Globalisation of Traffic Congestion Report, 2011), amongst the cities that were measured.

Figure 4-5: Congestion on the N1 Freeway between Pretoria and Johannesburg

Source: GDRT (2013); Getty Images (2020)

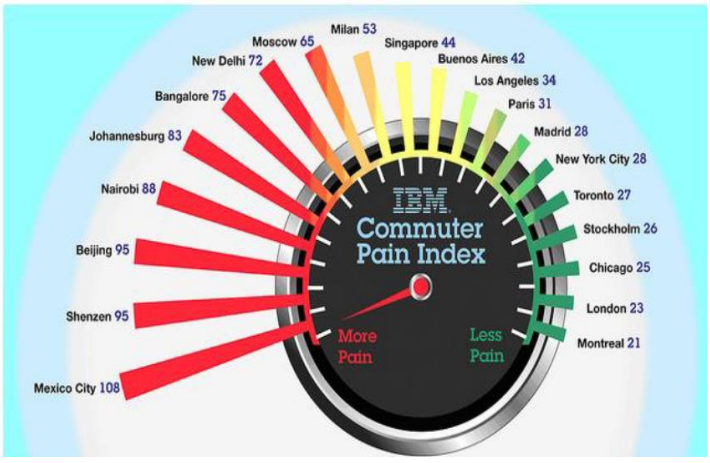

Figure 4-6: Johannesburg's congestion rating

Source: Globalisation of Traffic Congestion Report (2011)

In his presentation to the Gauteng Transport Commission, Mr Jack van der Merwe estimated that there would be 134 000 passenger trips on the Gautrain per day, which would go a long way in easing the traffic congestion. The Gautrain would run on an international standard gauge line and a closed loop system, as opposed to the narrower Cape Gauge lines with an open system that Metrorail operates on. Thus, the Gautrain would be capable of reaching speeds of 180 km/h (ibid.).

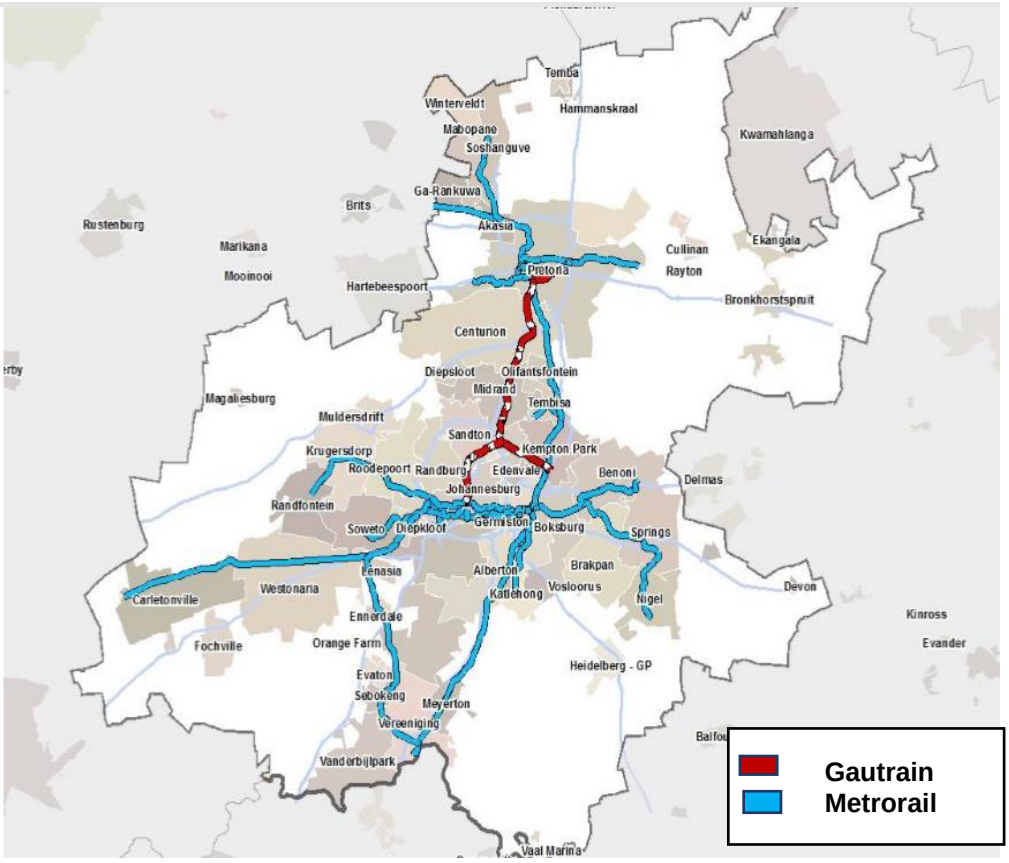

Figure 4-7: Gautrain service vs Metrorail service in Gauteng

Source: Adapted from GDRT (2013)

Different from the UK, Argentina, and Kenya cases reviewed above, Gautrain is a greenfield project[20], and it came into the space long dominated by two main players: Transnet and PRASA, with Transnet responsible for freight services, and PRASA for passenger services (DoT, 2022). In the 2011 Labour Report, the then Group Chief Executive Officer (GCEO) of PRASA, Mr. Lucky

[20] This means a new project constructed on vacant land where there are no existing buildings or infrastructure (MagicBricks, 2022).

Montana, stated that the last rail network was constructed in 1980 while 83% of the rail fleet operated on 1956 technology, and over 80% of the signalling system was obsolete (Parliamentary Monitoring Group, 2013). Consequently, most of the fleet and signalling system failed to operate to the optimal levels leading to delayed or cancelled rail trips. Added to this, in his report to the Gauteng Transport Commission in 2005, Mr Jack van der Merwe said that the Metrorail line was not conveniently located for the proposed Airport-Johannesburg-Tshwane route. Also, if high-speed trains were to run on the Metrorail network, the other normal trains would have to be slowed to allow the high-speed trains to by-pass certain stations.

Gautrain then officially entered the South African rail space in mid-2010, with the link between ORTIA (OR Tambo International Airport) and Sandton becoming operational during the 2010 Soccer World Cup. The entire network consists of ten train stations and 80-kilometer rail lines, of which 15 kms are underground and another 15 kms on viaducts (GMA Annual Reports; GMA Case Study, 2015). The rail system is adjacent to Metrorail services at Johannesburg Park Station, Pretoria Station, Hatfield and Kempton Park, but the two systems are not integrated operationally (Van Der Merwe et al., 2012). Furthermore, the GMA Annual Report for 2013 indicates that the Gautrain has physical interfaces with MBTs and municipal buses at Park Station.

4.4.2 Operating and Governance Framework

Prior to commencing with the procurement of Gautrain, GPG prepared a comprehensive feasibility study and financial model. At that time, it was clear that, like most passenger rail projects around the world, the Gautrain would require government financial support. Also, according to the GMA (2015), Gautrain was always conceptualised as a PPP, owing to the unproven nature of a high-speed rail link project, optimistic timelines, and a high degree of technical complexity. The support needed for the project was defined in two parts – the capital contribution that the GPG would have to make in the development period and the patronage guarantee that it would have to make during the operating period. This is because the total capital requirement was

far greater than that which the private sector could invest and recover from user fees because of the sunk costs of railway infrastructure.

In further laying the foundation for Gautrain, the Gautrain Management Agency Act (no. 5 of 2006) was passed for an establishment of the GMA, mandated to manage and oversee the Gautrain PPP Project. To accomplish the functions, section 4 of the act obliges the GMA to a list of actions, which include financial management and socio-economic development (GMA Case Study, 2015). A special purpose vehicle (SPV), the Bombela Concession Company (BCC), was also set up to design, build and part-finance the Gautrain – see Figure 4-8. The company was selected after an international tender process to design, construct, part-finance, operate and maintain the Gautrain system (National Treasury, PPP Unit, 2013).

The contract between GPG and BCC, known as the Concession Agreement, which also includes Bombela, was meant to deliver to specified level services related to the train and feeder/distribution buses, depot equipment, signalling system, safety, stations, revenue collection, marketing and passenger communication. Bombela also takes responsibility for the management and maintenance of all the system's assets (GMA, 2013).

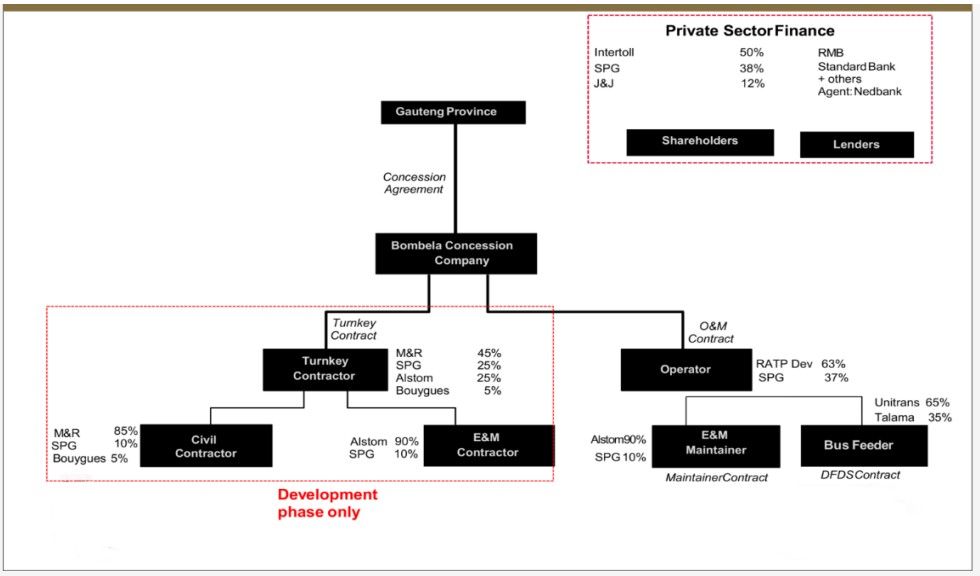

Figure 4-8: Gautrain contractual structure

Source: Bombela (2023)

The lifespan of the Gautrain is divided into two phases: the first phase lasting 54 months and the second, 15 years. According to the GMA (2013), the first 54 months were for the designing and construction of the infrastructure, while the remaining 15 years constitute the operational period. The construction phase commenced in 2006 and ended in mid-2010 while the operational phase started in mid-2010 and will end in 2026, after which period the system will be transferred wholly to GPG, bringing an end to the Concession Agreement (GMA, 2014).

The government contributes 88.7% of the costs of the project while the private party, Bombela, only contributes 11.3% to the cost of the Gautrain PPP (GMA Case Study, 2015). Unlike the other three case studies, this type of concession is one where government is the financier, and the private sector provides the actual infrastructure. The private partners borrow finance from the government (88.7% in this case) and fund the remaining 11.3% with their own revenue (which could be through their own private borrowing, or equity). Government receives a return on their borrowings through the interest charged to BCC, while BCC is awarded the rights to the proceeds of the Gautrain for the duration of the PPP.

Various stakeholders were directly and indirectly involved in managing the PPP contract during the different stages of the project, which showed institutional integration. It bears repeating that the project also had political backing, which Mr. Jack van der Merwe stated is one of the critical ingredients in determining the success of such a venture (Freight News, 2011). Besides the financial capacity, the project was also capacitated in terms of critical skills – engineering, legal, financial, etc. - as part of the Provincial Support Team during the planning and development phases.

With regards to risk, the Gautrain PPP agreement was very clear from the beginning. The GPG was tasked under the CA to provide land for the construction of the network (GMA, 2010). In addition, the provincial government bears the patronage guarantee obligation which stipulates that regardless of low demand for Gautrain services, GPG would pay the BCC

patronage fees to cover the capital, maintenance and operational costs of the consortium (GMA, 2013). During the planning stages of the project, a provincial patronage forecast was developed. The preferred bidder had established their minimum required total revenue to fund the project. If revenue received by the concessionaire from operating the Gautrain is less than the minimum revenue, the provincial government covers the shortfall. The bidders for the project during the procurement process were therefore competing based on the combined lowest provincial contribution and patronage guarantee payable by GPG (Dachs, 2011; GMA, 2015).

Literature shows that passenger volumes are an issue for any rail project/service. Very few cities in the world have volumes such as you find in Asian or European cities that make it easier for passenger rail to be self-sustaining (TCQSM3, 2013; Van de Velde, 2013). As such, the patronage guarantee poses a huge risk for GPG as seen during the COVID-19 lockdown where operations were forced to stop but the patronage guarantee was paid to the operator. This suggests that the viability of Gautrain might sometimes depend on the government running at a loss.

4.4.3 Efficiency, Effectiveness, and Impact Nexus

Whilst running approximately 6,700 train trips monthly, performance norms for availability and punctuality of the train service are mostly at 98.5% and 95% respectively (GMA, 2020) – a very good performance by rail standards (Litman, 2013). This performance has been consistent since the Gautrain started operating and, according to the GMA report (ibid.), to date (together with the support of its bus service), there has been approximately 105 million passenger rail trips and 32 million bus trips since the commencement of Gautrain's operations.

	Q1 (FY 2019/20)			Q2 (FY 2019/20)			Q3 (FY 2019/20)			Q4 (FY 2019/20)			Total
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	2019/20
Scheduled trips	6,632	7,048	6,950	7,559	7,329	7,082	7,546	7,162	6,424	7,411	6,988	6,257	**84,388**
Actual trips	6,613	7,044	6,932	7,542	7,311	7,070	7,542	7,099	6,403	7,395	6,975	6,237	**84,163**
Trips cancelled	19	4	15	13	11	7	6	66	21	12	9	14	**197**
Early starts	4	4	3	4	7	5	2	10	6	4	4	6	**59**
Late arrivals	145	98	111	104	134	102	120	58	139	224	168	125	**1,528**
Service availability	99.65%	99.89%	99.74%	99.74%	99.75%	99.83%	99.92%	98.98%	99.58%	99.78%	99.81%	99.68%	**99.66%**
Availability norm	98.50%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	98.00%	**98.00%**
Service punctuality	97.75%	98.55%	98.36%	98.57%	98.07%	98.49%	98.38%	99.04%	97.74%	96.92%	97.53%	97.90%	**98.11%**
Punctuality norm	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	94.00%	**94.00%**

Figure 4-9: Demand and performance of Gautrain

Source: GMA (2020)

Figure 4-9 shows the demand and performance for Gautrain over four quarters in the 2019/2020 financial year. The table shows that for the year, the total train passenger trips increased for most of the months except for May, June, December 2019 and March 2020. The GMA states that the decline for these months can be attributed to the positioning of the public and school holidays, and the national lockdown due to COVID-19 in March 2020, which resulted in Gautrain's commercial services being suspended. This increased the cost for GPG by about 3.3% from the previous year as it had to pay more on the patronage guarantee. Also, since 2013, Gauteng taxpayers have funded the shortfall of customers on the Gautrain by close on R13 billion (Tech Financials, 2022).

