Title:

The factors affecting the performance of South African Airways and its impact on economic growth

Applied Research Project Proposal

Submitted by

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28 February 2023

Abstract

The study sought to understand the factors that affect the performance of SAA and the impact it has on the economic growth of South Africa. This enterprise services thousands of South Africans every year; importantly, it also supports the national development agenda set out by government. However, SAA is a company in financial distress and has been kept afloat by continuous financial bailout from government. For instance, SAA last recorded a profit in 2011 and has been in continuous decline over the years due to factors like corruption and poor management. The South African government have been providing the much needed financial assistance with the intention to rescue SAA. In 2020, government committed a R10.5 Billion business rescue fund to help the entity in its operational management.

This study employed a quantitative methodology where a correlational design was used to describe the linear relationship between the variables of this study. Data was collected from various archives documents, dating from 2001 to 2019. This included annual reports on finances, government reports, publications and budgets on SAA. Content analysis and time series analysis were used to measure and analyse publicly available archives on SAA.

The results indicated that almost all the variables are normally distributed. This was further confirmed by the skewedness and kurtosis test for normality, showing consistency in the results. The results for return on equity and taxation showed non-normality based on their significant value, and this was corrected by taking their log transformation. Equity and employee benefits also disclosed a significant positive relationship with the two performance indicators. The findings suggest that the issue of shares to the general public attracts more financial resources to SAA, which ensures stability and higher performance.

DECLARATION

This research is for the partial fulfilment of the requirements for the degree of Masters of Business Administration to the Faculty of Commerce, Law, and Management, University of the Witwatersrand. This research is not sponsored by any organisation

DEDICATION

I dedicate this paper to my departed father who started this journey with me however was taken too soon before seeing the final research. Thank you for the encouragement and always being there in times of me needing encouragement

ACKNOWLEDGEMENTS

I would like to acknowledge and thank God for the strength to get this far. I would also like to appreciate the following people:

- My mother for the moral support and always being there.
- My supportive wife for being present when I couldn't be there for the children and always encouraging me to complete my studies.
- Many thanks go to my supervisor for always understanding and being there for me throughout this process. A thousand thanks for not giving up on me

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Definition of key terms and concepts

SAA – South African Airways

SOE – State owned enterprises

PFMA - Public Finance Management Act

GDP – Gross domestic Product

R&D – Research and development

NDP – National development Plan

SARHA- the South African Railways and Harbors Administration

PFMA - The Public Finance Management Act (Act of 1999)

List of Tables and figures

1. Chapter 1 - Introduction to research

1.1 Background and context

Section (1) of the Public Finance Management Act (PFMA) (Act of 1999: 8-10), Define an SOE as *"an entity which: (a) is a juristic person under the ownership control of the national executive (b) has been assigned financial and operational authority to carry on a business activity (c) as its principal business, provides goods and services in accordance with ordinary business principles (d) is financed fully or substantially from sources other than the National Revenue Fund or by way of a tax, levy or statutory money"* (PFMA, 1999). In South Africa following the 1994 democratic election state assets or agencies were converted into state owned enterprises in bid to promote a more effective and efficient service delivery strategy. This was done in order to follow international trends of using public authority instead of full privatisation in order to take advantage of the private sector efficiencies while maintaining public accountability (Mustapha, Kruss, & Ralphs, 2018). This would also assist in ensuring that government takes an active role in impacting the lives of all the people within the country's borders.

Kim and Ali (2017) argue that if deployed effectively, SOEs can positively contribute to the developmental goals of a country. These authors further stated that SOEs enable governments to pursue their economic, social and political objectives while generating revenue for the government (Kim & Ali, 2017). This includes promoting growth and development of promising sectors or lagging regions; delivering services that are not commercially viable to the urban or rural poor; addressing and intervening in cases of market failures resulting from natural monopolies; filling perceived market gaps and the financing of investments whose size or risk render private investment unlikely, or even, and attending to issues that are of heightened national priority or security (Kim & Ali, 2017). According to Kim and Ali (2017), the temporary losses of these ventures can therefore be aggregated against future economic growth and revenue derived through

taxes once the markets is profitable. While SOEs are geared towards the developmental goals of a country, their performance needs to ensure that economic benefit will be obtained irrespective of the losses. The performance therefore becomes critical in ensuring that the enterprise remains commercially viable.

However, South Africa's state owned enterprises have not been able to meet their mandate of providing competitive services to their clients. This is largely due to the escalating corruption culture and lack of accountability in these SOEs. As a result, most of these entities have been largely depended on government to bail them out from financial crises. These discrepancies can also be attributed to the fact that these enterprises were geared only to service the minority and therefore the scale in which they needed to deliver their services after the democratic dispensation was much larger and required more capital injection from the government. Consequently, the subsidies have grown and have become a constant occurrence.

It is for these reasons that this study sought to understand the factors that affect the performance of SAA and its impact on economic growth. The study further sought to determine the factors that influence the profitability of SAA. The research problem statement is detailed below..

1.2 Research conceptualisation

1.2.1 The research problem statement

The problem is that the SAA has been experiencing financial difficulties over the past years, with profit last recorded in 2011 (Omarjee, 2020). The national government has continuously provided financial bailouts to keep the airline operational. Government believed that the benefit outweighs the costs and the airline created value for the public.

While the Presidency has continuously affirmed in ITS State Of the Nation Address (SONA) its intention of closing or acquiring equity partners for failing SOEs that are still of strategic importance, this has failed to materialize and does not seem to be applicable to SAA..

Furthermore, similar to other state owned entities, SAA has been plagued with corruption, poor management, and an ineffective board responsible for operational and financial decision making. This has contributed to the enterprise persistent financial constraints hence the failure to provide adequate services to its clients Even with all these massive losses and failure of the numerous turnaround strategies, the government persisted in providing guarantees and financial bailouts to the ailing airline. The government further committed an amount of R10.5 Billion to resuscitate the airline through the business rescue process (Maeko, 2020). The other problem is that in a country with the highest levels of unemployment, an ever-widening inequalities, it is inconceivable that a government should persist in forking out these amounts of funds to keep an airline that has not made in profit in 11 years. The consistent bailout and commitment made to SAA by the South African government indicates that there was a value that outweighs the subsidies provided and this was associated with keeping the airline operational at all costs... So, the study aimed at examining the factors contributing to the well-functioning of SAA.

1.2.2 The research purpose (aim and objectives) statement

1.2.2.1. Aim of the study

The aim of the study was to investigate the factors that affect the profitability of SAA.

1.2.3 Research questions

The questions were as follows:

1. What are the factors that influence the profitability of SAA?

2. What is the influence of governance on the performance of SAA?

3. What is the impact of SAA on the economic growth of South Africa?

1.2.4. Objectives of the study

Government owned enterprises are designed to drive the developmental mandate of governments, they are mandated to ensure equitable access to the most basic needs for all citizens of the country. They are therefore seen as government's intervention into the private section that goes beyond mere policy and regulations. Private entities are driven by profit motives, therefore their role in the market is to deliver value to its shareholders in the form of monetary compensation, and failure to achieve profit for sustainable periods can result in business closure. However the same is not always true for state owned enterprises, due to the perceived importance of their mandate and the role they plays as government's intervention mechanism they are financially bailed out in times of strain that might result in them being insolvent, these bail outs has resulted in them being exploited for financial gain by rogue individuals which in turn renders their mandate obsolete as there are in constant financial strain, therefore not performing optimally.

This research seeks to the factors that affect the performance of SAA and its impact on the South African economy, this will be done through addressing the 3 research objectives namely:

1 To determine the factors that influence the profitability of SAA

SAA has been in dire financial over the last decade this has been categorized by continuous losses which require government to supplement the airlines operations and debt through bailouts. Return on equity and return on assets have been identified as critical measures of profitability.

Return on equity gauges a company's profitability and how efficient it is in generating profits**.** It measures how the profitability of a business in relation to the equity employed, therefore indicating how well a company's management creates value for its shareholders. Whether an ROE is deemed good or bad will depend on what is normal within the industry, therefore a good ROE that is equal to or just above the average for the industry.

While return on assets (ROA) shows how profitable a company is in relation to the use of its total assets. It therefore determines how coherently a company uses its assets to make a profit. A higher ROA means that a company manages its financial position efficiently and productively to generate profits. In simple terms it indicates what earnings are generated from the invested capital or assets.

These two will therefore give an indication of the performance of SAA by looking at the return of the assets and return on the equity of the shareholders

2 To examine the influence of governance on the performance of SAA

Good Governance is the backbone of success in any business. Corporate governance was developed to help companies operate in a more efficient way, good corporate governance improves access to capital, mitigates risk, and protects against

mismanagement, and therefore making companies more accountable and transparent in turn enables them to respond honestly to stakeholder concerns. Corporate governance is therefore one of the critical factors that can help a State-Owned Company (SOC) attract domestic and foreign investors, thus being able to maximize the societal benefits of investment. However, South African Airways (SAA) has recently emerged as one of the worst underperformers among existing state-owned enterprises (SOCs) due to leadership crises and poor corporate governance systems.

3 **To investigate the impact of SAA on the economic growth of South Africa**

The South African economy has been growing at a minuscular pace of the last two decades, due to the location of South Africa and its position as gateway to African, the South African government has identified air travel as one of the important strategic sectors for creating jobs and boost the economy, this is due to the entire industry, therefore, the airlines, the air transport infrastructure and the service providers through to the tourism, retail, logistics, engineering and construction sectors. A 2018 study by Oxford Economics on the value of the aviation sector to South Africa found that the aviation and the broader travel and tourism industry directly, indirectly, and as a catalyst supports more than 470 000 jobs, contributes $9.4 billion (about R150 billion) in gross value added, equivalent to 3.2% of South Africa's GDP. This therefore shows the importance and strategic value of operating an airline by the South African government

1.3 Delimitations and assumptions of the research study

The limitations of this study exists due to the nature of the research; while most information is widely available as SAA is a state owned enterprise, certain information might be omitted in order to cover up issues such as:

- Corruption

- Leadership failure
- Policy framework failure
- Trade relations

Another limitation was that SAA was placed under business rescue; hence, did not publish any annual financial reports released from 2019 to date.
SAA has also found a strategic equity partner and therefore going through a restructuring, they declined an interview because the finalization of the strategic equity partner is still in process.
In essence, the views expressed in media interviews, opinion pieces are subjective and therefore would need to be retested for validity and reliability.
It should also be noted that the annual financial reports available from SAA cover the period from 2001 to 2019.Subsequently, this provides 19 years of information; therefore, should be able to provide an analysis of the factors affecting SAA profitability and performance.

1.4 Significance of the research study

It is a well-established fact that SOEs are created to provide an essential public service, boost the economy and create employment. SOEs such Eskom, Transnet, SAA and Prasa were created to facilitate economic development and growth through the provision of critical services such as transportation and electricity services that foster the industrialisation program of the country.
There is a general feeling amongst the public that South African SOEs are a waste of public funds and a burden on the public purse. Nevertheless, for any government to reach its developmental goals, it needs to play a strategic and meaningful role in the economy. Reliable traveling is one of the hindrances to the development of the African continent; therefore, having strategic means to allow the easy flow of goods and services will enable

a government to achieve its developmental goals and growing the economy. It is no doubt that SAA plays an important role in facilitating and strengthening trade relations, and strategic goals of the government. However, the constant bailouts by government to the largest of these organisations have been cited as the greatest financial risk to the South African economy. Therefore, the need for understanding the contributing factors that affect the performance of SAA and its impact on the economy is vital.

This study aims at developing workable recommendations that will help the organisation to strengthen its management and increase profitability in a long run.

1.5 Preface to the research report

The study consists of six chapters. Below is the outlined of the study.

Chapter one introduces the study by providing a background, problem statement and purpose of the study. These include the aim and objectives of the study, the research questions and objectives of the study. Finally, this chapter provides the delimitation and the significance of the study.

Chapter two discusses the factors that affect profitability and performance at SOEs. The chapter presents both international and South African literature on the importance of SOEs, the role of government and leadership in the SOE. Lastly, literature on the impact of increased public debt on the economy is reviewed.

Chapter three details the research strategy, design, procedures, reliability, and validity measures as well as limitations of the study...

Chapter four presents the results of the study.

Chapter six provides a discussion on the findings of the study.

Chapter six discusses the summary of the findings and the conclusions

2. CHAPTER 2 - LITERATURE REVIEW

2.1 Introduction

The previous chapter introduced the aims and objectives of the study. This chapter discusses the conceptualization of SOE, historical background of SAA, the air transportation in South Africa and overview of SAA group. Available literature on the South African Airways as an SOE, the determinants of the profitability of the airline industry, the importance of SOEs on economic development is discussed. The chapter further discusses the state of SOEs in South Africa, the role of government on SOEs, leadership crisis in the SOEs, and the impact of increased public debt on the economy.

2.2 Conceptualisation of SOEs

There has been a debate regarding the accurate conceptualisation of the concept “SOEs”. The debate has led to disagreeing views on a universally acceptable conceptualisation of the term “SOEs” (Sithomola, 2019). However, there have been attempts from international bodies to provide a more detailed definition of a SOEs. World Bank (2015:1) describes SOEs in one main categorisation, namely SOEs are: “(1) control by the state; (2) with legal and financial autonomy (3) participation in the productive sector”. Basu, in the United Nations (2007:10), emphasises that the concept of SOEs also includes “any commercial, financial, industrial, agricultural or advertising enterprises that is owned either wholly or through majority ownership by the public sector”.

2.3 Historical background of SAA

SAA is one of the main SOE that is vital to the South Africa economy. Importantly, SAA is regarded as a leading carrier in Africa and services 35 destinations around the world, coupled with major destinations within South Africa. The entity's headquarter from is in Johannesburg, South Africa.

SAA identifies its mission as: "delivering commercially sustainable world class air passenger and aviation services in South Africa, the African continent and to our tourism and trading partners".

According to the SAA Annual Report (2014), the airline is further mandated to deliver the following five objectives:

- To play a supportive and critical role in national developmental and social agenda of the country.
- To endeavour and achieve sustainability in their commercial operations.
- To provide customer experience that is world class and of the highest standard to its customers.
- To deliver their operations in a manner that is consistency, efficient and effective for the creation of value for South African.
- To foster a culture of excellence that is pioneering.

2.3.1 SAA before Apartheid

Not much has been documented about the history of SAA prior to the Apartheid regime. At its inception, SAA, formerly referred to as the Union Airways was a privately owned entity, based in Port Elizabeth. Union Airways was granted a license to chatter airmail flights between Cape Town and other major centres within the country (Saamuseum, 2001). After years of being privately owned, the government decided to nationalize the Union Airways in February 1934 and renamed it the South African Airways. Through this nationalization the management of the airline was vested in SARHA (Saamuseum, 2001). *As part of its expansion strategy SARHS acquired the South West African Airways, which was also involved in weekly air-mail services from Windhoek to Kimberley, the operations of the airline were moved to the Rand Airport in the economic hub of South Africa, Johannesburg (Spinner, 2016). However, the pressure from the international community regarding the Apartheid racial system led to economic and political sanctions (Pirie, 1992). As a result, SAA was prohibited from flying to overseas*

2.3.2 SAA during Apartheid

Due to the strategic need of SAA and the manner in which the Apartheid regime affected the economic activity of South Africa, the need to elaborate on the history of SAA during the period of 1946 to 1994, thus becomes critical in understanding its value to government. According to Pirie (1992) the aviation industry during the apartheid era was a subject of increased political pressure and protests occurring both locally and internationally. However, the pressure from the international community regarding the Apartheid racial system led to economic and political sanctions (Pirie, 1992). As a result, SAA was prohibited from flying to overseas (Griffiths, 1989). It was not only African states that barred SAA from landing in the respective country, the America and Australia intensified the efforts and fight against the Apartheid regime through revoking SAA's landing rights.

Four basic airways sanctions were imposed on South Africa and these impacted the ability and mandate of SAA to deliver strategic flights that fostered the economic activity of the country.

According to Griffiths (1989: 250) these were:

- ✓ Refuse over-flying rights to any South African-based aircraft.
- ✓ Refuse landing rights to any South African-based aircraft.
- ✓ Prohibit its own airlines flying to and from South Africa.
- ✓ Refuse landing and/or over-flying rights to any aircraft flying to and from South Africa"

The ban from other African countries meant that SAA could not fly internationally to other destinations as it needed a stopover in an African state, as aircraft did not have the ability to fly direct without refuelling.

2.3.3. Post-Apartheid

As part of the Common Wealth meeting decisions in Harare to drop all sanctions imposed on SAA (Pirie, 1992), the airline was allowed to resume flights worldwide again. The re-entrance of SAA in the global environment allowed the airline to have new carriers. SAA also resumed the trans-Atlantic flights and were allowed to commence flights into Australia. Subsequently, the international aviation revolution resulted in other private players entering the markets hence competition was enhanced. For example, airlines like Air Zaire, Egypt Air and Kenya Airways had regular fights into South Africa (Pirie, 1992). This therefore had a negative effect on the competitiveness and operations of SAA. By this time, it was evident that SAA, which had no competition prior Apartheid, was experiencing financial and management challenges (Pirie, 1992).