In terms of other value measurements, the rapid rail link broke new ground to ensure that specific socio-economic development objectives were met. Gautrain introduced a fourth cornerstone over and above the normal technical, financial and legal perspectives, and adopted an innovative process to secure the commitment of the concessionaire to socio-economic development objectives (Van Der Merwe et al., 2012). These include objectives such as enhancing local development, stimulation of economic growth, job creation, skills development and enterprise development.

According to GMA, the project's socio-economic regime was developed as the first of its kind for a rail service in South Africa. An Independent Socio-

Economic Monitor (ISEM) has been appointed for the purpose of verifying socio-economic development achievements attained on the project. These are based on the verified achievements reported on a quarterly basis by the ISEM, including shareholding by black persons and black women, procurement, sub-contracting and employment equity elements (Van der Merwe, 2017). These targets were met and exceeded as the service continued to contribute positively to the Gauteng economy (Engineering News, 2019).

The rail system has not been without any challenges, however. Like Metrorail and Transnet, the system has experienced rampant theft of copper cables. In its early days, the Gautrain was disrupted as a result of cable theft in one month of its operation (Sowetan Live, 2011). The first cable theft caused a total of 54 train trips to be cancelled. The GMA says that it took about seven hours to resolve the problem. Strikes by employees of the BCC have also caused problems for the Gautrain PPP. For example, The Business Day newspaper reported that over a period of six months (between August 2011 and February 2012) the company had experienced five employee strikes. Four of the strikes were by bus drivers while one was by security guards. Bombela reported that the strikes resulted in a loss of train passengers by between 10% and 15% (Business Day, 2012).

Additionally, the Gautrain is largely criticised for consuming an unprecedented amount of public funding, while the train is aimed primarily at an elite class of people within Gauteng Province. Critics say this is occurring despite the dire and urgent need for more comprehensive and efficient PT targeting most of the travelling public (Thomas, 2013; The Citizen, 2019). Even though Gautrain was not created for mass PT but to attract private car owners between Pretoria and Johannesburg, politically, it is important that it is seen to serve the public. Ash (IRJ, 2016) says one way to do this is for the system to be integrated with other PT modes. The proposed Gautrain extensions to the south and to the north of Gauteng, Soweto in the south of Johannesburg and Mamelodi to the east of Pretoria, might attract more rail users other than just private car owners.

In summary, unlike the other three cases in this study, the Gautrain was a greenfield project which had more urban PT goals, namely reducing congestion and attracting other rail users besides the captive users attracted by PRASA, as the main motive behind the system. The foundation laid for the Gautrain seemed very solid. A feasibility study was completed, which showed exactly what the government would be committing itself to. From the start, the Gautrain had huge political support, with prominent politicians as the faces of the system. Again, this shows that rail privatisation is much more than a technical process.

4.5 Conclusion

This chapter has shown us the importance of political and socio-economic context in privatisation, either as a push factor for the decision or to be carefully considered during the privatisation process and its implementation. To this end, the UK's history of privatisation in railways shows that it may follow the regulation cycle, requiring nationalisation in the 1940s and, coming full cycle, being privatised in the early 1990s. This seems to be the case for Argentina, as well, with nationalisation in the 1930s, privatisation in the 1990s, and again, nationalisation starting from 2012. These demands come in the wake of a public outcry as a result of deteriorating service in the industry. In Argentina, privatisation came as a result of a prolonged deterioration and hostilities between the government and trade unions, the final straw of which was the hyper-inflation of the 1980s. In Kenya, not only was there a need to revive railways, but to also facilitate a historical mission of integrating the rail network in the Eastern African region. The only difference to this trend is South Africa, as Gautrain is a new project. However, South African rail (PRASA) has been experiencing similar pressure like that of the other three cases, especially in the last decade.

The adverse political and socio-economic conditions, though, tend to create a breeding ground for the insidious contestations, as seen in Argentina and Kenya. In addition to the powerful trade unions in Argentina, railway performance became one of the hot political issues starting in the 1950s, and

eventually attracted corruption and cronyism for political patronage. This culture easily swallowed the private sector later after the adoption of privatisation. Although Kenya does not have powerful trade unions, as in Argentina and South Africa, history of disrespect of state institutions after independence has brought about corruption in its public service. Thus, the privatisation process became a magnet for what is called ‘tenderpreneurs’ in South Africa, leading to a doubtful appointment of a private partner in the agreement.

Nonetheless, this chapter also shows us the importance of due diligence during the negotiation and design of privatisation partnerships, particularly regarding risk allocation. Being the latest in the privatisation (re)structuring space, Gautrain demonstrates how a near-perfect agreement must be designed. Of particular importance is the clarity provided on risk allocation between the partners. For instance, the COVID-19 national lockdown imposed by government in 2020-21 threatened the existence of Gautrain, but it survived because the GPG kept paying the patronage guarantee throughout the period. While the partnerships were designed along the similar lines in Argentina, risk allocation and management seem not to have been considered seriously, and it was never considered as a factor in Kenya.

In the UK, the strength of public institutions seems to have come handy in countering the consequences of not thinking through risk at the conceptual stage of the agreement. In fact, it seems the UK government wanted to totally privatise rail, only to be shaken by the Hatfield accident. To this, it seems emerged a realisation of the magnitude of the risk involved if railway was to be fully privatised. The franchise model adopted in the UK, nonetheless, seemed to have gone a long way in countering the effects of principal-agent relationship inherent to private-public partnerships. By making the work of the franchisees dependent on each other, the UK’s agreement seems to have managed to improve accountability and transparency, which made oversight possible. The principal-agent gap in Argentina and Kenya seems to have been exploited by unscrupulous characters to the maximum for the benefit of everybody, but the railway industry.

It's not a coincidence, therefore, that value created after privatisation is different in the case studies. The UK has survived the challenges it faced since privatisation. This is also the case with Gautrain, which achieved its target without failure at the early 2020s. That cannot be said about Argentina and Kenya, whose partnership contracts were revoked after 25 years and 11 years respectively, in the late 2010s.

Perhaps with the realisation that the results of privatisation have been mixed, there has currently been a turn in the regulatory cycle in the countries studied. The more recent government and private partnerships seem to be shifting from a focus on efficiency gains to the need to attract investment for the improvement of public service provision. As such, the emphasis is now on rail modernisation and a heightened focus on the rail user. The management of rail has therefore reverted back to the state in the case studies, but with select operations still being contracted to private operators. However, this may still not be the solution that is hoped for, as seen with the contractual challenges that Kenya has run into with the Chinese investors.

The question whether privatisation is suitable in the South African passenger rail industry still remains. The next chapter attempts to set the scene by answering the question: What can we learn from the above experiences and beyond?

Chapter 5. Comparing The Case Studies

As it is already stated, the debate surrounding privatisation has been widely divided between those who see the private sector as superior under all circumstances as explained in the theory of the firm and/or ownership/property rights theories, and those who see any form of restructuring or disposal of state assets as a threat to the public good as captured in the public choice theory. In the cases of Argentina and Kenya, for instance, it was shown that private sector is not immune to inefficiencies, maladministration and corruption, particularly where political patronage rules the processes. This is a breeding ground for failure of any privatisation project.

There remains a great deal of uncertainty about which structural reforms work best and under which circumstances (Schaaffkamp, 2014). However, the previous chapter has further shown us the importance of political and socio-economic context in privatisation, either as a push factor for the decision or to be carefully considered during the privatisation process and its implementation. Privatisation came as a response to the socio-economic conditions in the UK, Kenya and Argentina. It can further be argued that privatisation in these countries align to the economic regulatory cycle, seen by a shuffle between privatisation and nationalisation underpinned by failure and under-performance in the delivery of public transport leading to dire political and socio-economic conditions in the country.

The analysis of the case studies in the previous chapter confirmed Chapter 2's findings that there is no direct or strong positive correlation between privatisation and efficiency; that the process is not a panacea to a deteriorating rail service. Kenya's privatisation was a failure almost from the start, with not much improvement in the quality of service for the rail user. Initially, the UK and Argentina seemed to thrive immediately after privatisation, with both rail demand and passenger satisfaction increasing. Judging by the ridership and customer surveys conducted pre Covid-19 (GMA, 2020/21), Gautrain's experience with privatisation or concessioning seems to be positive so far.

The success stories in some of the cases were, however, short lived. In Argentina and Kenya, the contracts with the private operators were revoked in the 2010s because of challenges highlighted in both the principal-agent theory and the public choice theory. These include lack of monitoring of the private operators' performance, and the corruption that was said to be between the private operators and the officials in charge of oversight.

This aligns with Walters and Jansson's (2008) and Tan's (2011) views that infrastructure privatisation has had mixed results across sectors and countries. While some sectors - telecoms in particular - and in higher income countries, have been more successful, privatisation has not significantly financed capital investment nor improved efficiency in the provision of infrastructure in three main sectors – water and sanitation services, transport and energy. Overall, the experience of more than 15 years in railway concessions in the case studies shows that the low volumes on the passenger lines, and the low fares, cannot produce sufficient revenue to pay taxes and concession fees to governments, to cover the costs of operations, as well as the renewal of the depleted rolling stock, the large investments necessary to rehabilitate a heavily deteriorated infrastructure, and to generate profit for the concessionaire and improve the service for the rail user.

Some of the principal challenges to concessions relate to the typical need for some form of government guarantee, which reduces private sector efficiency incentives envisaged by theory. In all the cases, the concessions were made up of complex contracts, which involved regulatory aspects, distribution of commercial and political risks, public guarantees when needed, investment requirements, and service obligations that required the private partner (arguably not Bombela in the Gautrain concession) to give access to all groups in the area of the concession, regardless of the level of income. This meant that, firstly, governments had to continue financing the rail services in the form of subsidies. Secondly, all this put keen focus on the governments' capacity to regulate, monitor and enforce the contracts, which is a central theme in the principal-agent conflict.

The sections below analyses the case studies in accordance with the themes identified in chapters 2 and 4.

5.1 Ownership and Operational Structure

The Argentine, Kenyan and South African (Gautrain) case studies provide an example of a concession, which, as seen in Chapter 2, is one of the most common forms of privatisation in the rail industry. Under this option, all the railway functions may be shifted from the government to the private partner, who is given the exclusive right to provide a service or set of services within a given area (Bayliss, 2002; Barter, 2008). In addition to being given exclusive corridors to operate on, the private partners in Kenya and Argentina were given full responsibility for the provision of rail services (operations), the maintenance of rail assets and the renewal of such assets. The concessionaires in Argentina were, however, subsidised for operations, rehabilitation and investment in the passenger rail system. For Gautrain, the process also included the building of the infrastructure by the private partner as it was a greenfield project.

Unlike Argentina, Kenya and Gautrain, the UK franchised its railway lines. This was done by way of a radical reorganisation of assets along functional, geographic, and business lines. Track, stations, signalling, electrical for trains supplies, and management of timetables split from operation of train services to be operated by TOCs. Railtrack and later Network Rail was appointed as an asset manager, responsible for the maintenance and operation of all tracks, signalling and bridges. The rolling stock was owned by the ROSCOs and leased to the TOCs. As also stated by Campos and Cantos (2000), this seems to have worked favourably to the UK. The authors state that usually, where rail infrastructure and the operation functions are unbundled and franchised, the ‘in market’ competition is promoted as the franchisees can compete in the same rail corridors, thus transferring a higher proportion of risk to the private partner. Furthermore, this serves as an incentive for innovation, lower costs, lower prices, and higher operating efficiency, as the entity competes for a higher market share (Competitions and Markets Authority, 2015).

However, the UK has not been able to fully implement open access competition under the franchising regime. This cannot be easily achieved because the various aspects that make up the package of railways are so close that they need to be planned together to achieve seamless travel (Műller and Aragonés, 2012). This was part of the reason why the SARCC and Metrorail (which operated under Transnet at the time) were merged in 2008 (PRASA Strategic Plan, 2012). Additionally - and also applicable in the other case studies - the separation of infrastructure and operations requires complex railway institutional arrangements that ultimately increase transaction costs (Campos & Cantos, 2000; Abbott and Cohen, 2017), and might impede fare integration. On the other hand, unbundling might bring about more transparency, because smaller units are easier to monitor - thus helping to resolve the principal-agent problem - even though this was not the case in the countries studied.

Generally, this section supports the findings that public and private partnership agreements can vary, from concessions to franchises and who owns the assets and operates the services during the partnership. This in turn has an influence on accountability and the way they are run, hence may have an impact on the efficiency and effectiveness of the projects.

5.2 Political Context, Public Governance and Institutions

The findings in this research show that the structure of ownership or operations is not the only explanatory variable for the differences in performance. The other explanation lies in the broader institutional context. Literature states that whether a certain activity is best delivered in the public sector or private sector will depend on the sectorial and institutional context (Estrin and Pelletier, 2015; Chukwuma et al., 2016). In either case, the quality of government policy and corporate governance will impact upon the extent to which objectives of efficiency, service delivery, and social and environmental policy are achieved (Das Nair and Roberts, 2017; Awuah, 2019; Kikeri, 2019).

The case studies reflect a variety of both tangible and intangible country characteristics both observable and unobservable, including institutional capacity, business culture, nature of organised interest groups, patterns of social conflict, and codes of conduct. The risk in weak political and economic institutions mean that the state lacks the credibility to commit to contracts or implement proper, consistent regulatory procedures, and fails to safeguard property rights (Kikeri, 2019). Argentina had inadequate and fragmented institutional arrangements and weak government regulations at the time of passenger rail reform, including a volatile political and economic situation. Kenya also had weak government institutions and regulations. This meant that some of the policies were not fully implemented, which affected how the privatisation process unfolded and ultimately, the viability of the process. The UK had the most mature institutions out of all the cases. Hence, implementation of relevant policy was not an issue, and the privatisation process was transparent. Compared to Kenya and Argentina, this may explain the endurance of rail privatisation in the UK.

In accordance with the public choice theory, the greatest obstacle to passenger rail privatisation in Argentina was also the objection of the labour unions that represented the FA workers and the collusion between government officials, politicians and private sector employees in a sophisticated patronage network. The lesson from these case studies is that government needs to have a capability to address the concerns of the important stakeholders and interest groups, including those of workers. It is also important to ensure that there are policies and instruments in place to facilitate transparency and accountability throughout the lifespan of the privatisation contracts.

On the latter, Tan (2011) argues that it would be unrealistic to expect such socio-political features to change on a timescale comparable to that of privatisation transactions - or to think that less attractive attributes would disappear overnight. This was the case in Kenya, where there was a concerted effort to change the culture of political patronage which increased with the death of the father of the country's independence, Jomo Kenyatta. An

attempt to address such shortcomings, nonetheless, failed dismally as the networks seem to have been too entrenched to be dismantled.

However, the case studies indicate that successful restructuring is associated with the extent to which regulation enables private parties to resolve disputes independently and earn a fair return on their investments. The question for South Africa is whether, despite the country's relative mature institutions, are these enough to facilitate successful implementation of privatisation in the public service? According to Kane-Berman (2016) and Bloor (2017), corruption and non-implementation of policy are some of the big concerns in the country. Would South Africa's institutions withstand the pressure sufficiently to cushion the potential challenges of privatisation in passenger rail?

Lastly, privatisation, as articulated in the principal-agent theory discussed in Chapter 2, assumes human beings to be self-interested and points out conflict of interest between the principal and the agent (Eisenhardt, 1989; McTigue et al., 2020). This conflict of interest can be aligned by either offering appropriate incentives or by monitoring the agent's activities (Asian Development Bank, 2010; National Treasury, 2010; Gautrain Management Agency, 2015). As evidenced by the UK, Argentina and Kenya, lack of stringent enforcement may result in the private partner ignoring many or all their reporting obligations under the privatisation agreements. In some, this situation occurs because of operator intransigence (e.g. UK), in others because of a lack of expertise or initiative (e.g. Kenya)[21].

[21] As an example, a study on global airport privatisation found the worse principal-agent situation where there is enough proof to show that privatisations have enabled investments into the industry than would have been the case if the airports had remained under government ownership. However, it was also found that the relationship between the public and private parties were fraught with difficulties because of problems around contracts, enforcement of terms and unrealistic estimations of passenger demand (Graham, 2020).

5.3 Contract Design and Allocation of Risk

Literature shows that the issue of ownership and risk responsibility lies at the heart of any potential conflict between the public and private partners (World Bank Institute, 2000; Bullock, 2005; Asian Development Bank, 2010). The findings in Chapter 2 show that in a concession, the public partner is the custodian or owner of the asset, while the private partner must assume the risks associated with the asset. The business and institutional model of most first-wave passenger rail privatisation projects, especially in less developed countries such as Kenya, was quite unstable as it allocated excessive financial burdens, complexities and risks to the private partner – for instance, fixing and maintaining the dilapidated rail infrastructure.

The case studies show that privatisation efforts are more likely to be sustainable if the infrastructure is not completely dilapidated. Otherwise, government would need to invest in rehabilitating or renewing the infrastructure so that this risk is not carried by the private partner like it was the situation in Kenya. Also, poor communication and the sharing of information has been shown to be one of the most common project risks, as per the principal-agent theory. It is usually assumed that all participants co-operate and exchange information in order to achieve project goals. There is, however, a potential conflict of interests between project participants because they all have their own interests, as well. Unfortunately, the protection of ‘own interests’ resulted in fatal train accidents in both Argentina and the UK.

On the other hand, the WB and the IMF also developed a new era of technical assistance for developing countries such as Kenya and Argentina by directly financing workforce reductions in preparation for concessions. Without this, the private partners may not have been offered 'credible’ contractual arrangements. In this and other respects, the extent to which those private companies absorbed risk was limited. Chapter 2 shows that passenger rail privatisation methods are mainly characterised by shared risks (Bayliss, 2002). However, in the said cases (and to an extent the UK and the Gautrain) much of the financial burden was left with the state. In Argentina, the

concessionaires assumed all risks related to demand and the government carried the political and some of the financial risk in terms of subsidies, rehabilitation and investment in the passenger rail system. Part of this was that the government could not allow the system to collapse hence had to carry some of the financial risks. This has been the case in many countries that privatised or contracted their passenger rail systems (Kouser et al., 2011).

One of the major reasons for privatisation in the case study countries was to reduce the burden on the fiscus. However, the sharing of the financial risks meant that governments continued to invest heavily in the system, thus defeating the purpose of why privatisation was implemented in the first place. In the case of the UK, for example, the costs increased dramatically. The figures available show that in 2008 prices, the analysis done indicated that total industry costs increased from around £6.5 billion in 1994/5 to £13.9 billion in 2008/9 (Johansson and Bickel, 2020). That was an increase of 114% and, according to these authors, could not be explained away through over pricing, bad accounting, or increased labour and material costs.

It is also said that risk should be allocated to the party best suited to manage it (Amonya, 2017). For instance, government should carry the political risk while the private part should carry the demand risk. However, the case studies show that it is not always simple and suggests; that risk must be analysed on a project-by-project basis (Omwenga and Nasieku, 2016). In hindsight, the condition of the rail infrastructure in Kenya at the time of privatisation posed a huge risk to the success of the project. As such, its rehabilitation should not have been transferred to the private partner. In this case, it seems that risk was not clearly thought out and managed. The social, economic and political conditions in both Kenya and Argentina also posed a risk to the concessions, hence it was appropriate that the political risk remain with the government. For Gautrain, the ‘unproven nature’ of a rapid rail link in Africa meant that the demand risk had to be shared between GMA and Bombela. As the IMF (2016) states, an effective risk management practice does not eliminate risks but enhances government’s capacity to mitigate the risks.

5.4 Did Privatisation bring any benefits?

As indicated before, the results of privatisation have been mixed. For Kenya, it was largely a failure from the start, with not much improvement on the performance of the service, and the concession was eventually revoked. As discussed in Chapter 4, the privatisation of KRC was expected to generate revenue for government through improving efficiency in service delivery, increasing profits and reducing public debt (Ndonye et al., 2008). The concession initiative brought regenerated optimism that rail transport would once again contribute significantly to national economic growth. However, nearly a decade into the concession agreement, regulators' periodical performance review reports and media business reports revealed that the concessionaire failed to achieve performance and investment targets as well as meet concessional obligations, due to what stakeholders perceived as financing challenges and inadequate technical capacity (KRC, 2012; Mwiti, 2013; IEA-Kenya, 2014).

For the UK and Argentina, the most prominent positive outcomes of private sector integration were some improvements in efficiency, service quality and rail usage. In the case of Gautrain, demand has been rising since the system was implemented. Improvements related to service attributes such as punctuality, reliability, trip frequencies, comfort and the quality of station facilities. In Argentina, this translated to passenger-kilometres increasing by 30-40% in the first month of the concession. In some of the corridors, ridership increases during the first three to four months of concession ranged from 12% to 102% (Carbajo and Estache,1996). Passenger journeys rose at a rate of just under 4% per year from 1997 to 2012, in the UK (Parker, 2012; McCartney and Stittle, 2017). A survey conducted four years after private integration showed that 91% to 96% of Argentine railway commuters agreed that the service quality and reliability of the service had improved significantly since concessioning (Martin, 2002).

The incentives-focused managerial practices followed by private firms seemed to be more successful than the welfare-focused practices of many

nationally operated railways. However, the improvements were not sustained throughout the concession periods. In the UK and Argentina, the systems came to be plagued by negligence and mismanagement. As already mentioned, both rail systems consequently experienced several fatal accidents at some point during the concession periods. Added to this, in the UK, Argentina and Kenya case studies, customers increasingly came to complain about fare increases, which were not followed by a rise in efficiency. This supports Schaaffkamp's (2014) contention that PT contracts seem unable to sufficiently increase the market share and to achieve long-term improvements in customer satisfaction.

The next section compares the development (socio-economic) contexts of the case studies to that of South Africa, thus helping to assess South Africa's preparedness for its passenger rail to be privatised.

5.5 Case Studies Comparisons with South Africa

	UK	Argentina	Kenya	Gautrain	South Africa
Socio-economic context	Mostly middle-class economy with an educated population.	Rail serves a captive market who must travel long distances to their places of work.	Rail serves a captive market who must travel long distances to their places of work.	Rail serves a small middle-income population.	Rail serves a captive market who must travel long distances to their places of work.
		History of colonial rule and violent repression of political dissent.	History of colonial rule and violent repression of political dissent.	History of colonial rule and violent repression of political dissent.	History of colonial rule and violent repression of political dissent.
	Constrained economic environment at the time of privatisation.	Constrained economic environment.	Constrained economic environment.	Constrained economic environment.	Constrained economic environment.
	Low levels of unemployment	High levels of unemployment, poverty and crime.	High levels of unemployment, poverty and crime.	High levels of unemployment in the country, but the Gautrain customer is mostly employed although also affected by crime.	High levels of unemployment, poverty and crime.
Resources available	Relevant skills available locally.	Relevant skills imported from other countries.	Relevant skills imported from other countries.	Some relevant skills imported at the inception of the project.	Local skills have been developed through projects like the Gautrain and other PT projects.
	Local funding.	Funding by agencies such as World Bank and IMF, making it easier for privatisation process to unfold.	Funding by agencies such as WB and IMF, making it easier for privatisation process to unfold.	Funding from government and private companies.	

Constraints		Strong labour unions.		Strong labour unions.	Strong labour unions who are against privatisation.
		Corruption.	Corruption.	Corruption.	Corruption.
			Vandalised rail network.		Vandalised rail network.
		SOEs as tools of macroeconomic policy and job creation.	SOEs as tools of macroeconomic policy and job creation.	SOEs as tools of macroeconomic policy and job creation.	SOEs as tools of macroeconomic policy and job creation.
			Low land use densities, which have an impact on demand.	Low land use densities, which have an impact on demand.	Low land use densities, which have an impact on demand.
				Policy uncertainty regarding rail privatisation at the time of inception.	
				Negative public perception, largely because of issues around affordability and access.	
Opportunities	Policy certainty.	Policy certainty.			Policy certainty, especially now with White Paper on National Rail, and White Paper on Transport Policy.
	Strong labour unions emerged during the Industrial Revolution but has since weakened.				
	Population largely supportive of privatisation.	Population largely supportive of privatisation.			

	High passenger volumes in rail before privatisation.	High passenger volumes in rail before privatisation.			
			Strong political back-up.	Strong political back-up.	
		Poorly performing rail service.			Very poorly performing rail service
					Rail investment through modernisation programme.
					Lessons from the Gautrain and other privatised industries, e.g. South African Airways.
					Privatisation can be in our own terms because no funding agencies to dictate conditions.

Table 5-1: Comparing South Africa to the case studies

Sources: Edwards, 2008; Mwangi, et al. (2016); Das Nair and Roberts (2017); Gentle, et al. (2018); Kikeri (2019)
PRASA (2022); United Nations Development Programme (2013, 2022)
Transparency International (2023); Council on Foreign Relations (2023); IMF (2023)

The country that has more similarities to South Africa amongst the case studies is Argentina. The conditions that led to the privatisation of passenger rail in Argentina, including the other case studies, were experienced in the early 2020s in South Africa starting from the 2010s . These include a worsening debt and economic crisis[22] leading to the deteriorating quality of service in passenger rail and other sectors. In confirmation of Gwilliam's regulation cycle (2008), the Argentine government needed to find a solution to its crisis, and this came in the form of privatisation.

The Argentine economy fared badly during the 1980s when the first debt crisis was at its highest (Menckhoff and Zegras, 1999; Műller and Aragonés, 2012). Growth of real output stagnated, financial markets collapsed, prices rose as the currency steadily depreciated, and capital fled the country in pursuit of safer havens. At the cusp of this economic crisis, FA was privatised after years of mismanagement, deteriorating services and huge increases in operating losses – a situation similar to that of South Africa (Biz News, 2022; Foreign Policy, 2023). The large deficits and decline in quality of SOE services during this period created an atmosphere favourable to privatisation among the general public even though vocal labour unions were questioning the process. Privatisation was, therefore, seen as a cornerstone of policies aimed at stabilisation and structural reform and was considered a superior form of management (Kopicki and Thompson, 1995; Ramamurti, 1997), in line with the property rights theory. It can be argued, however, that these conditions were far from desirable to carry out an orderly privatisation in rail and the other sectors.

The use of SOEs as tools of macroeconomic policy, a practice common in prior administrations as well, severely weakened Argentina's and Kenya's abilities to undertake necessary capital investment and sustain adequate quality of services. Like South Africa, as the practice continued, Argentina's

[22] In 2022, the South African economy was on the brink of collapse. After years of corruption, mismanagement and poor investment, the fruits of the once promising country were rotting – Biz News (2022)

ability to provide services deteriorated, on some occasions resulting in substantial losses to the state and widespread discontent among users.

Passenger rail in Argentina and Kenya served a captive market, mostly low-income communities, as it does in South Africa. Argentina's population was highly urbanised, just as it is in the case in South Africa, with most of the population in these two countries living in peripheral areas of the city (United Nations Development Programme, 2013, 2022; IMF, 2023), as is typical of the urbanisation globally (Suzuki et al., 2013). Thus, passengers or commuters must travel significant distances to get to their places of work. While this spatial growth pattern points to the importance of rapid PT systems like rail, it also points to its importance in fulfilling equity objectives such as access to economic opportunities.

Unlike in the UK, Argentina and Kenya had high levels of poverty and notable discrepancies remained among the wealthy and poor in urban areas, especially in Argentina and South Africa. This might explain the high crime rate in both countries. According to a 2011 report in Argentina, crime was considered to be "one of the biggest burdens facing residents" (Borgen Magazine, 2014). Robberies, especially muggings at bus stops, as well as street violence and other shootings are not unordinary, and are in part due to a lack of police presence in parts of the city. Crime in South Africa is much more pervasive and violent, spilling over to the rail system (PRASA, 2022), making it a major red flag to be made part of the agenda in any rail reform.

Like South Africa, Argentina and Kenya have a history of colonial rule and violent repression of political dissent (Edwards, 2008; Gentle et al. 2018; Council on Foreign Relations, 2022). This might explain the rise of political resistance through structures like the labour unions in later years. As common in most developing countries, many of the SOEs in Argentina and Kenya had an additional political mandate, absorbing labour that had become redundant in other sectors of the economy to keep unemployment rates low. As highlighted in the public choice theory, there is thus a powerful combination of

interests against privatisation, whereas in the more developed countries, opposition is much less influential.

The analysis above supports the findings that context is a major determinant of the sustainability of privatisation as it has a bearing on ownership/property rights, risk allocation/contract design and governance/institutions discussed in the first section of this chapter. Even so, literature, supported by the case studies, shows there is no guarantee that privatisation will result in value for the rail user. The UK seemed to have all the necessary ingredients for privatisation to be a success. Although it has endured up until today, the review of the country in Chapter 4 shows that it has many challenges. It may be that the challenges faced by the UK were because it was the first to implement privatisation, and it has evolved with experience and lessons learnt. The Gautrain seems to support this view, coming to the scene much later than the other case studies, thus benefitting from the experience of others.