The ever evolving and competitive aviation industry meant SAA had to adapt to the new reality and business environment. For instance, to further enhance the commercialization process again, SAA introduced more routes. By 1991, SAA had expanded its operations to 11 cities within the African continent, and also introduced 4 flights to the islands, in the Indian Ocean. To top it all, further routes were introduced to the network as more diplomatic ties were created, coupled with the profitability of these destinations (Pirie, 1992). In essence, irrespective of their feasibility and profitability SAA soon faced financial challenges and its reliance on state financial assistance began. Debt started to increase; the 1996-97 financial years saw SAA incur a loss of R323 Million. At the time, this was attributed to the devaluation of the Rand by 35% against the Dollar and the resulting price spike in fuel (Andrews, 1998).

2.4. Air transportation in South Africa

Air transportation is vital to the economy of South Africa as it helps to connect the country to its international communities. It does this by allowing businesses to trade their goods and services irrespective of the geographical areas. Air transportation also brings tourists and investment to the country (Oxford economics, 2016). Furthermore, air transportation has around 390,000 aircraft landing and taking off from South Africa every year. Consequently, the aviation industry is able to connect South Africa to emerging, first world and fast-growing countries in the world. Therefore, European and Asia-Pacific are the largest travellers to South Africa. In 2014, South Africa witnessed 3.3 Million passengers with Europe; accounting for 16.3% while the Asia-Pacific accounted to 6.5% increase. In the same year, foreign tourists spent a net of $9.2 Billion across a variety of tourism sectors such as restaurants, hotels, and transport providers. South Africa in turn was able to export $110 Billion worth of goods and services in 2014 (Oxford economics, 2016).

In 2017, it was reported that 20.9 Million passenger journeys were made to, from and within South Africa (defenceweb, 2019), This resulted in $9.4 Billion spending in gross value added; representing a 3.2% of the South Africa's GDP. Additionally, the air transportation has created over 472,000 jobs in the country (defenceweb, 2019). Prior to the Covid-19 pandemic the air transportation was estimated to double over the next 20 years. This was expected to bring an additional 23.8 Million passengers to South Africa, resulting to $20.2 Billion in GDP by 2037 (defenceweb, 2019).

This would have also resulted in a forecasted growth of 102% over the 20 years. This was going to be boosted by the implementation of the Africa Continental Free Trade Area and the accompanying Single African Air Transport Market. This initiative would benefit South Africa and its African peers; driven through business and trade enabling policy and legal frameworks (defenceweb, 2019).

For these reasons, the South African air transport market is regarded as the strongest aviation market in Africa and ninth on the global e-Freight friendliness index and 41st out of 124 countries on the Air trade Facilitation index (ATFI) (Oxford economics, 2016).; However, investment in infrastructure is needed to maintain this position. The importance of South Africa's air travel to the African continent is enormous because the country facilitates the movement of air cargo through its customs and borders' regulations. The industry is critical to the nation's economic growth development as evidenced by South Africa's raking of 55th out of 136 nations on the Enabling Trade Index (ETI) for facilitation of the free movement of commodities across borders and to their destination.

2.5. Overview of South African Airways Group

As the national carrier, SAA aims at pproviding commercially sustainable world-class passenger and air transport services in South Africa, on the African continent and the globe at large. The services offered by SAA make an enormous contribution to the GDP of South Africa. Its services support connectivity and the tourism industry in South Africa. It is argued that the private sector would fill the void once SAA has been scrapped (Leitch, 2020). It is worth noting however that private carrier only invests in economic routes; hence, developmental routes will not be serviced as there is no incentive for proceeding with such routes (Leitch, 2020). Therefore, SAA plays a vital role in opening up no-economic routes that have potential, these routes also allow private to come in once they are profitable enough.

SAA employs 5,000 people and 10,000 in the SAA Group, and is essential in creating employment and also help grow the South African economy and the rest of Africa (Leitch, 2020). For instance, about R9.8-billion was contributed through the induced effects of spending by the employees of the aviation sector and its supply chain. Jobs in the aviation sector are highly productive and therefore of high value. The average aviation employee generates R721, 132 in gross value added annually, which is more than the average in South Africa. This translates into R5-billion in additional revenue for the government through the aviation supply chain and R2.3-billion through taxes (Leitch, 2020). In addition, the 2014 Oxford Economics study states that the aviation sector contributes R50.9 Billion (2.1%) to South Africa's GDP. This contribution is made up of R20.1 Billion through direct aviation sector output and R21 Billion indirectly through the aviation sector supply chain (Leitch, 2020). While SAA might only contribute a fraction, it is still a huge amount in relations to its bail outs. Leitch (2020) estimate that

conservatively SAA contributes 10% of those figures with translates to R11-Billion of value to the GDP, plus a further R7.5-Billion in tourism annually.

While the challenges beleaguering SAA are well documented, the benefits of ensuring that SAA is kept afloat and contributes to the country's economy might far outweighs those of collapsing the national carrier (Smith, 2019). It is also well documented that the effective management of SAA and through its air links in the region, the movement of people and goods enable the government to facilitate international and regional trade. Indirectly, the supply value chain also benefits through connectivity. Therefore, by providing specialised services through SAA technical aircraft maintenance services to other local airlines that do not have maintenance licenses, the promotion of innovation and skills development in the country is guaranteed to improve. On balance, this helps improve the technical capabilities of the aerospace industry in South Africa (Smith, 2019).

It cannot be disputed that South Africa as a developing country needs to maintain a strong air connectivity within the African continent as it coins itself as a gateway to African. The domestic air transport market is well developed hence leading to robust competition for the greater African market (Smith, 2019). A competitive environment will benefit the economy through providing choice, affordable, safe, and reliable connectivity to destinations and markets throughout the country; while also reducing the cost of travel and doing business. Therefore, government involvement in this strategic section is important as it avoids market monopolies from materializing. This therefore shows the importance and strategic value of operating an airline by the South African government.

2.6. South African Airways as an SOE

The rationale behind the establishment of SAA is important in understanding the benefit of operating a state-owned airline. SOEs form part of the strategic intent of the

government. According to The Presidential Review Committee (2012), SOEs are mainly categorised into four types:

(i) Those that are of commercial interest
(ii) Those that need to act as developmental finance institutions
(iii) Those that are Statutory corporations
(iv) Those whose benefits to the public was immense and therefore are Non-commercial.

As an SOE, SAA operation should be commercially viable and be market-related in order to generate sufficient revenues while sustaining a bankable balance sheet. SAA is thus meant to be financially self-sustainable in its mandate of connecting South Africa to the world, and also in enabling air travel with the boarders of South Africa. Due to the fact that SAA is a state-owned aviation, its operations should not result in market monopoly of the industry. This is because competition drives monopolies, and is more likely to charge higher travelling prices to consumers. Thus, being an SOE, SAA should provide cheaper flying alternatives for its citizens, while providing exceptional services.

2.6.1. Subsidiaries of SAA

SAA caters for different markets and therefore introduced subsidiaries in order to affect its mandate in a commercial manner. These are discussed below:

2.6.1.1. Mango

This is the low-cost offering flight, designed to compete within the South African boarders. Mango was launched in 2006 and operates as an independent airline to SAA. Mango's mandate is to provide highly competitive local marketplace competition. It therefore provides a service aimed at price-sensitive passenger. This airline also offers

comparative rates for cargo service in high-density routes, for local and international flights across the Africa continent (SAA Annual Report, 2014).

2.6.1.2. SAA Technical (SAAT)

South African Airways Technical SOC Limited (SAAT) specialises in full-service maintenance and repairs, and is the largest of its kind in Africa. SAAT provides its service to a wide array of airlines, both domestic and international (SAA Annual Report, 2014)

2.6.1.3. Air Chefs

Air Chefs was created to serve as the supplier of food and drinks within the airline industry. It provides a full service of preparing and cooking food, the cleaning if airlines and ensuring airlines are ready to the next flight in respect of hygiene. Air Chefs is fully owned by SAA (SAA Annual Report, 2014).

2.6.1.4. South African Travel Centre (SATC)

The South African Travel Centre (SATC) operates as a travel management company and agency, it has presence nationwide as well as in Botswana, Ghana, Lesotho, Mozambique and eSwatini. SATC also boost 80 franchises that are independently run but still accountable to them (SAA Annual Report, 2014).

2.7. Determinants of the profitability of the Airline industry

Due to globalisation, the civil aviation industry is evolving at an exponential speed; this is despite the continuous problems experienced by the industry. So, issues such as ever increasing fuel costs and the requirement to adhere to stringent safety requirements are critical to the profitability of airlines. Garent, Mantalis, Lemonakis, Vassakis and Spinthropoulos (2013) argued that the size of an organisation reflects the efficiency and economic growth of companies in general. Nonetheless, in this era of financial crisis,

liquidity have become a significant factor for the stabilization and growth of organizations; this is also evident in the airline industry (Garefalakis, Mantalis, Lemonakis, Vassakis, & Spinthiropoulos, 2013) .

Moreover, aviation plays a significant role in the global tourism industry (Garefalakis, Mantalis, Lemonakis, Vassakis, & Spinthiropoulos, 2013). As a consequence of globalization, the growth in consumption and the international trade, the aviation industry has become one of the most prominent industry in the world value (Yildirim, Curuk, & Ergun, 2019).

These factors have contributed to the increased profitability in the aviation industry. Thus it becomes critical to remain profitability and sustainable over the long run. Nevertheless, airlines like other companies are usually prone to failure due to the magnitude of their operational costs. Garefalakis et al (2013) stated that growth in an organisation can be attained in many ways. (Garefalakis, Mantalis, Lemonakis, Vassakis, & Spinthiropoulos, 2013), These are generally categorised as growth in total assets, profits, and sales. L Scholars who have examined the relationship between firm size and other characteristics have noted the significance and impact management has on performance in the organisation. (Garefalakis, Mantalis, Lemonakis, Vassakis, & Spinthiropoulos, 2013). Similarly, studies have showed that most of profitable aviation firms are as a result of their size, cash flows to liabilities return on invested capital, net margin, location, quick ratio and short term investments (Yildirim, Curuk, & Ergun, 2019).

Research also show that location of an aviation organisation play significant role in its profitability, In addition, well established organisations appear to gain more profits than small medium enterprises. Therefore highlighting that big organisations have an increased total assets which then leads to exponential growth in profitability. Equally, the

pricing factor implemented by the management play an important role on profitability in the airways industry.

The board composition within the airline plays a greater role in the performance of the organization, this coupled with the supervisory role performed by non-executive directors helps the organisation to be efficiently managed, resulting in higher governance scores thus a higher market value of a firm's value in the market (Garefalakis, Mantalis, Lemonakis, Vassakis, & Spinthiropoulos, 2013).

2.6.1. Corporate Governance and profitability in the airline industry

Corporate governance has become an integral part in the management of the airline industry and its profitability. Importantly, corporate governance has been involved in the restoration and development of SAA. For instance, when SAA was experiencing financial difficulties, government came to the rescue by helping revive the national aviation firm. There was an acknowledgement by government and SAA that corruption, maladministration and poor management had contributed to the collapse of SAA. In many countries, SOE reform efforts failed to deliver sustained improvements in performance because they did not fully address the core governance deficiencies of public enterprises (Wong, 2004). Corporate governance is a key determinant of airline performance (Duppati, Scrimgeour, & Stevenspn, 2016). Governance is a structure and process by which institutions at each level make decisions, determine who will be involved in the process of decision making and implementation, and determine the person or persons who will be held accountable and responsible for the results of implementing decisions that affect numerous different factors. Therefore, good governance goes beyond the ability of the public sector to abide by the rules that provide a legitimate, effective, and efficient framework for the implementation public policy (Adebayo & Ackers, 2022).

In addition, good corporate governance has to do with managing public affairs in a transparent, accountable, participatory, and equitable manner, respecting the principles of disclosure, openness, and transparency. On balance, good corporate governance is underpinned by requiring shareholders, boards, officers, and employees to demonstrate honesty, transparency, ethics, and integrity in the management of their corporate affairs.

However conflicting objectives coupled with political interference tends to form a barrier in the achievement of an innovating and competitive airline in South Africa and the world. It must be noted that the airline industry is notoriously competitive and subject to the vagaries of fluctuating demand, f and political uncertainty. The challenges are compounded by the high levels of unionism within the industry, and the opportunities associated with the on-going technological advance (Duppati, Scrimgeour, & Stevenspn, 2016). This therefore further complicates the relationships between governance and performance. Research show that due to the diversity of governance arrangement surrounding airlines, conflicting ideas in the management of SAA have been prevalent (Wong, 2004). Therefore, sound corporate governance leads to better performance, as it requires cooperation from those involved in the management and betterment of SAA.
While it must be accepted that SOEs may not entirely be equal to the privately owned airways and their performance of their private counterparts due to the different strategic goals each serve., It is for these reasons that a system of professional oversight is required in both regimes, these typically includes the checks and balances in which sound corporate governance plays a huge roll, due to the competition within the aviation industry. Conversely, in cases like these, good corporate governance becomes highly important in the airlines industry (Wong, 2004).

There has been numerous calls to privatise SAA and other SOEs like Eskom. These calls came from both civil society and businesses. In most cases, privatisation is not a viable options in developing countries, even though it might be a more effective way to boost

performance. Private organisations normally have one goal in mind and that is, maximisation of production and profit. However in some services especially, in developing countries where majority of the citizen fall below the poverty line, it becomes critical to have government intervention in rescuing SOEs. Arguably, corporate governance has over the years proven to be the backbone of ethical leadership (Duppati, Scrimgeour, & Stevenspn, 2016). Governments may be forced to choose to own enterprises if they are natural monopolies, have strategic value, or provide important public services. These might also be negated by strong political and labour opposition for privatisation. Conversely, high quality having strong governance and management in the airlines industry helps to sustain their success despite the challenges they face. Some of the challenges that are common to airlines, include economic and capital market volatilities; the currency fluctuations against the American dollar; the ever increasing fuel prices and competition at both the regional and domestic levels. (Duppati, Scrimgeour, & Stevenspn, 2016). In essence, good governance and administration practices are important in reducing potential risks for investors, attracting investment capital and improving the performance of organisations, better access to financing and lower cost of capital. On balance, the importance of SOEs in the economy and development of South Africa should not be overlooked.

2.7. The importance of SOEs on economic development

. Over the years, many developing countries have recognised the importance of SOEs in promoting economic and social development. In their nature, SOEs are designed to enable an environment where businesses will grow. These organs of the state are able to impact and deliver mega government infrastructural projects in order to foster business and growth activities within a country. (Mustapha, Kruss, & Ralphs, 2018). The key though

depends on the efficient and cost-effective manner in which these SOEs provide these services. SOEs are also crucial to the industrialisation program of a country and enable governments to meaningfully steer the economy in the direction of development. Therefore, it is critical for government to provide the much needed support to SOEs, and to ensure their continued existences forms the bedrock of a country's industrialisation program and service delivery (Mustapha, Kruss & Ralphs, 2018). These authors further highlights that the support must be in a manner that creates public value while remaining efficient and internationally competitive (Mustapha et al, 2018).

Furthermore, due to their developmental mandate, SOEs are praised for their capabilities of opening up non-economic routes; hence, enabling the private sector to come into the market when it becomes big enough to be profitable (Leitch, 2020). The private sector performs activities from a purely commercial standpoint; and therefore shies away from investing in trade routes that are not generating enough profits (Leitch, 2020). SOEs can therefore not be judged on their profitability but should also be evaluated on the valueadded to the ecomony through their continuous operations.

The state exercises full control of SOEs through owning majority stake. So, SOEs enable the state to take an active role in the daily operational and management activities and by contributing to the economy of the country (Kim & Ali, 2017).

Kim and Ali (2017) contends that SOEs are different from private enterprises in that they are often granted favourable treatment such as subsidies, debt waivers, favourable loans and protection against bankruptcy. As such, they are also expected to provide important public goods and services to citizens, which is often not financially profitable. This important role has however been shrouded in controversy due to the failure of government to do on-going oversight on SOEs. Governments are required to provide required assistance to SOEs. They are expected to enforce regulations, and at the same

time be the owner of SOE assets. This has unfortunately led to the unprecedented levels of corruption and has undermined many SOEs' competitiveness and efficiency. The corruption within these entities results in mismanagement, and technical incompetence of employees (Sithomola, 2019). The underperformance and financial mismanagement drain scarce resources that are essential to the provision of services which these enterprises are tasked with providing. Most importantly, SOEs are expected to execute their tasks in a financially profitable manner while providing crucial public goods. To put it differently, SOEs are still immensely important in delivering socioeconomic and developmental programs in the country.

For example, SOEs are crucial in the provision of basic services such as clean water, cheap electricity, and sanitation services in remote towns and villages, which might not be as financially profitable for private entities to provide (Kim & Ali, 2017). Despite government's positive role provided to SOEs, there has been calls to privatise these enterprises. The debate has been around the persistent corruption and mismanagement of funds in most SOEs. Nonetheless, those in disagreement have argued that the privatization of SOEs might deprive people at all spectrum of life of critical public goods. The privatization of SOEs might also compromise security of the state due to the role that some SOEs play in strategic industries (Kim & Ali, 2017).

Moreover, SOEs are designed to provide public services in a manner that is equitable. Hence, due to their size, they are also a critical source of employment. This has rendered them too big to fail; therefore, the overlapping ownership and management functions in SOEs have severely undermined their efficiency (Mustapha, Kruss, & Ralphs, 2018). Subsequently, it is also important to examine and understand the state of SOEs in South Africa.