Given the current state of the rail service and funding constraints, PRASA/South Africa does seem ripe for the implementation of privatisation. Additionally, as captured in Table 5-1, there is now policy certainty in terms of both the White Paper on National Rail (DoT, 2022) and White Paper on Transport Policy (DoT, 2021) . Also, the government has invested a lot of funds in the modernisation programme, which, unlike in Kenya and Argentina - where the rail infrastructure was in a poor state - the private partner would not have to carry the commercial risk of investing in assets. The Gautrain and the privatisation of other industries in the country also offered lessons of the potential risks of the process and how these can be managed. Lastly, unlike in Kenya and Argentina, South Africa can dictate its own terms of rail privatisation based on the realities of the country (Das Nair and Roberts, 2017).

Having said all this, the case studies offer a cautionary tale of rail privatisation, and one still wonders whether rail privatisation is feasible in South Africa given the contemporary social, economic and political challenges in the country.

This is one of the questions posed to the experts in the interviews detailed in the next chapter.

5.6 Conclusion

In summary, this chapter has attempted to set the scene for the interviews discussed in the following chapter. In particular, it highlights the difficulty to guarantee a successful outcome from integrating private sector participation into a national railway network. It is, however, possible to highlight the main advantages and disadvantages from this policy action, depending on the model selected and how the contract is designed.

The selected cases also underline the many conditions required for the positive benefits of passenger rail privatisation to materialise. For example, where unemployment is high and rising, where recession persists, where industrial output is on the decline, where inflation remains unabated, where debt servicing proves painful and where standards of living are low and declining, privatisation is not easy to implement (Gidadhubli and Kumar, 1993; Nellis, 2005; Chukwuma et al., 2016). This is important considering the push for rail to be privatised in South Africa and given the country's current socio-economic and political realities. Kenya's programme failed quickly because it had the worst socio-economic conditions and as such the financial risk of infrastructure investment, was shifted to the private sector. The socio-economic conditions in the UK and Argentina were better than in Kenya, hence privatisation seemed to be working in the initial years with demand and service quality improving. However, like with the Gautrain, this came at a huge cost to the government through the subsidies paid to the private operators.

A comparison of the development contexts of the four case studies with that of South Africa showed similarities across several criteria, more so for South Africa and Argentina. Argentina embarked on its rail privatisation drive during a deepening debt and economic crisis, with huge unemployment levels giving rise to social problems like crime. Privatisation was seen as a panacea to resolve some of these challenges. Although there were some improvements

in the performance of rail initially, these were not sustained. Perhaps Argentina's conditions then were not conducive to passenger rail privatisation; its economy needed to be stabilised first.

The case studies also show that there are issues of PT that need to be considered. For example, that passenger rail thrives in corridors where there are high volumes. Argentina and the UK had these volumes hence rail demand was able to increase significantly when performance improved in the initial years of privatisation. Also, as Table 5-1 shows, the practical implementation of programmes of privatisation has proved to have significant implications on the relationships between government, the public and the private sector. Hence, privatisation cannot simply be treated as a problem in Economics. Important public policy issues are raised.

Important lessons learnt from the case studies are captured in the Table 5-2 below.

Critical success factors of privatisation		Red flags associated with privatisation
Ownership model/structure • Organisation of infrastructure and operations, e.g. separation • Management model, e.g. franchising, concessioning, PPP, etc. • Strategic body, e.g. regulator		Job losses • Potential job losses at privatised SOE as part of cost cutting exercise • Resistance from public and unions
Contract design and risk allocation • Allocation of duties and ownership • Financial responsibilities		Rise in prices • Private partner's goal is to maximise profit
Governance and institutional capacity • Mature institutions • Policy certainty • Enforcement of property rights		Exclusion • Lower income groups priced out of the system and can no longer access job and other opportunities
Socio-economic conditions • Stability • Nature of organised interest groups		Opportunistic behaviour • Rent seeking and corruption
Feasibility • Realistic financial and demand projections • Clear objectives		Financial burden on government • Depending on risk allocation, e.g. patronage guarantees
Political support • Funding • Commitment		Disputes between the contracting parties • May affect service quality

Table 5-2: Synopsis of lessons from the case studies

All these are lessons for South Africa, and they will be tested in the next chapter, which details the interviews with the PT/rail experts including some rai users.

Chapter 6. Findings from the Field

This chapter discusses the findings of the interviews conducted with experts in the rail and/or PT field. The interviews were structured according to the main findings in Chapter 2 and Chapter 4 and helped the researcher to answer the research questions. The main findings of the referenced chapters were that privatisation is not a panacea to improving the poor performance of passenger rail. While there are potential benefits of privatisation, these are dependent on various conditions required for such benefits to materialise, as also stated by authors such as Gidadhubli and Kumar, 1993; Nellis, 2005; and Dorfman and Harel, 2015. The main themes explored in this chapter include:

- Definition and Rationale for Privatisation
- Political context, Public Governance and Institutions
- Ownership Structure
- South Africa's Privatisation Readiness

The interviews thus focused on testing the findings from the literature and the case studies – as summarised in Table 5-2 - with the opinions of the interviewees, which include nine experts in the field and two rail users.

6.1 Background to the Interviews

The study focused on the question whether privatisation was a panacea to an ailing passenger rail service, its feasibility in South Africa, and the value that can be gained from it. Privatisation literature was reviewed, and four case studies were evaluated and benchmarked with South Africa. The findings coming out of these were in turn tested through the interviewees, and the results of these are described in this chapter.

In total, eleven interviews were conducted, nine of which were with experts and professionals in the rail and/or PT sector, and the remaining were with rail-users. Out of the nine experts, one had an international experience in rail and PT. In-depth interviews using a semi-structured questionnaire (see Appendix B) were used to interview the experts to get their perspective of

passenger rail privatisation and its applicability in the South African context. This method of interview allowed for more probing, thus getting more insights than what a questionnaire could elicit. The same approach was used to interview the rail users, but the questionnaire was tailored to suit their level of knowledge and understanding of rail and PT issues.

The respondents did not give the researcher permission to reveal their identities (Appendix C and Appendix D), only their work experience, job designation and their PT field of specialty – refer to Appendix A. The respondents will thus be referred to as Expert 1 to Expert 9, and the customers referred to as Rail User 1 and Rail User 2.

6.2 Definition and Rationale for Privatisation

The interviews started with general questions about the definition of privatisation and the types of privatisations that are found in passenger rail privatisation projects. The reason for this was to test the experts' understanding of privatisation and to see whether there would be any novel definitions of the concept. As expected, all the experts had similar understanding of what privatisation is, mainly giving a textbook definition, with the focus being on 1) the transfer of responsibility from the government to the private sector and 2) the supposed efficiency of the private sector. The two rail users interviewed were also aware of what privatisation was and gave a similar definition to that of the experts. This awareness by the rail users confirmed that privatisation is not a novel concept in South Africa, as stated in chapters 1 and 2.

Expert 1 went into further detail, describing privatisation as a restructuring process which affects the whole supply chain of an SOE or government entity, involving assets, liabilities, work forces, management, and strategic focus. To the researcher, this brought home the gravity of the process and the cautiousness with which it must be approached. In further expanding on the definition of the process, Expert 8 seemed to display some discomfort about the process, stating that it was about profit rather than welfare, with the latter

being important in passenger rail. This description aligns with the property rights theory about the profits pursued by private companies (Spulber, 2009; Walker, 2016), and also aligns with the discomfort shared by critics of privatisation regarding the profit maximisation focus of the process (Buchanan and Tollison, 2009).

As also highlighted by the reviewed literature, two of the nine experts mentioned that privatisation might be misunderstood, hence there is a need to look at the concept carefully. Literature makes a distinction between full privatisation (or divestiture) and partial privatisation (mainly characterised by PPPs). This research mainly used the term in its general sense, unless stated otherwise. However, it is important to be aware of this distinction because the type of industry it is implemented in may have an impact on how the process unfolds. In agreement with authors like Ramamurti (1997) who pointed to the technical and political difficulties of rail, Expert 3 argued that rail is very capital intensive unlike building a school or a hospital. While rail stations can be compared to the school and hospital buildings, this is not applicable to inputs such as OHTE (overhead traction equipment), tracks, rolling stock, etc. Therefore, as supported by Figure 2-3, this means that rail privatisation would be ideally located where there is less competition and less risk to the operator. The advantage of this could be that the operator would be guaranteed income. The same reason could be a disadvantage because the operator might not have the incentive to work hard, as argued in the ownership/property rights theory.

As to why governments choose to privatise, the experts' views again aligned with those of the findings in this research. In agreement with the study that was carried out by Graham (2011) to assess the rationale behind privatisation, all the experts stated that the reason why governments should privatise is to generate capital, as well as to improve efficiency, effectiveness, and quality of the provided service and efficiency. This view generally shows a focus on the customer and not so much the private owner and their need to make profit.

The idea of privatisation as a means to an end seemed to be an overarching theme among all the experts. In looking at the case studies, the end was for the government to spend less but at the same time improve rail's service levels, which was the case for the UK (Gourvish, 2002; Modubu, 2003; Parker, 2012). The same was true for Argentina and Kenya. For Gautrain, GPG wanted to introduce a rapid rail link, which would help ease the congestion on the N1 national highway and at the same time contribute to the economy of Gauteng (GMA, 2014) and demonstrate that PT could be envisaged as a viable alternative to the private car. Gautrain's envisaged contribution to the economy happened to some degree. Expert 6 mentioned that some Gautrain stations have seen enormous investment around them. This expert estimated that 60% of all commercial development in the whole country over the 5 years from 2012 to 2017 were built within 2km of a Gautrain station, something which is not documented as yet. This was confirmed by Mr Jack van der Merwe in his presentation at the 6th CSIR Conference (6th CSIR Conference, 2017).

Most of the experts, however, emphasised the need for sustainability in whatever decision that government takes. According to the experts, government must consider what South Africa wanted to achieve and the best means to get the country there sustainably. Expert 1 emphasised that it is not about privatisation or state ownership, and it should not be about what other people did somewhere else because we might end up adopting the wrong tools. "You can get there, and it can be very disruptive". The cases of the UK, Kenya and Argentina do bear evidence to this statement, with privatisation having resulted in fatal train accidents, rent-seeking and increased costs for the rail users. Conversely, a disruption to the status quo could also be positive as it might be the catalyst needed to bring about change.

6.3 Political Context, Public Governance and Institutions

6.3.1 Government Institutions and Four-war Partnership

The case studies have shown that the performance of a privatisation project partly depends on the political and socio-economic context, and government institutions found in a country. This is in line with how the experts interviewed

answered the question about the factors leading to the successes of privatisation in the rail sector. On political and socio-economic issues, 6 out of 9 experts mentioned political support as one of the main factors leading to the success of a privatisation project. This means the political leadership must demonstrate commitment and ability and willingness to contribute the resources needed (Expert 4). In Kenya, such a commitment was shown by an establishment of the Parastatal Reform Programme Committee (PRPC), chaired by the Vice President and Minister for Finance.

The cases of Kenya and Argentina also showed the importance of mature institutions, not only in putting up privatisation projects, but also in protecting the integrity of the processes. Chukumwa et al. (2016) and Das Nair and Roberts (2017), attest to this by stating that privatisation has been part of a comprehensive change in regime, institution building, and reorientation of the economy towards the market, like it was the case in the UK, Kenya and Argentina. However, where there has been limited oversight from other branches of government, corrupt practices associated with privatisation have been reported. The corruption that beset the privatisation processes in Kenya and Argentina - from bidding to oversight - might explain the demise of the projects, despite the large amounts of money that were invested by the lending institutions. For Expert 9, institutional maturity is present in South Africa as evidenced by the several PPP projects such as the Gautrain:

> "The issue is more around suburban rail, which requires great political support because of the funding and guarantees that will be required from government by anybody who comes here".

Performance is enhanced by governance context and the strength of state institutions in the country. The policy framework on the relationship contract, as well as the regulation set up, should be very clear from the beginning. There might be a need for a regulatory body responsible for monitoring the performance of the partnership (Expert 6). In return, this would augur well for accountability and transparency, which is one of the most important ingredients for a successful privatisation project (Expert 2, Expert 4, Expert 5). According to Expert 8, monitoring of performance would lead to minimisation

of political interference, which, Chapter 4 has shown, was one of the contributing factors to the collapse of concessions in Kenya and Argentina. Such an arrangement, therefore, closes the principal-agent gap. In the UK case, this was a result of mature government institutions, as it was also expressed by Expert 7. Privatisation may therefore not completely eliminate political interference in former SOEs. However, the head of the school of governance at the University of the Witwatersrand, Mr. Qobo, proposed setting up an independent holding structure “led by private professionals, with government having representation” (Mail & Guardian, 2022).

Nonetheless, the interviews also suggested that such an arrangement may depend on what may be termed a three-way relationship, amongst (1) the government, (2) private partner, and (3) the public including property developers for value capture (Expert 6; Expert 7). As such, it is important to think about how the partnership can maximise revenue and - directly or indirectly - boost economic development. The three-way relationship is also important because, as mentioned by Expert 3, a lot of projects have been stopped in the South African market because stakeholders were not consulted. For Gautrain, although not supportive of the project at first mainly because of issues pertaining to property expropriation, the public came to support the project because of the spinoffs that came from building the Gautrain, i.e. properties along the corridor gained value and easy access to the system. However, support for other systems may be a challenge, as was the case with BRT in some parts of Johannesburg. Some of the BRT corridors had to be rerouted as a result (Polity, 2015).

All the experts stated that the Gautrain was a partnership between government, the private sector and the public with government leading and giving the necessary support. Expert 5 gave an example of political support by using the BRT system as a reference. According to this expert, some people were not happy during the initial stages of the BRT in the country. It was a new concept and some stakeholders like the taxi industry were not happy at the time. However, with political support, the local authorities managed to get some buy-in from the leadership of the taxi industry, which

helped with the planning and implementation process (albeit to a limited long-term success).

For Expert 3 and the two rail users, a genuine four-way relationship would also involve in-depth participation of the public, including communities and civil organisations – particularly labour unions. This will also serve to build trust and manage expectations from various stakeholders (Expert 1). Indeed, all the experts stated that one of the main challenges to privatisation was the high trade union culture in the South African railway sector. This is a challenge stated in the public choice theory, and it had an impact on the unfolding of the privatisation processes in Argentina and Kenya. The worst criticism around privatisation in South Africa came from labour where it is normally considered that there will be job losses (Expert 9). This would have an impact on the government's role of social responsibility (Expert 8). According to Expert 8, government's biggest mandate is its social responsibility and must thus protect jobs. Job losses from privatisation were seen particularly in the cases of Kenya and Argentina, supporting the observation by the property rights theory that private companies tend to run services with reduced staff because of the need to be efficient and generate more profit. The solution would therefore be how the government integrates the current workforce into the new system (Expert 4) through training and reskilling (Expert 3; Expert 4; Expert 7; Expert 8). As Expert 7 put it:

> "I do not see the loss of employment if privatisation were to be implemented. The need to rehabilitate and maintain the rail infrastructure will generate all types of employment, thus opportunities lie ahead in mass employment."