2.8. The role of government on SOEs

SOEs play a critical role in ensuring that the citizens' needs are met in an equitable manner. Importantly, SOEs ensure that citizens are also a significant player in most economies. This is because SOEs are positively contributing to the strategic sectors of the economy in most countries. These include energy, minerals, infrastructure, and other utilities like financial services. As a result, it is significant for corporate governance to be involved in SOEs.

According to the World Bank (2018), corporate governance is defined as "the structures and processes by which companies are directed and controlled".

Corporate governance was developed to help companies operate more efficiently. Similarly, good corporate governance improves access to capital; mitigates risk; and protects against mismanagement; making companies more accountable and transparent. This also helps SOEs to strategically respond to stakeholder concerns.

Furthermore, corporate governance should embody processes and systems that are meant to direct, control, and hold into account SOEs. In South Africa state-owned companies are controlled and managed by statutory provisions based on the enabling legislation and the Companies Act. The corporate governance of SOEs is governed by the Public Finance Management Act (PFMA) and is in accordance with the Protocol on Corporate Governance, which summarises the principles of the King II Report on Corporate Governance (Toit, 2005). The ultimate governance oversight over SOE's in South Africa vests in Parliament, the Executive, and the Boards of that SOE, with each playing a different and distinct role in the management of an SOE (Toit, 2005). Parliament, through the Standing Committee on Public Accounts (SCOPA), exercises its governance role of ensuring service delivery and enhancing economic growth of SOEs. It does this through the valuation of the performance of SOEs; by interrogating their annual financial statements and audit reports of the Auditor-General; and also by summoning the SOEs

to parliament should they need clarity on the service delivery performance and review of none-financial information contained in the annual reports of SOEs.

Equally, the Executive Authority as the shareholder and the owner is responsible for ensuring that appropriate management is put in place in order to achieve the mandate of SOEs. In addition, the executive ensures that effective there is financial viability and that returns on investments are achieved. The competent executive authority acts as shareholder, while the Minister of Finance and the National Treasury are responsible for financial supervision (Toit, 2005)

Oversight by the Executive Authority is largely governed by the PFMA provisions. The PFMA confers oversight powers on the Executive Authority particularly, with respect to corporate, shareholder agreements, and quarterly reports. Above all, the Executive Authority exercises its power by appointing the board of directors, and also has the powers to dismiss the board. The executive must also ensure that there is a mix of executive and non-executive directors, and that the directors have the necessary skills to run the SOEs. In essence, the Board of Directors is the governing body of SOEs. The Board of Directors has absolute responsibility for the performance of the SOE and has the power to appoint and dismiss the SOEs' executives. Governance principles related to the roles and responsibilities of SOEs directors are contained in the PFMA and the Corporate Governance Protocol (Toit, 2005). Conversely, these legal bodies are also prone to disagreements, usually in flights over policy decisions and the management of SOEs.

2.9. Leadership crisis in SOEs

In developing countries, SOEs are likely to remain as the cornerstone of economic development. In the South African context, there are over 700 SOEs in which the government has partial or full ownership. These SOEs are expected to play a central role in socio-economic development initiatives and betterment of South Africa .Although many of these SOEs were established with the best of intentions, they are often implicated in the misalignment of their mandatory objectives, largely due to poor leadership and corruption. The negative effects that results from this leadership vacuum have led to many SOEs into a permanent state of undesirable complexities. These challenges have also contributed to maladministration, lack of accountability, inefficient productivity, and low morale amongst employees.

Therefore, it not evident that the failure of SOE's in South Africa can be attributed to the leadership conundrum that paralysis the effectiveness of these entities and hampering them from achieving their critical mandate. Leadership in these entities has been used to infiltrate the funds assigned t to achieve their objectives. This has resulted in a political patronage, and has become a nurturing ground for senior executives to pursue their personal interests.

South Africa is lauded as having the best constitution, with well formulated legal frameworks and firm political will. However, these policies have not translated into expected results, and therefore appear to be nothing more than a rhetorical phrase. Chapter 13 of the NDP emphasises the call for "Building a Capable State" as one of the developmental direction the country is moving towards. The NDP also reiterates best world practices such commitment and dedication by leadership as a pillar of effectiveness and efficiency. Chapter 13 further recognises that SOEs can only achieve their mandate and yield the envisaged outcomes through a leadership that is accountable.

(McGregor, 2014)

For South Africa's SOEs to succeed in fulfilling their mission, they must be led by leaders appointed on the basis of merit, with proven track record in the highest level, integrity that in unrivalled, and the conviction to serve the nation with pride while committed to good governance (Khoza & Adam, 2005). Leadership in all great organisations provides the inspiration that builds an environment in which employees are able to perform their duties with precision. Therefore, leadership is instrumental to the achievement of organisational objectives. This is because it provides the necessary guidance to ensure that objectives are obtained in a manner that is sustainable and aligned with good governance; leadership also plays a crucial role in shaping an inclusive, and corruption free culture of governance (McGregor, 2014).

2.10. The impact of increased public debt on the economy

The sovereign debt crisis and the collapse of the financial markets, which affected several countries in Europe and America, have highlighted the dangers of ever-growing indebtedness of countries around the world. This has led to policymakers and lenders to determine the optimal level of government debt that could threaten a country's economic growth (Baaziz, 2015). There is an agreement that a link exists between public debts and GDP growth (Baaziz, 2015). A study conducted by Reinhart and Rogoff (2010), based on an extensive data set covering forty-four countries found that the debts of SOEs roughly increased to over 90 percent as compared to the GDP. The findings also show that economic growth has deteriorated dramatically beyond that point. This study was also supported by the findings of Reinhart and Rogoff (2010), who concluded that a nonlinear impact of government debt on economic growth at a threshold level of 86% of GDP has negative effects. These studies highlight that economic growth can be affected

by government debts and that it slows down the government debt-to-GDP ratio which exceeds a tipping point of around 90% of GDP (Baaziz, 2015).

SAA has been sustained by a continuous bailout since 1999. The main objective of the airline and its strategic intent is to boost the tax collections through enabling air travel and generating taxes while creating job opportunities and contributing to economic development. However, the airline has been kept alive by contributions from taxpayers for the better part of the past ten years (Tleane, 2020). Research suggests that SOEs tend to have a negative impact on economic growth because they are inefficient at the micro level (Baaziz, 2015). The government has provided SAA with more than 57 Billion in bailout money since 1994 (Business Maverick Analysis, 2019). The most commonly cited problems associated with SAA financial woes are mismanagement of funds, corruption, over-staffing and lack of accountability (Tleane, 2020). The burden of funding the operations of SAA, and the indirectly the losses incurred by the airline has been the responsibility of the taxpaying South Africans (Baaziz, 2015).

Funding through bailouts can be provided by the government in a variety of ways. According to Jitsing (2012, the government can either reallocate funds from other programmes to finance the bailout; therefore, cutting off additional spending on core programmes or alternatively halt infrastructure projects or the government could choose to increase its budget deficit to fund the bailout package, thereby choosing to borrow more and therefore the budget deficit growing. This, in turn leads to the state debt costs increasing (Baaziz, 2015). The Government could also choose to use funds from its contingency reserves to fund the bailout, and risk having insufficient funds to deal with a national disaster. In all of these cases, the taxpayer must ultimately provide additional funds to pay for the bailout (Tleane, 2020). It can therefore be argued that SOEs bailouts have negative effects on the economy. For example, government have to compromise the provision of basic services and the development of infrastructure to rescue financially

struggling SOEs. The increase on national debts interest rates also has an impact on investment (Tleane, 2020).

2.11. Conclusion

Various authors have emphasised SOEs importance in the growth of the economy. SAA is one example of SOEs who are positively contributing to economic development and creation of employment in the country. Different stakeholders have also involved in providing financial and management support to SOEs. However, corruption, maladministration and mismanagement of funds in most of South Africa's SOEs have had a negative effect in the developmental process. Literature further shows how governance is averted in order to create networks of patronage and self-enrichment for the politically connected. So, there is a knowledge gap with regard to available mechanisms meant to help address the mentioned challenges experienced by SOEs in general, and SAA in particular. Government has gone to categorize some of these SOEs too big to fail. Hence this study sought to fill the void by examining the cost benefits of subsidizing SAA. Equally, the study aimed at exploring the governance issues at SAA and how these affect their operations. The methodology of the study is discussed below.

3. CHAPTER 3 - RESEARCH STRATEGY, DESIGN, PROCEDURE, AND METHODS

This chapter discusses the research approach, research design, data collection and analysis procedures, and sampling methods used in this study. To collect, process, and analyse the empirical data. The chapter also describes the reliability and validity measures used in this study. Finally, the chapter outlines both independent and dependent variables used to measure the factors contributing to profitability at SAA.

3.1. Research strategy

A research strategy refers to the overall plan in which one will conduct a research study. A research strategy therefore is designed to guide a researcher in planning, executing, and monitoring the study (Van Zyl, 2014). This offers a high-level guidance into the activities to be taken to arrive at the study findings. According to Van Zyl (2014: 15), “research is among other things an intensive activity that is based on the work of others and generates new ideas to pursue answers”. This process enables one to gain new knowledge and insight into a topic. There are three methods in which a research strategy can be conducted; namely, qualitative, quantitative and mixed methods. Qualitative research investigates on the understanding and interpretation of individuals regarding their social world which leads to the epistemological position of interpretivist. (Bryman & Bell, 2012: 26-28). In contrast, quantitative research highlights the quantification in data collection and is referred as a deductive approach by testing theories. (Saunders, Lewis & Thornhill, 2012: 26-28). While a mixed method uses a combination of both qualitative and quantitative research strategies.

This study followed a quantitative strategy to respond to the research aim and questions. Quantitative research is best defined as a process of collecting and analysing numerical data (Van Zyl, 2014). Quantitative methods are used to find patterns and averages in data and to make predictions and test for causal relationships that can be generalized into the wider population (Van Zyl, 2014). This type of research strategy assisted the researcher

to review accessible statistical data on the profitability of SAA and its contribution to the economy of the country. Quantitative method also helped the researcher to find numeric patterns in order to interpret readily available data and infer the findings to the wider society.

3.2. Research design

Research design is described as a blueprint for conducting the study which will allow for maximum control over factors that could interfere with the validity of the research results (Polit and Hungler, 1999). Research design imparts the comprehensive structure for the procedures the researcher follows, the data the research collects, and the data analysis the researcher conducts (Leedy & Ormrod, 2015). Research design guides the researcher and results in the evidence obtained, and effectively addressing the research problem as unambiguously as possible.

Quantitative research methods can be descriptive, correlational or experimental research. A correlational research design was used in this study. Correlational research design is method used to investigate the relationships between two or more variables without the use of controlling or manipulative techniques (Van Zyl, 2014). A correlational design is thus a non-experimental type of quantitative research. The researcher chose this designto highlight the strength and/or direction of the relationship between two or more variables. This process further highlighted if the correlative direction is either positive or negative. This design therefore helped the researcher to identify attributes and make predictions on the effect of one variable to another; thus, the higher the correlation, the higher the degree of relatedness amongst the variables.

3.3. Research procedure and methods

3.3.1. Research data and information collection instrument(s)

Data collection is the process of gathering and measuring information on variables of interest, Data collection is an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes (Leedy & Ormrod, 2015). The data to be collected depends on the research questions; these give a particular focus to one's observations. Data is collectable in a wide array of methods; this includes questionnaires, observation, experiments, interviews, documents and other data collection sources. Robson (2002) alludes to the fact that data collected must be rigorously analysed and a framework must be developed encompassing a theory one will understand, be able to explain to others.

For this study, data was collected from secondary sources; that is, archived data. A secondary source is a document that discusses information which was originally presented elsewhere (Van Zyl, 2014). This information interprets and analyses primary sources.

Secondary data is written based on first-hand accounts; drawing on the data and experiences from primary sources in order to reassess the information and make conclusions from combining information from other sources (Van Zyl, 2014). Secondary sources analyse, interpret or describe historical events, due to the fact that primary sources aren't always accessible to everyone, secondary sources thus provide a simpler and consolidated version of the same vital information (Van Zyl, 2014).

The archived data included academic journals, reports from South African national departments' websites and other academic research from 2001 to 2019. The researcher made use of the annually published SAA financial reports for the period between 2001 and 2019. These financial statements helped the researcher to retrieve data on the

factors affecting profitability at SAA. Moreover, these financial reports provided much needed information on the financial outlook of the SOE, and its growth thereof. On the other hand, journals and reports from academic authors provided information on SAA operations and management processes. Importantly, these data sources presented information regarding the responsibilities of corporate governance and its impact on leadership. In essence, the secondary data retrieved also provided information on the factors affecting the performance of SAA and its impact on economic growth. The frequency of the data was increased by using E-views.

3.4.1. ***Research data and information collection process***

3.4. Research data and information processing and analysis

3.4.1. Research data and information processing

On one hand, research data processing involves a series of steps performed on data in order to verify, organize, transform, integrate, and extract data in an appropriate output form for subsequent and intended use. In order to ensure utility and integrity of data, the methods used to process data must be documented. Research data processing helps to generate facts and patterns; presentation of results and discussion of findings.

3.4.2. Research data and information analysis

On the other hand, data and information analysis involve the interpretation of data gathered through the use of analytical and logical reasoning to determine patterns, relationships, or trends. Data can be analysed through regressions analysis, cluster analysis, content analysis.

Content analysis was used in this study to analyse collected data. Content analysis is a detailed and systematic examination of the content of a particular material with the goal of identifying patterns, themes, or biases. Content analysis is typically conducted on forms

of human communication including books, newspapers, personal diaries, legal documents and bulletin board entries.

In this study, content analysis was done on documents that were not written for research purposes but intended for the general public, i.e. newspapers, financial magazines and the state budget. Furthermore, these documents were analysed for the purpose of generating results and findings for scientific purposes. This method of i analysis was chosen because it is relatively inexpensive, and allows the researcher to research documents without making personal contact.

In addition, a time series analysis was be used to analyse financial archives Time series analysis is a detailed and systematic study of the content of a particular material with the aim identifying patterns, themes, or biases. Time series analysis is generally conducted on books; newspapers; personal records; legal documents; films; television; art; music; videotapes of human interactions; transcripts of conversations, and Internet blog and bulletin board entries (Van Zyl, 2014). A time series analysis can be used to conduct a reflective study in order to analyse the decisions made at a particular periodic (Van Zyl, 2014).

3.5. Research strengthens—reliability and validity measures applied

Validity and reliability issues are important in quantitative research. According to Drost (2011: 105), validity refers to “the extent to which a measure adequately represents the underlying construct that it is supposed to measure”. On the other hand, reliability is “the extent to which measurements are repeatable when different people perform the measurement on different occasion under different condition, supposedly with alternative instruments which measure the construct or skill” (Drost, 2011: 106).

3.5.1. Reliability

According to Van Zyl (2014), reliability occurs when a test measures the same thing more than once and results in the same outcome, while validity is when a test does what it is supposed to do. Research reliability refers to the degree of consistency or accuracy with which an instrument measures the attribute it is designed to measure. If a study and its results are reliable, it means that the same results would be obtained if the study were to be replicated by other researchers using the same method. The types of reliability are as follows:

- **Test-retest reliability**

This is a measure of consistency between measurements of the same construct administered to the same sample at two different points in time (Drost, 2011). For example, “if the correlation between the two sets of test is significant then observations have not changed substantially hence the aspect of time is very critical for this type of reliability” (Kubai, 2019: 3). To assess the consistency and repeatability of the research instruments, the researcher applied the same research equipment on the archived data at various times. The researcher also measured the uniformity of the study data from several data sources.

- **Split-half reliability**

Heale & Twycross, (2015) defined Split-half reliability as a measure of consistency between two halves of a construct measure. Kubai (2019: 4) states that “the numbers of items for measuring a construct is available and is measured within the same time period hence minimize the random error”. The researcher achieved a split-half reliability by allowing other researchers to apply the same methods to the similar units of analysis.

- **Inter-rater reliability**

This is a measure of regularity between diverse items of the same construct (Kubai, 2019). This type of reliability “measures the consistency within the instrument; and questions on how well a set of items measures a particular characteristic of the test” (Kubai, 2019: 4). To ensure inter-rater reliability, the researcher collected data from several archived data sets to achieve the consistency of results obtained. These included annual financial reports, policies, government reports and performance statements.

3.5.2. Validity

Validity refers to the degree to which an instrument measures what it is intended to measure. Validity is concerned with explaining the truth of research findings as explained by Zohrabi, (2013). The following are the types of validity:

- **Construct validity**

This refers to how a concept, idea or behavior that is a construct is translated or transformed into functioning and operating reality (Trochim, 2006). This will be achieved by formulating a theory through data analysis.

- **Face validity**

This is where an indicator seems to be a reasonable measure of its underlying construct “on its face” (Kubai, 2019: 6). It actually ascertains that the measure is appears to be assessing the intended construct under investigation (Kubai, 2019: 4). Face validity in this study will be achieved by assessing the research instruments designed by the researcher. This includes the semi-structured interviews and the sampling techniques thereof.

- **Content validity**

This is an assessment on how well a set of scale of items matches with the relevant content domain of the construct that it is trying to measure (Kubai, 2019: 6). The researcher will make use of semi-structured interviews to source the diverse perceptions and experiences of workers with regard to trade unions and how their interests are being addressed by these unions. This will allow the researcher to yield research results and findings that will help address the role of trade unions in addressing workers' interests.