The UK, Argentina and Kenya case studies did not consider training and reskilling. However, the Gautrain case study (GMA, 2014) clearly indicates that training was done as part of the project and that new job opportunities were created both in the construction phase and the operations phase.

All the experts agreed that equity issues must be considered in privatising rail, given South Africa's history of discrimination. For 8 out of the 9 experts, the focus was on access and affordability, which aligned with South Africa's

development goals for PT. Expert 9 stated that, generally, for cities that have effective rail systems as a backbone the household expenditure is a lot lower than systems where you rely on cars or road-based modes of transport. In some of those cities, household income expenditure of approximately 10% is attributed to transport. In South Africa, household transport expenditure is sitting at 30%, as confirmed by the Stats SA (2020). The expert might have misquoted the statistics in the NHTS (2020), which indicate that travel costs (at 30%) were a bigger influence than travel time in choosing which mode to use. Household expenditure on transport was sitting at over 20% in 2015 when the last Income and Expenditure Survey was done (StatsSA, 2022).

With rail being unavailable because of the vandalism to the network and other problems documented in Chapter 2, Expert 9 stated that people would pay as high as 50% of their household income for transport because they would have to resort to other, much expensive PT modes. This shows how important a well-functioning passenger rail system is, as stated in Chapter 2. The two rail users also focused on access and affordability. The concern around these issues shows that passenger rail in the country serves a captive market, which is largely the case in developing countries as shown by the Kenya and Argentina case studies. A captive market means that users are very price sensitive.

Expert 4 and Expert 9 raised the need for balance. According to these experts, a developmental country needs to look at the balance between equity and efficiency. The main objective is to ensure that the country has got a fully functional rail system because that itself will ensure that the majority of the population have mobility and access.

6.3.2 Policy as an Enabler of Privatisation

To this effect, the case studies show the importance of policy in driving the implementation of privatisation projects. In the UK, the government published its White Paper outlining proposals for privatising British Rail (Preston, 2008; Wellings, 2014) while The Railways Act of 1993 provided the legal framework

for its privatisation (Competition and Markets Authority, 2015). For Argentina, the privatisation process was initiated through State Reform and Public Enterprise Restructuring Law of 1989, and several agencies were created to regulate and monitor the activities of private concessionaires (Menckhoff and Zegras, 1999; Műller and Aragonés, 2012). The Kenya Railways (Amendment) Act of 2005 made it possible for the country to enter into concession agreements. The high-level Reform Programme Committee provided political backing for rail privatisation (Njeremani, 2003; Malago and Jonyo, 2015).

All the experts agreed that policy certainty and robustness is critical for the implementation of any PT reform programme. Although all the experts agreed that South Africa has sound PT policies, the most relevant one being the White Paper on National Rail (DoT, 2022), for Experts 3,4, and 5 the lack of vision for PT was a concern. “Is it foreseen that we regulate freight rail only or also passenger rail? Practicality needs to be clarified” (Expert 4) in terms of guidelines (Expert 3; Expert 9).

Policy should also make it clear where government wants to introduce the private sector and how it sees its role (Expert 4; Expert 7). According to Expert 4, this is not explicit in the rail policy. Added to this, there should also be clarity on who will do the oversight/regulation (Expert 3). Will a regulator be appointed like in the case studies, or will the contracting authority regulate the partnership? The case studies do not give a directive about which option is the best strategy to adopt, but the principal-agent theory suggests a need for a regulator to monitor the activities of the private partner.

Expert 6 and Expert 7 stated that another policy vacuum is around value capture. According to Expert 6, the Gauteng Transport Infrastructure Act (GTIA), for instance, is completely narrowly focused on the creation of transport infrastructure. It does not mention ToDs or value capture issues. Expert 6 emphasised that it would be very good to have a strong policy that enabled value capture. This is in agreement with Expert 1 and Expert 5 who earlier said that such projects should be used as instruments of change. Value

capture promotes economic spin-offs, which is very important in South Africa's high unemployment rate.

The last concern raised by two out of the nine experts was the general paucity in policy implementation in South Africa, regardless of how good they were (Expert 1; Expert 3). Expert 1 gave the 'user pays' principle as an example, which government is seemingly not keen to enforce. This could be because of challenges highlighted by the public choice theory, where government decision-making is surrounded by a constellation of interests forming specialised coalitions interested in government enterprise operations (Nayar, 1994 quoted in Majumdar and Ahuja, 1997). An alternative view is that policies such as the 'user pays' might be a challenge for the government to implement because of individuals' ability (or inability) to pay for services (Mokonyama, 2012), hence why some are captive to PRASA's service. In such a case, passenger rail privatisation may not be easy for the South African government to implement because of questions of what is affordable and what is equitable to the majority of the transport users, as highlighted by Expert 7. Expert 1 argued that this makes for an uncertain environment, where government promises things in both the short-term and the long-term, but nothing gets done. This "is akin to a constitutional crisis because no one knows where the country is going".

Overall, in line with the findings in the case studies, the experts discussed policy at three levels, namely (1) the existence of an enabling policy and (2) the implementation of such policy. At the heart of these policies are (3) the institutions that drive them. The case studies showed that despite the countries having enabling policies, institutional capacity was a critical component in determining the effectiveness of these policies. If the institutions are weak, policy will not be implemented, or the institutions will be beset by corruption or the cutting of corners. The UK itself was not totally immune to 'corrupt' practices. For instance, the reduction in maintenance by the TOCs to make more profits, which also suggest that the government did not do its role of oversight diligently.

Another institutional weakness in South Africa identified by most of the experts is law enforcement, as also identified as a constraint in Chapter 5. The theft and vandalism that has taken place on the rail infrastructure, among other problems, brought the service to a standstill. This is partly underpinned by socio-economic issues like unemployment, which were seen in Argentina. As already stated, part of the solution is to be found in multi-stakeholders working together, according to seven of the nine experts. In 2020, PRASA launched an Integrated Security Plan that incorporates various stakeholders (DoT, 2020). Railways Africa (2022) reported that the plan was bearing fruit as some of the crime incidences had gone down.

6.4 The Nature of Privatisation

6.4.1 Ownership and Operational Structure

The UK franchised its passenger rail system; Argentina, Kenya and Gautrain concessioned theirs. As shown in Chapter 5, both the franchising and the concessioning have advantages and disadvantages and the decision on which model to go with depends on the objectives of the government or the contracting party. Accordingly, rail privatisation can take “many configurations” as all the experts argued at the beginning of this chapter, depending on the objectives of the contracting party and the local context. According to Expert 2, the strategic building blocks in privatisation projects deal with: (1) assets, (2) liabilities, (3) work forces, (4) management, and (5) strategic focus:

> “[With] regards [to] assets, restructuring begins with the division and reassignment, rehabilitation, abandonment, and/or replacement of physical assets. Where liabilities are concerned, restructuring includes the development of a balance sheet where none existed before, as well as the clarification and formalization of liabilities, and the re-engineering of outstanding debt to create a viable capital structure. Regarding the work force, restructuring deals with fundamental labour issues, including the number of employees, the mix of skills that the enterprise requires, and the conditions for employee severance or early retirement. With regard to management, restructuring addresses the values, skills, and capabilities of the management team and the possible need for change. Finally, in the area of strategic focus, restructuring relates to the definition of the railway’s business, the source of its competitive advantage, and the redirection of its competencies.” (Expert 2)

Depending on the results of the assessment done above, the government can remain the owner of the railways and have the operations run by a private company (Expert 4). This was the model implemented in both Argentina and Kenya, and the Gautrain operates on a similar model. The franchise model adopted in the UK privatised both the operations and the infrastructure but initially resulted in reduced maintenance (to save costs) and deterioration of quality, resulting in some accidents (Expert 2).

However, as seen in Chapter 3, the cases of Kenya and Argentina show that the reduction in maintenance by the private operators can occur even when infrastructure is not privatised. The important thing is about how 1) assets are utilised and maintained or how operations are managed, and 2) whether the service is affordable (Expert 4). The expert gave an example of Canada and China. In Canada, rail is fully privatised and is operating optimally. This is the case with China even though the service is fully nationalised. The expert's observations confirm those of authors like Abbott and Cohen (2017), who argue that in passenger rail, the demand is on average higher in countries that have maintained the holding model. The difference in performance between the vertically integrated model and the vertically separated model, however, remains more or less stable. In Japan, operations and infrastructure are fully privatised and are run by various private companies (Expert 7). According to this expert, these companies receive no subsidies from government but are able to generate revenue, mostly from their commercial interests at the stations and along rail corridors. This suggests the importance of innovation in driving rail demand and looking beyond the farebox to generate revenue.

Expert 1 gave an example of light rail operations in Ethiopia, in which a private company runs the operations, and the infrastructure is in state hands. The expert indicated that there was a problem with the partnership because the project was sold as that which would solve Ethiopia's PT problems. Although there was huge demand for the service, the biggest problem was the expectation that the partnership with a Chinese company would address large-scale network problems. Kenya's Rift Valley Railways concession quickly ran into problems because of this same problem of unreasonable expectation for

the private partner was expected to spend huge sums of money to fix the network, thus affecting their profits.

The interviews revealed that there was an attempt at concessioning in South Africa in the early 2000s (Expert 9). The approach taken would have been either the UK model or the Argentine model. In the model similar to that of Argentina, the private operators would run the service using Metrorail's/PRASA's trains. Like in the UK, the second model involved the private operators using their own trains. According to Expert 9, the plan failed because of the bad condition of the infrastructure, which would affect performance, and the contracting period. In contrast, Expert 3 said that this project failed because of lack of political will.

Overall, most the experts indicated that ultimately, it does not matter what type of privatisation model is selected, so long as qualified companies are chosen to achieve government objectives and ensure that value is created for the rail users. The two rail users also shared this view. The experts also emphasised that objectives or plans must be followed with the necessary funding. It is also important that the government supports the said companies. All this is borne by the findings in the case studies.

6.4.2 Contract Design and Risk Allocation

The case studies discussed above show that risk allocation is one aspect in passenger rail privatisation that is likely to cause the most conflict. In Kenya, for example, risk was mostly allocated to the private sector because of the dilapidated state of the infrastructure. This resulted in the rapid decline of the partnership between the government and the private sector. The researcher therefore sought to get the experts' views on how risk can be allocated for efficient and effective functioning of privatisation arrangement.

Indeed, the majority of the experts who responded to this question also saw the structure of the contract as one of the most important factors in the success or failure of the privatisation project. Expert 2 elaborated that it must be clear

in the structure of the agreement what contribution the private sector would bring in the project, be it financial investment or other capacities. The risk inherent in investing in the project would serve as an incentive for the private partner to perform optimally (Expert 3). This should be balanced in a way that it does not disadvantage the rail user (Expert 6). This must also be the case in terms of the responsibilities with regards to the infrastructure and assets (Expert 6).

It is important to note that even with the experts, there seems not be consensus on how risk should be allocated in the design of the contract, with Expert 1 saying that private sector should carry most of the risk as the private sector would be incentivised to perform - “but where they are guaranteed income, they tended to perform less than expected”. This was the case in Kenya, Argentina and the UK where income in terms of subsidies was guaranteed. For Expert 1, the point of such partnerships is to transfer risk to the private sector and not to have the private sector replace the SOE, especially for services like PT, as this would not be sustainable in the long term.

Expert 8, on the other hand, argued that the public sector should carry most of the risk so that government does not lose control of the service. For Expert 4, what is important is that the partners agree on how risk (especially demand risk) must be managed during the operational stage, as it was the case with Gautrain, where the government agreed to shoulder patronage guarantees regardless of the economic conditions of the country. However, Expert 3 and Expert 6 stated that the COVID-19 pandemic, which no one anticipated, has changed the risk equation, which no one anticipated. Expert 6 added that because of this, the private sector is highly unlikely to take the demand risk anymore, as confirmed by authors such as Casady and Baxter (2020). This suggests that risk allocation is a matter of negotiation and compromise, depending on the objectives of each partner – as emphasised by all the experts. It would be unfortunate if one partner takes on less risk or more risk than they should because of the power dynamics between the contracting partners.

According to all the experts, part of identifying and managing risk in privatisation projects is the planning process which takes place before the decision about privatising is taken. It is at this stage that risk should be fully understood, and the appropriate risk allocation be agreed on. One of the most important factors in the success of the Gautrain is that there was thorough planning starting with benchmark visits, involving important stakeholders such as PRASA, communities, and so forth (Expert 7; Expert 8). Additionally, the feasibility study looked at the viability of the Gautrain project with regards to the costs, technical capabilities and benefits the stakeholders such as business, government and rail users. In particular, the latter are mainly concerned about the affordability of the service.

Expert 5 called for “quality private sector participation”. This speaks to the design of the contract itself. For example, the Gautrain contract focuses on service levels – such as punctuality, cleanliness, reliability, safety and so forth and not unnecessarily fancy frills like provision of Wi-Fi (Expert 6). Expert 6 also raised the need for regular maintenance to be worked into the contract. The lack of maintenance was an issue in the UK, Kenya and Argentina hence the train accidents that occurred. Added to this, Gautrain prioritises safety and security as these pose a threat to the viability of projects - as argued in Chapter 5 - just like they did in the case of Argentina. Therefore, part of Gautrain’s strategy has been the protection of its assets, using the latest technology to do so. Even so, the system does also fall prey to crime to some degree, just like the PRASA system. For example, in Salvokop (one area the Gautrain passes through) the company has had to put three fences (Expert 6)! The contracting authority can thus link good security to performance (Expert 4; Expert 6).

Most of the experts indicated that contracts for rail privatisation projects should be used as tools for change and value creation. An example of how this can be done would be to compel the private operator to provide facilities for equity and economic empowerment at stations and be compelled to train designated groups (Expert 8). This is already done to some extent at PRASA stations, but a more formal or co-ordinated approach would be more beneficial.

Overall, the experts all agreed that the design of the contract is about what the government wants to achieve through the privatisation project. Does the government want to generate revenue or provide transport to the people, more especially the vulnerable groups in society (Expert 3; Expert 8)? Government's objectives must therefore be clear from the start, and it must put in the groundwork in terms of feasibility to determine what is possible and reasonable and what is not. Gautrain has offered valuable lessons in this regard, which might explain why the system is still thriving more than 10 years after its establishment.

In terms of how flexible the contract should be, Expert 1 stated that it should be flexible enough to allow for innovation on the part of the private operator. In the UK case, authors such as Jupe (2010), Parker (2013) and Preston (2016) argued that inflexible contracts, as well as risk allocation, resulted in private operators having limited ability, and muted incentives, to respond to customer preferences. In contrast, Expert 6 saw the inflexibility of contracts in a positive light. According to this expert, the Gautrain's concession agreement was not flexible at all because none of the parties involved wanted to create a "whole element of unknowns", besides the "narrowly defined force majeure". The expert added that in hindsight, the government gained from this rigid contract because if this was not the case, they would have paid more in terms of the patronage guarantee stemming from challenges like the COVID-19 lockdown where people were not allowed to use PT.