- **Criterion-related validity**

This type of validity has to do with the degree of correspondence between a test measure and one or more external referents (criteria) by correlation (Mohajan, 2017). This will be achieved by conducting a pilot study; the results obtained should be similar to the findings of the actual research.

3.6. Research weaknesses—technical and administrative limitations

- ✓ The limited research on African SOEs and the unpopularity of some SOEs such as Eskom and SAA proved to be a limitation. SOEs sometimes have very volatile relationships with their respective shareholder departments. This limited the amount of information the researcher could obtain from the SOEs in question.
- ✓ The financial operations of the Ministry of finance are kept secret and not available to the public. Therefore, this limited the researcher to obtain important information on financial reports.
- ✓ Archival data may be incomplete, and it may be time-consuming to find and sort through archives that do not use standardized descriptive methods or are in

original languages. Hence the researcher struggled to source more data on some reports from SAA.

- ✓ Archival data may not be in a format that is easy to use to answer the research question.

3.7. Estimation technique and discussion of variables

A regression model provides a function that describes the relationship between one or more independent variables and a response, dependent, or target variable. This study relied on secondary data obtained from the World Bank and financial statements from SAA.

3.7.1. To determine the factors that influence the profitability of SAA

Regression model

$$Return\ on\ assets_t = \beta_1 + \beta_2 TotalAssets_t + \beta_3 Employee\ benefits + \beta_4 Shareholdersequity_t + \beta_5 Net\ income_t + \beta_5 total\ liabilities_t + \beta_6 taxation_t + \mathcal{E}_t$$

$$Return\ on\ equity_t = \beta_1 + \beta_2 TotalAssets_t + \beta_3 Employee\ benefits + \beta_4 Shareholdersequity_t + \beta_5 Net\ income_t + \beta_5 total\ liabilities_t + \beta_6 taxation_t + \mathcal{E}_t$$

Where t represents the years; Ɛ represents the error term; β are the coefficients estimates.

Whereby:

Profitability will be measured using total assets, employee benefits, total liabilities, shareholders equity, taxation, and net income.

Dependent variable

Return on equity (ROE)

ROE gauges a company's profitability and how efficient it is in generating profits**.** It measures how the profitability of a business in relation to the equity employed; therefore, indicating how well a company's management creates value for its shareholders. Whether an ROE is deemed good or bad depended on what is normal within the industry, therefore a good ROE that is equal to or just above the average for the industry.

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

Return on assets

Return on assets (ROA) indicates how profitable a company is in relation to the use of its total assets. In other words, it indicates how efficiently a company uses its assets to make a profit. A higher ROA means that a company manages its financial position more efficiently and productively to generate profits. In simple terms, it indicates the returns generated from the invested capital or assets.

$$\text{Return on Assets} = \frac{\text{Net profit}}{\text{Total Assets}}$$

Independent variable

Total Assets

Total assets refer to the total amount of assets that an organisation owns. Assets are items of economic value that are consumed over to provide a benefit to the owner.

Shareholders' equity

Shareholders' equity shows how much the owners of a company have invested in the business, through either by investing money in it or by retaining earnings over time.

Net Income

Net income is gross profit minus all other expenses and costs as well as any other income and revenue sources that are not included in gross income.

Total liabilities

Total liabilities are the combined debts that a company owes. They are generally categorized into three: short-term, long-term, and other liabilities

Taxation

Taxation is the levy of compulsory taxes on individuals or legal entities by governments in almost every country in the world. The primary purpose of taxation is to raise revenue for government spending, but it may also serve other purposes as well.

Employee benefits

Employee benefits can be defined as the different forms of non-monetary compensation and money compensation an employee receives from their employer.

3.7.2. Influence of governance on the performance of SAA?

$$Return\ on\ assets_t = \beta_1 + \beta_2 board\ size + \beta_3 gender\ diversity_t + \beta_4 none\ exuctive\ directors_t + \beta_5 Executive\ directors_t + \varepsilon_t$$

$$Return\ on\ equity_t = \beta_1 + \beta_2 board\ size + \beta_3 gender\ diversity_t + \beta_4 none\ exuctive\ directors_t + \beta_5 Executive\ directors_t + \varepsilon_t$$

Where t represents the years; ε represents the error term; β are the coefficients estimates.

Whereby:

Performance was measured using board size, gender diversity, nonexecutive director and executive director.

Dependent variable

Return on equity (ROE)

ROE gauges a company's profitability and how efficient it is in generating profits**.** It measures how the profitability of a business in relation to the equity employed, therefore indicating how well a company's management creates value for its shareholders. Whether an ROE is deemed good or bad will depend on what is normal within the industry; therefore, a good ROE that is equal to or just above the average for the industry.

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

Return on assets

Return on assets (ROA) indicates how profitable a company is in relation to the use of its total assets. In other words, it indicates how efficiently a company uses its assets to make a profit. A higher ROA means that a company manages its financial position more efficiently and productively to generate profits. In simple terms, it indicates the returns generated from the invested capital or assets.

$$\text{Return on Assets} = \frac{\text{Net profit}}{\text{Total Assets}}$$

Independent variable

Nonexecutive directors

A non-executive director is a member of the board of directors of an organisation, who is not a member of the executive management team of the organisation.

Executive director

Is a member of the executive management team, therefore a member of the board of directors of an organization who holds an active management role within the organization.

Gender diversity

Diversity in governing bodies aims to cultivate a broad range of demographic characteristics and attributes in the governing bodies. One simple and widely used measure to promote heterogeneity on governing boards, commonly known as gender diversity – the inclusion of woman on governing board.

Board size

The size of the board of directors refers to the total number of directors of each sample company, including the CEO and the chairman for each fiscal year. This include outside directors, executive directors, and non-executive directors

3.7.3. Impact of SAA on the economic growth of South Africa?

$$GDP_t = \beta_1 + \beta_2 return\ on\ assets_t + \beta_3 return\ on\ capital_t + \beta_4 return\ on\ equity_t + \beta_5 taxation_t + \beta_6 Total\ assets_t + \beta_7 employee\ benefits_t + \beta_8 Operating\ profits(loss)_t + \mathcal{E}_t$$

Where t represents the years; ε represents the error term; β are the coefficients estimates.

Whereby:

The Impact on GDP will be measured using return on assets, return on capital, and return on equity, taxation, total assets, and employee benefits.

Independent variable

Gross domestic product (GDP)

Gross domestic product (GDP) is the standard measure of the value added created by the production of goods and services in a country during a given period. As such, it also measures the income generated from that production, or the total amount spent on final goods and services (net of imports). GDP is the most important indicator for capturing economic activities.

Dependent variable

Employee benefits

Employee benefits can be defined as the different forms of non-monetary compensation and money compensation as employee receives from their employer.

Taxation

Taxation is the levy of compulsory taxes on individuals or legal entities by governments in almost every country in the world. The primary purpose of taxation is to raise revenue for government spending, but it may also serve other purposes.

Return on assets

Return on assets (ROA) indicates how profitable a company is in relation to the use of its total assets. In other words, it indicates how efficiently a company uses its assets to make a profit. A higher ROA means that a company manages its financial position more efficiently and productively to generate profits. In simple terms, it indicates the returns generated from the invested capital or assets.

$$\text{Return on Assets} = \frac{\text{Net profit}}{\text{Total Assets}}$$

Return on equity

ROE gauges a company's profitability and how efficient it is in generating profits**.** It measures how the profitability of a business in relation to the equity employed, therefore indicating how well a company's management creates value for its shareholders. Whether an ROE is deemed good or bad will depend on what is normal within the industry, therefore a good ROE that is equal to or just above the average for the industry

$$\text{Return on Equity} = \frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

Return on capital

Return on capital, or return on invested capital, is a ratio used in finance, valuation, and accounting, as a measure of the profitability and value-creating potential of companies relative to the amount of capital invested by shareholders and other debt holders.

Operating profits or losses

Is the profit or loss from operations of the organization?

Total assets

Total assets refer to the total amount of assets that an organisation owns. Assets are items of economic value that are consumed over to provide a benefit to the owner.

4. CHAPTER 4 - PRESENTATION OF RESULTS

4.1. Introduction

This study sought to investigate the factors affecting the performance of SAA and its impact on economic growth. The study collected data from publicly available information on SAA; this included, financial statements, academic journals, and reports from South African national departments' websites from 2001 to 2019. Of SAA and performing time series and ratio analysis on the financial statements. Specifically, firstly, the study sought to examine the factors influencing the profitability of SAA. Secondly, identifying the influence of corporate governance on the performance of SAA, and; thirdly, to examine the impact of SAA on the economic growth of South Africa. The chapter first presents the descriptive statistics and characteristics of the variables used in the regression model.