6.5 PRASA'S Privatisation Call: What Could Be Done?

6.5.1 Privatisation Approach for Passenger Rail in South Africa

The experts and the rail users were questioned on the manner in which South Africa could implement passenger rail privatisation. The findings in the cases of Kenya and Argentina suggest that the economic and political climates in the two countries were not conducive to privatisation. Both countries had huge debts, and Argentina was especially beset by crime and poverty on top of the political instability. In line with the case study findings, 8 of the experts and both the rail users stated that for privatisation to succeed, there should be

economic and political stability, and the state of infrastructure be at the acceptable level. The state of the country's rail infrastructure was very poor, which means either the private companies taking on the risk of fixing it or the government funding it.

As stated in Chapter 5, an opportunity for South Africa was in the fact that government was already investing money to upgrade the rail infrastructure through the modernisation programme. However, this programme was set back by the vandalism that took place during the COVID-19 lockdown as well as the myriad of problems facing PRASA, highlighted in Chapter 2. As such, Expert 3 and Expert 4 called for a "cultural change" on both the side of the government and the communities. The issue of communities and their role in assisting the viability of services was brought up a number of times, with most of the experts and the two rail users stating that communities must be part of the solution going forward, whether the current status of rail provision remains, or rail is privatised. However, just as contracts need to be specified, so too does the nature and extent of the public participation. Failing this, public participation might be merely a checklist exercise, as stated by one of the rail users.

The issue of political buy-in was prominent in response to this question, as well as other questions asked to the experts and the rail users. As shown in the Gautrain case study, part of the reason this rail system was able to take off and succeed was because of political support and buy-in. To this effect, all experts mentioned political will as an important ingredient in facilitating funders and investors' confidence to inject their own funds in the projects. Political support was also seen as being important because of the funding and guarantees that may be required from government by any local or international private company.

Currently, government's commitment to rail privatisation was unclear (Expert 4), save what is contained in policy documents such as the White Paper on National Rail Policy (DoT, 2022) and the White Paper on National Transport Policy (DoT, 2021) summarised in Chapter 1. Added to this, there is already a

negative perception of privatisation in the country and the government must work to change these perceptions if it is to go ahead with privatising rail (Expert 4; Expert 9). Kenya and Argentina show that the governments worked to change people's perceptions about privatisation and to gain their support.

Expert 1 was the only expert who raised the need for access to capital. The expert sees privatisation as an opportunity for small companies and previously disadvantaged people to participate in the industry. However, the case studies show that participation in the industry comes at a huge cost and mostly big companies have the capacity to participate. Even so, the profits made are not enough to offset the loans taken, thus the need for guarantees from the government. The government would thus need to make a deliberate effort to ensure that small companies are included in the process.

In terms of how privatisation can be approached, 8 out of the 9 experts advised the role players in the project to be cautious. In contrast to the case studies where rail privatisation was implemented in one phase, the experts called for a phase approach – "no shotgun approach" [Expert 6]. In fact, the UK case study shows that franchising the rail system was one of the reasons given to test if it can be fully privatised. Three decades after the implementation of the system, this has not happened, once again pointing to the complex nature of rail. Therefore, according to the 8 experts, before privatising the whole network, the South African government can test the concept on selected corridors. Expert 6 and Expert 9, however, also raised a warning with this approach, which is that the financially viable rail corridors may be cherry-picked by the private companies and ask to be subsidised for the rest. This was the case in Argentina, where the well-performing corridors were taken over by private companies while the poorly performing regional rail corridors were eventually rationalised What can we learn from the Gautrain?

6.5.2 Lessons from the Gautrain

The intention with the questions on Gautrain, was to uncover more lessons in addition to the case study. This is because Gautrain is more relevant to South

Africa and it is a system that the experts interviewed, and the rail users, would be more familiar with.

One area in which the Gautrain system has shone is that of value capture (Expert 6). Most of the experts agreed that there are opportunities to be explored, although South Africa does not have the population densities found in Asian countries such as Japan and Hong Kong, which allow for the PT system to be integrated with urban development, thus generating demand. The demand generated is not only for the rail service, but for the retail/commercial products along the rail corridors and at the stations (Expert 7). According to Expert 9, however, the best South Africa (or PRASA) could do is to reduce the subsidy bill by maximising revenue from its property portfolio. In contrast, Expert 1 believed that South Africa is not doing enough in this area. The expert stated that operations can be profitable if you allow for multiple revenue streams. “PRASA’s ability to generate revenue from its property is grossly under-rated, even with Gautrain”.

Most of the experts mentioned the role of protection of infrastructure and regular maintenance as lessons to be taken from Gautrain. The experts said that Gautrain is a closed system, hence safety and security are easier to manage than in an open system like Metrorail (PRASA). In fact, safety and security are prioritised in the Gautrain system, as they arguably could be in certain sections of the Metrorail system. Expert 3 and Expert 4 added that as in the Gautrain, government would need to look at the protection of assets in those corridors they would want the private sector to be involved.

Another valuable lesson came from Expert 1 and Expert 5. According to these experts, South Africa must look beyond the cost of projects when projects are priced. What the Gautrain has shown is that the country can derive much more benefits that were not fully accounted for in the costing of a project. As such, going forward, the full benefits of a project must be investigated to be able to compare it with alternatives. The Gautrain case study shows that the GMA has done this through their socio-economic development, a fourth cornerstone over and above the normal technical, financial and legal perspectives. This

view was corroborated by Expert 4, Expert 6 and Expert 9. Expert 6 added that the Gautrain project was a huge opportunity with a lot of risk. If the country had just carried on talking about it, analysing it to the “nth degree” and trying to get it 100% right, the project would not have happened. The Gautrain has demonstrated that if similar big investments are done correctly, they can have massive socio-economic impact.

However, Expert 1 and Expert 8 were concerned that the government’s contract with Bombela Consortium transfers most risk to the state. Expert 1 added that it is like the country has nationalised the project and brought in the private sector to run it. “If this is the case, why can’t you take the fee that you pay the concessionaire and bring it to government?” The ownership/property rights theory perhaps provides an answer. As seen in Chapter 2, the theory argues that the absence of a market for shares removes sanctions for bad performance and incentives to managers in the public sector. Private firms, on the other hand, get punished for bad performance in terms of profits generated. It, therefore, makes sense that government would go with private companies because of their perceived efficiency, although this was found to be questionable given the mixed results that privatisation projects have had, and supported by authors like Tan (2011). Thus, it is up to the government to ensure that the private companies brought into privatisation projects are capable and are affordable, otherwise there would be no justification of having the private sector at Gautrain’s price tag (Expert 1; Expert 4; Expert 5; Expert 8).

All the experts agreed that concessions can be good, but most said government must do an honest assessment of whether the country got a return from the system. Expert 4 and Expert 7 indicated that there are no right or wrong answers, but (the point raised again) upfront government needs to be sure about what the country wants when bringing in the private sector. “You want competition? You want to outsource some functions, etc”?

According to the experts and the rail users, another great lesson from the Gautrain is the customer-focus orientation evidenced by its service offering:

clean and reliable trains that are always on time and if they are not, this is communicated to the customer in time. For passenger rail to succeed, the service provided must be attractive and competitive to the other modes (Expert 9). This expert mentioned that PRASA's modernisation programme is about getting the service to these levels. Operations also need to be in line, but the service levels are things that we see with Gautrain, down to their ticketing system and ease of accessing information.

The final question posed to the interviewees was whether Gautrain's size made it more manageable and easier to run compared to the size of PRASA/Metrorail (in which case it would be unfair to compare the two systems). Expert 1 and Expert 9 stated that many railway networks around the world - whether privatised or not - are far bigger than Gautrain and PRASA but still manage to maintain their high levels of service. However, according to Expert 3, Expert 7 and Expert 9, it is a reality that PRASA's network is a lot bigger and is open. This makes it much more at risk of theft, vandalism, encroachment, which the Gautrain is not vulnerable to. Although it can be seen as a generalisation, Expert 9 stated that PRASA's network runs through the poorest of communities, making it more vulnerable to some security threats.

Despite all the lessons from Gautrain, it is sometimes seen as a contentious system because of the discontentment about who it serves, as highlighted in the Gautrain case study. This also came out from some of the experts as well as the rail users. It is therefore important that if rail privatisation goes ahead, it must be seen to be legitimate, a process that has the support of citizens.

6.5.3 Are there Potential Benefits to Rail Privatisation?

One of the main questions in this research is whether privatising passenger rail will add value for the customer. Literature purports that privatisation improves quality since private companies generate more profit by improving quality of services. The case studies, however, showed mixed results.

Expert 9 reminded us of the purpose of passenger rail, which is to transport passengers. If this can be provided reliably and the service is always available – typical rail KPAs (Key Performance Areas) – the measurement of these will determine who is best able between government and the private sector to provide the rail service. If the service is provided by the private sector and there is no improvement shown, for instance, then it can be questioned whether there was a need for having gone the privatisation route (Expert 1; Expert 3; Expert 4; Expert 8; Expert 9). What all the experts agreed on was that the way that passengers are treated, and the quality of the service given will have an impact on demand. As seen in Chapter 1, nowhere has this been more evident as with the steep decline in demand of PRASA's rail service in the preceding years. What most of the experts questioned was whether quality of service can only be achieved under privatisation. Both the rail users expressed the same doubt, questioning the idea of the superiority of privatisation.

Affordability of services also came out strongly in both the case studies and in the views expressed by most of the experts as well as the two rail users. Already, the majority of South Africans spent a huge portion of their disposable income on PT (Expert 9; NHTS, 2020). As the case studies show, affordability became contentious a while after privatisation was implemented in the UK and in Argentina, with fares going up and, according to the two rail users, Gautrain is unaffordable to most rail or PT users in South Africa. As such, all the interviewees agreed that the government would still need to subsidise rail even if it were privatised. This view is shared by authors such as Guzman and Oviedo (2018) and Litman (2018), who defined efficiency in terms of how it addressed issues of welfare or equity for designated groups through subsidisation. Expert 5 and Expert 6 recommended a flexible fare structure, with those who can afford to pay for rail services paying and those who cannot afford getting subsidised. The rail users are not the only ones who potentially can benefit from privatisation. Expert 4 said that one of the good things about the Gautrain project is that it has resulted in the building of capacity. The system has built both technical and non-technical skills, which stand to benefit the country regardless of whether passenger rail is privatised or not.

6.6 Summary of findings

The outcome of the interviews mostly corroborated those of the literature review and the case studies. Table 6-1 captures the highlights of the interviews.

	Convergence	Divergence
General		
Definition of passenger rail privatisation	Restructuring across the whole business including assets, liabilities, work forces, management and strategic focus. Collaborative relationship between government, the private sector and communities/stakeholders that creates value for all. It can take multiple configurations, from wholesale privatisation, to outsourcing specific functions in the supply chain of passenger rail to the running of operations.	PPP approach. This view does not take into consideration that in some countries, e.g. Japan, there is full privatisation. The need to make rail profitable rather than focus on welfare issues.
The purpose of passenger rail privatisation	Depends on what government wants to achieve, i.e. its vision and objectives, which include efficiency. Should be people centred or be of value to society. It should not be because everybody else (other countries) is doing it. Managers in the public sector are not inherently ineffective compared to those in the private sector. Their focus is just different.	To assign the rail function to the local authority to make it more efficient. This view assumes that national government is not effective in running passenger rail, but that local government is. It is for profit, as reflected by the higher fares charged by the private sector.
Factors that influence the success of passenger rail privatisation	Political support and a champion of the process. Preparation process, which includes feasibility studies.	Some of the experts believed that the private sector should carry the most risk. This gives them an incentive to perform. The changing social, economic, and political landscape should be considered in allocating risk to the private sector.

	Management of expectations, as defined by clear vision and objectives. Risk allocated to the party that is best suited to carry it. Trust between the contracting authority and the private party. Clear and supportive policies that get enforced. The design of the contract and how it should be a tool for change. PT and quality elements like integration, reliability, punctuality, accessibility, etc. are also important in passenger rail.	The design of the contract, i.e. whether it should be strict to allow for predictability or flexible to allow for some room for innovation.
Lessons from Gautrain and other countries	Design of the contract between the government and the private partner. Groundwork/feasibility studies must determine whether to go ahead with privatisation or not. Innovations around security. A focus on the customer. Land use and PT integration in countries like Japan.	There was no divergence here because the experts identified the same lessons.

The Local Context		
Equity	The success of privatisation is not automatic. The context of a country plays a very important role in shaping how the process should unfold. Historical issues must be considered. Should be a middle ground where pro-poor is mixed with pro-growth. Labour issues. The experts were not very concerned about potential job losses should privatisation go ahead because of jobs that can be created in the privatisation process.	There were no diverging views under this section. This was not surprising to the researcher because South Africa's developmental goals and its challenges are clear.
Policy	Policy certainty and the implementation of policy, are critical to the success of privatisation efforts. Therefore, the White Paper on Rail is a step in the right direction. Gaps in the Rail Policy (at the time of the interviews) that need to be addressed, e.g. funding. Vision: the government needs to be explicit in its position on rail privatisation.	
South Africa's readiness for passenger rail privatisation	The country/government must proceed with caution because of the technical and developmental issues that need to be addressed. Current rail system (both infrastructure and operations) must be stabilised. Pockets of rail corridors where privatisation can be tested. Issues of crime and corruption might be a deterrent to private companies	Differences in opinion on where in passenger rail's value chain can the private sector be brought in. Suggestion that the private sector's role be on repairing and stabilising the railway system (modernisation) rather than on operations. One suggestion on long distance high-speed rail.

Innovation		
	Important because of scarcity of funding and to be able to compete with other transport modes. Value capture pertaining to property along rail corridors. Local economic development (LED). The use of new technologies to achieve efficiencies and to cut costs. The contract used as a tool for change.	

Table 6-1: Summary of the interviews

As seen from the table above, there was mostly agreement amongst the interviewees about what privatisation is, the ingredients for success in privatisation projects. These include:

- Ownership and operational structure
- Political context, public governance and institutions
- Contract design and the allocation of risk.

There was also general agreement about the potential benefits of passenger rail privatisation in South Africa. Differences in opinion centred around the weight or the importance of some elements (e.g. risk and its allocation) and the suspicion regarding the motives of the private sector.

6.7 Synthesis of the interviews, case studies and literature

Overall, the overarching findings confirm Sanders et al. (2012)'s view that although passenger rail is no panacea, within the appropriate framework it can add value. As shown in the research, the appropriate framework depends on commercial and non-commercial elements such as local context and contract design. Table 6-2 below synthesises the findings from the three data sources in the research.

	Literature	Case studies	Interviews
The privatisation process for passenger rail			
Ownership structure - multiple configurations; choice of model depends on government's objectives.	✓	✓	✓
Competition rather than full divestiture.	✓	✓	✓
Contract design according to the goals of each party.	✓	✓	✓
Risk sharing allocation according to who is best to carry the risk.	✓	✓	✓
Feasibility studies before embarking on privatisation project.	✓	✓	✓
Clear vision and objectives of why government wants to privatise.	✓	✓	✓
Monitoring and evaluation of the private partner: principal/agent relationship.	✓	✓	✓
Developmental considerations			
Process must be people centred.	✓		✓
Middle ground where pro-poor is mixed with pro-growth.			✓
Targeted subsidies.	✓		✓
Safety and security.			✓
Labour issues must be considered.	✓	✓	✓
Institutional and governance considerations			
Policy certainty.		✓	✓
Resources – funding and skills.		✓	✓
Strong institutions.	✓	✓	✓
Political support.		✓	✓
Additional ideas			
A three-way relationship among government, private partner, and local communities.			✓
Land value capture to help with revenue generation.			✓
The modernisation programme.			✓

Table 6-2: Synthesis of the literature, case studies, and interviews

Table 6-2 shows that literature on privatisation is more focused on the unfolding of the process and how it results in efficiency. The gaps under the developmental and institutional aspects may be because, for instance, the maturity of institutions is taken as a given by those writers whose focus is on privatisation in the developed world. Alternatively, those gaps in literature could be because privatisation was mostly a product of Economic Science whose focus was more on efficiency and productivity, and not necessarily people centred. Literature shows that for some industries, this focus is not a problem but for PT, particularly passenger rail, it is crucial. This was borne out in the case studies where fare increases affected passengers' satisfaction with the service regardless of whether it had improved or not post-privatisation.

The experts interviewed also confirmed the importance of developmental aspects and how these may affect privatisation efforts in a country like South Africa. These were said to be red flags associated with privatisation (Table 5-2). Hence, there was an emphasis by the experts and the rail users on policy, safety and security, job creation, affordability, consultation, and equity, which are very important issues in the country (National Planning Commission, 2013), and continue to be a guide towards better living conditions for the citizens (Sibanyoni, 2021). These were also important issues in Kenya and Argentina but were not taken into full consideration in their rail privatisation processes.

The findings in Table 6-2 are used to formulate recommendations in the final chapter.

6.8 Conclusion

The results of the interviews confirmed the findings that privatisation is not a panacea to fix a deteriorating passenger rail system. Of the 9 experts interviewed, 8 expressed this view. The 1 expert felt that because of the current operational and institutional state of rail, both institutionally and operationally, privatisation could well be the panacea in South Africa. The expert based this on the success of international rail systems, which were

privatised and seem to be doing well. Like authors such as Mohan (2001), Dorfman and Harel (2015) and the Global Centre for Public Service Excellence (2015), Expert 1, Expert 3, Expert 4, Expert 9 and the two rail users argued that empirical evidence on privatisation did not provide unqualified support for the belief that privatisation automatically leads to outcomes superior to those under public ownership.

It is important to note, however, that none of the experts - including the 2 rail users - had any substantive/considerable objection towards rail privatisation. Some of the experts said that rail privatisation is an opportunity with a lot of risk. As such, the experts' approach to the questions posed to them was to always look for balance. In agreement with the findings following from literature review and case studies, the experts stated that rail privatisation has advantages and disadvantages. For example, in talking about labour issues and how privatisation might bring about job losses as seen in the cases of the UK, Kenya and Argentina, most of the experts expressed the view that done correctly, privatisation could bring about new job opportunities. Added to this, most of the experts conceded that considering South Africa's history, job retainment was very important but that this must be balanced with government's ability to run an effective rail system. This in itself will have a knock-on effect of the country's majority getting access to job opportunities.

There was a persistent thread of 'affordability, access and mobility' throughout the interviews from both the experts and the rail users. This could have been brought about by how the questions were posed to the respondents or an indication of the realities of South Africa coming to the surface. The latter is a more likely reason considering the poor socio-economic conditions in the country and the fact that the South African passenger rail serves a captive market. As such, some experts wondered whether the current political, social and economic instability in South Africa in the early 2021s lent itself to privatisation. This is because, again in support of the findings of the research, there are conditions that are needed in order for passenger rail to potentially succeed and add value for the rail user. These include socio-economic context

as defined in this research, the design of the privatisation contract and risk allocation, as well as the operating model implemented.

Regarding socio-economic issues, it is concluded that privatisation needs a stable political climate with mature institutions where policy is implemented. The case studies give some credence to this conclusion, even though the UK, which seems to fulfil these conditions, continues to have challenges with its privatised rail system. The case of Gautrain was used extensively by all the experts to demonstrate the importance of doing the correct groundwork before the decision to privatise is taken. After this the contract will determine the relationship between the two parties including how risk is allocated. Some of the experts, nonetheless, added that the process should be a four-way relationship, including the public sector, private sector, interest groups such as property developers and trade unions, as well as ordinary communities.

There was a disagreement amongst the experts about how risk should be allocated, with some of the experts pointing out that the point of such projects was to have the bigger risk transferred to the private companies. Some experts believed this would make government lose control, which is important to retain because of the difference in focus by the contracting parties. In terms of the operational model of a rail privatisation project, the experts stated that this could take multiple configurations, depending on the objectives of the government or the contracting authority and the local context. The important thing is about how 1) assets are utilised and maintained or how operations are managed and 2) whether the service is affordable. Some of the experts pointed to the fact that in some cases the public sector can be more effective when they have the support and the right conditions to implement projects. China was given as an example, where projects get quickly rolled out because the support, policy, and legislation are there to support the rail industry.

The experts conceded that, unlike other industries, rail is complex , thus there were no guarantees that privatisation would succeed even given the ‘right’ conditions. Funding, in particular, is a challenge for rail, making it difficult to invest in the infrastructure, as borne by the case studies in this research. The

most successful rail privatisation projects, therefore, have been those that have some business case around them. Besides Gautrain, these include projects in Asian cities and North American cities.

Overall, the experts advised that one needs to be cautious in how privatisation could be approached in South Africa since it seems that the government wants to move ahead with the process as contained in the new Rail Policy and the Transport Policy. Most called for a phased approach in which certain corridors are piloted for privatisation. This agrees with research cited by Laabsch and Sanner (2012), which suggest that rail reform be carried out sequentially. The results of the pilots would help government decide how to move ahead. The Gautrain is also there to give valuable lessons, such as value capture and contract design, even though it is regarded as elitist by rail (PRASA) users.

The chapter closed by synthesising the views from the experts and the findings from the case studies and the literature. There was mostly agreement amongst the three sources, with some gaps in the literature. The gaps were said to be likely from the focus and interests of writers on the subject.

The next chapter concludes the research and proposes a way forward based on the salient findings.

Chapter 7. Conclusion and Recommendations

South Africa finds itself in a position where there are calls for its railways to be reformed. At a cursory glance, the restructuring plans that were envisaged to transform the railways and bring about the much sought-after change and benefits for the rail user have failed to transform the service. The service quality continues to deteriorate, with the rail user forced to find alternative, albeit more expensive, modes of PT.

Globally, the privatisation of passenger rail has been hailed as a panacea to improve its service quality and other challenges like poor governance and ballooning costs. The position of the South African government is captured in a series of PT policies, the latest being the White Paper on National Transport Policy (DoT, 2021) and the White Paper on National Rail Policy (DoT, 2022). This research thus explored whether privatisation could indeed stop the deterioration of passenger rail and improve the quality of its service. Since privatisation can be a contentious process, as seen by the vociferous opposition of stakeholders such as labour unions in South Africa and elsewhere, the primary aim of the research was, therefore, to explore whether it is a panacea, to understand the value that can be derived for the rail users as well as its feasibility in South Africa. One main question and three sub-questions were therefore asked to guide the research. These were:

1. Is passenger rail privatisation a panacea to its deterioration?
    a. What value can the South African rail user derive from privatisation?
    b. What has been the experiences of Gautrain and other privatised passenger rail systems in international cities?
    c. Is passenger rail privatisation feasible in South Africa?

The general findings of the research were that privatisation was not a panacea to an ailing SOE or a poor quality of rail service. As argued by Gidadhubli and Kumar (1993); Nellis (2005); and Chukwuma et al. (2016) in Chapter 2, where unemployment is high and rising, where recession

persists, where industrial output is on the decline, where inflation remains unabated, where debt servicing proves painful and where standards of living are low and declining, privatisation is not easy to implement. That was particularly true for an economy like South Africa where other services besides passenger rail were failing because of its societal, economic and political complexities. The UK, Kenya and Argentina mirrored South Africa's current economic crisis at the time their rail services were privatised. For Kenya and Argentina, that undermined the governments' capacity to maintain subsidies, and affected the viability of the partnership with the private companies, eventually contributing to their failures. Additionally, the research found that some of the principal challenges to such partnerships relate to the typical need for some form of government guarantee, which reduced private sector efficiency incentives envisaged by theory.

This did not mean that the private sector had no role in South Africa's railways. The findings in the research showed that rail privatisation could bring efficiency as well as other benefits. For the UK, the biggest benefit was the investment brought by the private operators. Argentina and Kenya were also able to attract investment as well as the skills and capacity brought by the private companies. For Gautrain, the private sector brought capital investment, new technology, and business focused management techniques much easier than managers in SOEs whom theory contended were mostly hampered by their welfare focus.

The research found that the benefits of rail privatisation were dependent on a number of commercial and non-commercial conditions. These were:

- New ownership/operational model – the degree to which delivery institutions were to be structured in a business-like or commercial manner, including the option of private sector ownership and the degree to which its monopolistic nature should be broken down and some of its sub-businesses be separated and decentralised. That can take multiple configurations depending on the objectives of the government or contracting authority.

- Risk allocation and contract design - the degree to which risk was shared between the private partner and the public partner, and who carried what risk. Risk identification, allocation and management must form the foundation of that exercise.
- Governance and institutions – the degree to which contract agreements were monitored, and penalties were instituted if targets were not met. That was dependent on the strength and maturity of institutions, where policies were implemented, and laws were enforced.

In terms of the value for the rail user, the findings showed that privatisation must result in a better service at lower prices as desired by the rail users. Kenya failed to do that from the time its railways were privatised. The UK and Argentina were able to increase customer satisfaction and demand for some time after privatisation, but that was short-lived as the customers started complaining about fare increases and other problems in the systems. For Gautrain, customer satisfaction has been consistently high since its implementation, but the service was for a niche market and remained unaffordable to most PT/rail users in South Africa. Although not extensively discussed in the research, that highlighted the need to look at how subsidies were managed and targeted.

The next section details the salient findings of the research per chapter (specifically Chapter 2 to Chapter 6). This is followed by recommendations and future research ideas, which are in turn derived from the main findings.

7.1 The Main Findings

Privatisation brings efficiency and thus responds to the needs of the rail user, so say its proponents. Chapter 2 therefore sought to study the effects of privatisation in general and passenger rail in particular. This was done through the theory of the firm and its variants, namely ownership/property rights theory, the principal-agent theory, and the public choice theory. The theories explained the behaviour and the motives of managers in public companies

compared to those in private companies and how these resulted in the efficiency or non-efficiency of each.

Although the chapter failed to establish a direct link between privatisation and efficiency, it demonstrated that privatisation could have positive benefits in competitive markets like telecommunications and the oil industry. For welfare focused natural monopolies like passenger rail, it is however not sufficient to create the policy and legal conditions for market introduction and exit. Instead, a suitable regulatory framework may be required to introduce some form of controlled competition. This has been mainly through partnerships between the government and private companies, in particular concessions and franchises. The outcomes of these partnerships were found to be dependent on both commercial and non-commercial features, chiefly the socio-economic conditions of a given country, the new ownership/operational structure and the design of the contract and allocation of risk.

Another important finding of Chapter 2 was that privatisation may simply be a result of the regulatory cycle explained by Gwilliam (2008), the pull between privatisation and nationalisation, which is normal in many economies. This was mirrored in the history of the rail industry in the UK, USA and even South Africa. The case studies showed that there has been another turn currently in the regulatory cycle. The more recent government and private partnerships seem to be shifting from a focus on efficiency gains to the need to attract investment for the improvement of public service provision. As such, the emphasis is now on rail modernisation and a heightened focus on the rail user. The management of rail has mostly reverted back to the state in the case studies, but with select operations still being contracted to private operators. However, this may still not be the solution that is hoped for, as seen with the contractual challenges that Kenya ran into with its Chinese investors.

In order to explore these issues, this research used qualitative research method. This method allowed for the refinement and revision of themes as they emerged during the data collection process. Also, since the study looked

at case studies on privatisation in four countries, the main method used was the comparative case study.

To test and to triangulate the results emerging from the literature and the case studies, primary data collected from interviews with professionals in the rail and/or PT field in the country (including two rail users) was used. The results from the interviews mostly converged and corroborated the results in the literature review and the case studies, which was, that the direct link between rail privatisation and efficiency was inconclusive. The application of rail privatisation had produced mixed results across different contexts. However, the interviews revealed interesting insights and pointed to some gaps in the findings pertaining to South Africa.

Chapter 4 reviewed four case studies wherein passenger rail privatisation was experienced. These were the UK, Argentina, Kenya and South Africa (Gautrain). The reasoning behind selecting these particular case studies was to match the development contexts of the cases to South Africa as closely as possible, while allowing for some difference (e.g. the UK) in order to observe potential differences in performance based on the emerging themes and findings from Chapter 2. However, like privatisation in general, the themes merely demonstrated a correlation and not a causation between privatisation and passenger rail's success or failure. The UK was a case in point: while literature suggested that institutional capacity was one of the critical drivers of success in privatising passenger rail, that was not conclusively the case in the UK despite it having the most mature institutions out of all the case studies. The success of Gautrain in a developing country like South Africa also blurred that correlation. Therefore, the identified themes or indicators were said to be important but how much important they were, was not determined.

The case studies reinforced the thinking that, while some parts of railway networks can be run profitably, other parts required public subsidy, whether services were privatised or not. The alternative was to allow loss-making but socially and/or economically valuable services to collapse – as was the case with regional passenger services in Argentina – or to raise fares – as

happened in the UK and Argentina. As with the findings in Chapter 2, the outcomes of privatisation in the case studies were mixed.

Both the UK and Argentina experienced improved performance in the years following privatisation but soon encountered challenges partly because the rail assets were not being maintained as per the agreements with the private operators. All the governments in the case studies continued to fund rail following privatisation, which begged the question as to whether value for the rail user can ever be attained without significant funding from government. On their part, WB studies acknowledged some problems with privatisation (e.g. fare increases) but argued that, on balance and overall, both financial efficiency and service quality, or value for the rail user, increased as a result of privatisation.

Chapter 5 compared and analysed the findings from the case studies against those of the literature and theory. The analysis confirmed that privatisation is not a ‘cure-all’ for a failing passenger rail system. For instance, while agency problems may tend to be more acute under public ownership, this need not be true in all contexts. Depending on which ownership structure was implemented or how the contract was designed, the state could lose its ability to make the private entity accountable to the private interest, as was the case in Kenya and Argentina. On the other hand, the case studies showed that given suitable conditions, privatisation can result in benefits such as skills and capacity from the private sector, promotion of market competition, institutional reform, and so forth.

Together with Chapter 2 and Chapter 4, the chapter also responded to the question about the value that the rail user may derive from privatisation. Travel surveys in both the UK and Argentina showed that rail users could benefit from privatisation, as measured by the increase in rail demand and customer satisfaction in the periods following privatisation. However, because of the private operators’ need to make profit, as highlighted by the theory of the firm and the property rights theories, the systems were soon beset by negligence

– resulting in fatal accidents – and fare increases, which the rail users started complaining about.

Lastly, to start responding to the question about the feasibility of passenger rail privatisation in South Africa, the chapter compared the developmental contexts of South Africa to that of the case studies. Argentina was found to have more parallels with South Africa, particularly the economic and political instability at the time when rail privatisation was implemented in the former country. For the researcher, this brought doubt about South Africa's readiness for the process. On the contrary, the case of Kenya suggested that the poor state of passenger rail in South Africa may leave the country with little choice but to privatise if it wants to keep its railways from collapsing completely. In this case, South Africa may be ripe for passenger rail privatisation, and if the country were to choose this route as per the series of PT policy, there were opportunities it could harness to its advantage.

Chapter 6 discussed and analysed the interviews with professionals in the rail and/or PT field, as well as the ad hoc interviews with two rail users. The intention of the interviews was to test expert opinion on rail privatisation and to see whether these opinions corroborated the findings from the literature and the case studies. The interviews were also intended to uncover new or innovative ideas. Overall, the opinions of the experts did corroborate those of the findings, with an emphasis on political and socio-economic context, governance and maturity of governance institutions; policy implementation and risk allocation and contract design, as the critical factors influencing the outcomes of rail privatisation.

The issue of affordability came out strongly in the interviews for both the experts and the rail users, confirming that passenger rail in South Africa serves a captive market. Hence, there were calls by most of the interviewees for pro-growth to be mixed with pro-poor. The interviews also revealed rail privatisation was a four-way relationship amongst the government, private partner, the public, and business community, particularly property developers. Beyond the genuine involvement of the main partners, there was a need for

in-depth participation of all the stakeholders if such projects were to receive the necessary support while taking advantage of the resources/expertise that can be brought by other stakeholders.

As to the question about South Africa's readiness for passenger rail privatisation, or more specifically the feasibility of the process in South Africa, most of the experts called for one to be balanced and cautious in implementation of the project. According to the experts, a more sophisticated debate was required, identifying those projects or rail corridors where privatisation had the potential to add value, depending on what the government wanted to achieve, while recognising its limitations. The Gautrain was said to offer valuable lessons on how privatisation or partnerships with the private sector could unfold, and how some of the challenges in the country's rail system (e.g. safety and security) could be resolved.

7.2 Recommendations

The research found that although privatisation was not a panacea to a deteriorating passenger rail service, it could create value for the rail user given the following conditions. The recommendations are drawn from Table 6-2, which synthesised the main findings from the three data sources in the research.

7.2.1 Contract Design and Risk Allocation

Government must go through a disciplined process to prepare the project. First, the government must state its objectives explicitly (Shaw et al.,1996; Kouser et al., 2011) and through a feasibility study, assess the viability of the privatisation project before embarking on it, and to determine the best form of privatisation for its purposes (Graham, 2020).

The design of the contract and allocation of risk come after the feasibility study and the selection of the private partner. The contract defines the rules of engagement between the public partner and the private partner and ensures that services are delivered within specification and at the agreed cost (National

Treasury, 2010). In terms of innovation, the contract can also be used as a tool for change by contracting for developmental opportunities such as LED in the vicinity of the projects. This would help ensure that ‘pro-growth is mixed with pro-poor’, as some of the interviewees advocated.

Depending on the objectives of the government and the resources available, risk is shared between the private and the public partner according to who is best able to carry a given risk. Usually, government carries the political risk, and the private partner carries the commercial/performance risk of a privatisation project (Amonya, 2017). From the interviews, indications are that private companies may not be willing to take the demand (commercial) risk in future projects because of the unexpected challenges stemming from the COVID-19 pandemic. On the other hand, because of the pandemic, some of the experts interviewed said that government needs to consider how patronage guarantees are managed going forward. Risk identification, allocation and management must therefore be part of a comprehensive strategy (Omwenga and Nasieku, 2016) in any rail privatisation project.

7.2.2 Governance and Institutional Maturity

The findings indicated that the quality of government policy and corporate governance will impact upon the extent to which objectives of efficiency, service delivery, and social and environmental policy are achieved (Das Nair and Roberts, 2017; Awuah, 2019; Kikeri, 2019). The new rail policy is a positive step, but there are concerns about policy implementation and gaps in existing PT policy to support the potential privatisation of rail and, for authors like Van de Velde (2013) and Onderwater (n.d.), to promote ToDs and value capture. A realistic approach from which to start adjusting the passenger rail reform process would therefore be to mould it around existing institutional realities and limitations (Schalekamp, 2015). For example, gaps in policy can be clearly spelt out and developed into agreements between the contracting parties.

7.2.3 Fostering Partnerships

Privatisation of government services involves huge risks and public scrutiny because of its impact on people' socio-economic conditions, such as affordability, access and job security (Ramamurti, 1997; Makovsek et al. 2015). These are already some of the concerns in South Africa, led by labour unions. To mitigate these concerns would be the critical role of political support (Dorfman and Harel, 2015). Political support showed how privatisation came to be accepted by the population in all the case studies. The support can be in the form of campaigns to educate the population about the process and the benefits that can be derived from it. Training and reskilling should be part of the process in order to address South Africans' concerns about potential job losses. All this calls for a strong relationship amongst all the stakeholders, namely the government, the private companies, the population and the business community (Abdullah and Kadaroo, 2020). There must be a concerted effort to create a four-way relationship for the success of the project.

7.2.4 Law Enforcement

Safety and security must be addressed if rail, whether privatised or not, has a chance of succeeding in South Africa. According to Nguyen-Phuoca et al. (2021), service quality perceptions and personal safety perceptions regarding PT have an impact on loyalty to that service. The GMA puts enormous financial resources into safety and security, but one wonders whether this is sustainable in the long run. While innovative measures such as CCTVs are important, ultimately, there must be law enforcement. A suggestion from some of the experts and rail users is to have partnerships between government, communities and the private sector, wherein the idea of community ownership of stations or rail assets would be promoted so that communities can help in protecting them by, for example, reporting crime. For authors such as Crawford and Cunningham (2015), where coordination is well-organised through effective partnerships, there are significant benefits to community safety and crime prevention.

7.2.5 A Phased Roll-out

Kopicki and Thompson (1995) argue that rail concessioning's main advantage is the opportunity it affords government to decide on whether to go the route of total divestiture, and it also assists in establishing other benefits of railway operations in the private sectors vs the public sectors. Laabsch and Sanner (2012) report that the results from some research on rail reform suggests that reforms tend to yield better results if they are carried out sequentially rather than in a 'big bang'. As such, this research proposes that privatisation be piloted in selected rail corridors to test the concept. The findings in this research suggest that South Africa is not fully ready for rail privatisation, however, there are pockets where the concept can be tested.

PRASA is implementing a phased roll-out of its modernisation programme. It would be easier for government to start with some of the corridors identified as part of modernisation. On the other hand, the disadvantage of this is that government will be cherry-picking corridors that are already performing well, hence are likely to respond positively to privatisation - as some of the experts highlighted and also stated by authors such as Altug & Filiztekin (2006) and the Global Centre for Public Service Excellence (2015). If the objectives of the government are to support public priorities, then there should not only be an economic case for rail but an equity one as well.

Thus, to balance things out, government can privatise a modernisation corridor and another one like Hammanskraal in Pretoria or Botshabelo in Bloemfontein, which fall outside the modernisation corridors but have 'reasonable' demand profiles. All these approaches would allow policy change to proceed cautiously before privatising the entire network.

7.2.6 Funding

All the sources of data in this research are in alignment about how expensive rail is to construct, operate and maintain. Few, if any, rail systems in the world are able to make a profit (van Reeven, 2009; Guzman and Oviedo, 2018). Consequently, most rail systems are subsidised because of the social,

economic, political and environmental role rail plays (Beck et al., 2013; IEA, 2019).

The case studies show that most governments struggle to sustain this mode of PT financially. Those countries that have dense populations have an easier time in doing this because of the high patronage they can generate (Van de Velde, 2013). Even then, the governments have had to come up with novel ways to generate more revenue through mechanisms such as value capture (Van de Velde, ibid.; Onderwater, n.d.).

Value for the rail user cannot be attained without investment in rail, whether this investment comes from outside sources or government, or a hybrid model as with the Gautrain. In support of Schaaffkamp (2014), privatisation cannot be merely an exercise of cost-cutting. This would impact on its sustainability, as shown by the case studies.

7.3 Further Research Ideas

In light of the recommendations/gaps above, the following issues could be followed up in future research:

- Allocating and managing risk in passenger rail privatisation projects.
- Addressing safety and security in passenger rail in developing countries.
- Generating revenue through value capture in passenger rail in developing countries.
- Why is PRASA's modernisation programme not reaping the envisaged results?
- Is PRASA merely a symptom of South Africa, interalia governance, leadership, labour unions, general attitudes and productivity of personnel? Comparing PRASA with other SOEs in the country.

7.4 Concluding Thoughts

Passenger rail privatisation often calls for huge sacrifices through guarantees by the government, political (popularity) sacrifices, fare hikes or

the reduction of employment because of its commercial nature. It is then left to the experts and the decision makers to come up with strategies and policies on how to balance the scales between these commercial interests and developmental interests. The dissertation has offered some suggestions on how this can be done.

To quote Bullock (2011):

> Politicians expect concessions to transform run-down, under-engineered railways into modern, European-style operations. They rarely do this, but they do provide railways with the best opportunity of contributing to the economic development of countries, so long as governments financially support passenger services and major track maintenance and ensure compliance with contractual arrangements.

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APPENDIX A: Details of the Respondents

Grouping	Work description	Experience in the rail/PT field
Research/Academia Expert 1	Researcher from national research institution focusing on sustainability in transport and mobility.	25+ years in research field.
Research/Academia Expert 2	Speciality in rail, International experience in rail, Consulting services for governments on rail projects.	30+ years' experience in the rail field.
National Government Agency Expert 3	Rail regulator focusing on compliance and safety issues. Previous experience in rail operations and infrastructure.	18 years in passenger rail field and 5 years' experience in rail regulation.
National Government Expert 4	PT policy, Economic regulation policy.	25+ years in PT policy field.
Local Government Expert 5	PT planning, with experience in implementation of 2010 PT projects – particularly feeder services. Development and implementation of IPTN projects.	13 years' experience in PT at the local government level.
Provincial Government Rail Agency	Experience in PT, project finance and	30+ years in PT field

Expert 6	management of PPPs	
National Rail Agency Expert 7	Experience in both land use and rail planning. Focus more on property side of rail and has been on study tour to Japan	15 years
National Rail Agency Expert 8	Experience in both freight and passenger rail planning, Spatial data analysis. Also involved in local politics.	25 years
National Rail Agency Expert 9	PT, Rail planning, Rail strategy, Project, implementation at executive level.	25 years in both private and government PT sectors
Rail user 1	Administrative worker	Has used Metrorail for 13 years.
Rail user 2	Professional in medical field	Used Metrorail for 10 years before buying a car

APPENDIX B: Interview Questions

The interview seeks to elicit the views of experts in both rail and public transport about passenger rail privatisation in general and South Africa, in particular. It presents a predetermined list of open-ended questions, which the researcher hopes will elicit these views. The researcher wants to examine how far the expert opinions corroborate or contradict the reviewed literature and case studies in the research. The evidence will be taken together to answer the research questions.

1. What is your understanding of privatisation in general and in passenger rail in particular?
2. Is private ownership superior to or more beneficial than state ownership?
3. Are you aware of any developing countries in SSA where privatisation has been implemented successfully either in rail projects or PT projects?
4. Are there other models/methods of passenger rail privatisation you are aware of?
5. In your view, what determines the outcomes of concession/PPP projects in passenger rail?
6. Should the South African government consider the possible welfare impacts of privatising passenger rail, e.g. access and affordability, job losses in the rail industry, etc.?
7. Are there factors in South Africa that would make the privatisation of passenger rail a challenge to implement?
8. What lessons can South Africa take from Gautrain?
9. If the Gautrain's concession model were to be extended to the whole country and to a more diverse market, would they still be able to maintain their high level of performance?
10. What can privatisation achieve that PRASA's modernisation programme has not been able to achieve? (Respondents familiar with PRASA's modernisation programme)

(Most respondents so far seemed to be confused by the question so I rephrased as: If Bombela/GMA were to take over the running of PRASA, would they be able to raise the performance standards to those of Gautrain?)

11. Do you think South Africa is ready for the privatisation of passenger rail?
12. Does South Africa need new policy to allow for passenger rail privatisation?

APPENDIX C: Confidentiality Agreement (Cover Page)

CONFIDENTIALITY AND NON-DISCLOSURE AGREEMENT

BETWEEN

GAUTRAIN MANAGEMENT AGENCY
a provincial entity, established in terms of Chapter 2 of the Gautrain Management Agency Act, 2006 (Act No. 5 of 2006), hereinafter referred to as **"**the **GMA"**

AND

Johanna Lata

LTXJOH001
hereinafter referred to as **"**the **Student"**

(Jointly referred to as the "Parties")

APPENDIX D: Consent Form

Title of the research
Exploring privatisation as a panacea to the improvement of passenger rail's quality of service in South Africa

Name of the researcher
Johanna Lata

I, …… agree to participate in this research project. The research has been explained to me and I understand what my participation will involve. I agree to the following:

(Please tick boxes you deem appropriate)

I agree that my participation will remain anonymous.	YES	NO
I agree that the researcher may use anonymous quotes in her research report.	YES	NO
I agree that the interview may be audio recorded.	YES	NO
I agree that the information I provide may be used in an anonymised format after this project has ended, for academic purposes by other researchers, subject to their own ethics clearance being obtained.	YES	NO

Signed by …… Signature …… on this day …… 2021

Signed by Johanna Lata Signature …… on this day …… 2021