4.2. Descriptive statistics

This study used time-series data from 2001 to 2019 for the analysis process. The frequency of the data was increased by quarterlising and using E-views. Data on

economic growth was obtained from the World Bank's World Development Indicators, dating back to 2021 Data Repository. Information regarding corporate governance, performance and other firm characteristics was obtained from the annual report of SAA. While non-ratio variables were converted to their natural logarithm form in accordance with the methodology described for the study. Therefore, Table 1 provides the statistical characteristics data obtained from the annual reports. The sample mean, standard deviation, minimum and maximum values are reported.

The results in Table 1 show that GDP, which is a proxy for economic growth, had an average value of 3,264,386.7 South African Rand over the period. The three profitability measures; that is, the return on asset, return on equity and return on capital, recorded a negative mean values of -0.132, -0.207 and -0.025, respectively. This indicates that on average, SAA has not been making profits but losses over the sample period of 2019 to 2021.

The average value for operating costs was 23,640,526 South African rand. Also, total liabilities showed an average value of 18,009,632 Rand, while the total assets during the period under review were 15,141,526 South African Rand. This reveals that SAA has higher operating costs and relies largely on debts to finance its SAA. This is very alarming because the costs and debts are more than the assets of the SOE. Therefore, this is more likely to cause insolvency if this trend continues. Again, the average value for net income/loss was negative (i.e., -2,015,000 Rand), showing that SAA is making more losses than income. This is not surprising considering the fact that SAA have more liabilities and operating costs than their assets. In addition, the three performance indicators affirm this through their negative mean values. This is a great call to SAA to improve its operating mechanisms and reduce their costs and to enhance its performance.

The results show that firm equity, which indicates the number of shares sold by SAA, was 9,847,263.1 Rand on average whereas the equity multiplier recorded 2.209 Rand as its average value. The equity multiplier is a risk factor assessing the proportion of SAA's assets being financed by stock. The results show that more than half of SAA's assets are financed by debts and other interest-bearing liabilities. As a result, this does not help as it is likely to affect SAA performance since all the returns made might be used in paying these incurred debts. Employee benefits and Taxation also recorded average values of 4,482,263.2 and 50,263.158 Rands respectively.

Regarding the corporate governance variables, the descriptive statistics reveal that the average board size over the period is 10, with the maximum value being 16 and the minimum being 4. The average for gender diversity was 6.526, showing that about 60% of the board members are females. The number of executive and non-executive directors was 8.105 and 2.000, respectively. This indicates that executive members are less represented on the board as compared to non-executive directors.

In essence, operating profit/loss also recorded a negative average value of 648105.26 Rand, revealing that SAA is making more losses than profits. This confirms the argument regarding the operating income/losses of SAA. The interest cover ratio had a mean value of 0.947, which is less than the required average of 1.5 for every SOE. The average interest cover ratio suggests that SAA is burdened by debts and has less capital to finance its operations.

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
GDP	76	3264386.7	1423665.4	-1674645.3	5690794
Return on asset	76	-0.132	0.201	-0.567	0.199

Return on capital	76	-0.025	0.057	-0.216	0.081
Return on equity	76	-0.207	0.552	-2.124	0.974
Operating Costs	76	23640526	6464557.1	11523719	33703781
Total assets	76	15141526	1691535	7652906.5	17659500
Total Liability	76	18009632	6765366.4	6613000	34285875
Equity multiplier	76	2.209	1.682	0.835	6.352
Net income/loss	76	-2015000	3071975.6	-9480594	3033156.3
Equity	76	9847263.1	4239526.7	1572687.5	13134031
Employee benefits	76	4482263.2	1255786.7	2175750	7220250
Taxation	76	50263.158	160916.91	-221656.25	547406.25
Board size	76	10.105	3.447	4.344	16.406
Gender diversity	76	6.526	1.651	2.75	10.125
Non-executive	76	8.105	2.953	2.906	13.625
Executive	76	2.000	0.812	0.844	3.313
Interest cover ratio	76	0.947	3.786	-8.187	10.141
Operating profit/loss	76	-648105.26	1386015.8	-3111875	2199812.5

4.3. Correlation Matrix

The Pearson Pairwise matrix for correlation presented in Table 2 shows the extent of linear dependency and strength among the variables used in the study. The explanatory variables were taken as their ratio of the outcome variable and log transformations to avoid spurious correlation results. The choice to de-trend the variables is evident in their weak associations presented in the table below. Also, it is worth noting that some of the values are measured in percentages.

It can therefore be seen from t Table 1 that non-executive directors and board size have a strong correlation between them, with a correlation of 0.980. This is followed by the equity and equity multiplier, which shows a strong negative correlation of -0.956. The correlation between total liabilities and interest cover ratio indicates a negatively weak correlation, which is -0.006.

Table 2: Correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(1) GDP	1.000																	
(2) return on asset	-0.339	1.000																
(3) return on capital	0.010	0.129	1.000															
(4) return on equity	0.086	0.790	-0.128	1.000														
(5) operating costs	0.873	-0.415	-0.023	-0.075	1.000													
(6) total assets	0.149	0.002	0.626	-0.017	0.074	1.000												

(7) total liability	0.782	-0.688	0.017	-0.362	0.801	0.207	1.000						
(8) equity multiplier	-0.574	0.290	0.020	0.050	-0.692	0.090	-0.462	1.000					
(9) net income loss	-0.285	0.994	0.107	0.810	-0.362	-0.041	-0.664	0.276	1.000				
(10) equity	0.716	-0.257	0.138	-0.002	0.795	0.086	0.555	-0.956	-0.233	1.000			
(11) employee benefits	0.588	-0.452	-0.365	-0.211	0.714	-0.431	0.683	-0.538	-0.410	0.524	1.000		
(12) taxation	-0.376	0.100	-0.202	-0.092	-0.488	0.169	-0.487	0.239	0.074	-0.319	-0.273	1.000	
(13) board size	0.176	0.452	0.365	0.211	0.714	0.031	-0.683	-0.538	0.410	0.524	-0.273	-0.538	1.000

	11	37	81	27	57	68	0.089	0.323	39	10	0.030	0.155	00					
(14) gender diversity	-0.209	0.448	0.328	0.225	-0.261	0.016	-0.288	-0.024	0.425	0.043	-0.276	0.145	0.831	1.000				
(15) none executive	0.029	0.426	0.326	0.305	0.066	0.049	-0.148	-0.265	0.423	0.338	-0.104	-0.122	0.980	0.856	1.000			
(16) executive	0.366	0.306	0.429	0.279	0.427	0.110	0.164	-0.406	0.324	0.510	0.250	-0.214	0.682	0.415	0.521	1.000		
(17) interest cover	0.044	-0.139	-0.796	0.038	0.140	-0.308	-0.006	-0.049	-0.124	-0.027	0.245	0.446	-0.272	-0.316	-0.257	-0.220	1.000	
(18) operating profit	-0.403	0.423	0.848	0.027	-0.417	0.406	-0.395	-0.206	0.376	-0.156	-0.529	0.008	0.285	0.375	0.242	0.330	-0.758	1.000

4.4. Model Diagnostics

4.4.1. Unit Root Test (was done using the augmented dickey fuller test)

Table 3 presents the t-statistics for the Augmented Dickey-Fuller (ADF) (Dickey & Fuller, 1979) unit root test results of the variables. The test was necessary to ensure that only stationary variables are used in the model to satisfy the preconditions for the econometric technique adopted for the study. The test was further important for ensuring that none of the variables is integrated of the second order. For these reasons, the study stated a null hypothesis of no stationary amongst variables against the alternative hypothesis of variables being stationary.

Table 3: Unit Root Test

	Initial Level *I*(0)		**First Difference *I*(1)**	
Variable	**Statistic**	**P-value**	**Statistic**	**P-value**
GDP	-1.499	0.534	-5.518	0.000
Return on Assets	-3.360	0.012	-4.025	0.001
Return on Equity	-4.405	0.000	-4.369	0.000
Return on Capital	-3.712	0.003	-4.133	0.000
Total Assets	-4.319	0.000	-3.987	0.001
Total Liabilities	-1.369	0.597	-3.207	0.019
Equity Multiplier	-2.569	0.099	-4.235	0.000
Net Income	-3.402	0.010	-4.065	0.001
Equity	-2.104	0.242	-4.118	0.000
Employees Benefit	-1.247	0.652	-5.553	0.000
Taxation	-3.346	0.012	-4.412	0.000
Board Size	-2.674	0.078	-3.930	0.001
Gender Diversity	-3.099	0.027	-4.087	0.001

Nonexecutive	-2.794	0.059	-3.968	0.001
Executive	-3.440	0.009	-4.632	0.000
Interest Cover Ratio	-3.717	0.003	4.254	0.000
Operating Profit/Loss	-2.850	0.051	-4.441	0.000

The results highlight that conclusions on variables stationary is drawn by comparing the calculated ADF test statistics against the ADF critical values at a 5% significance level. The stated null is rejected when the calculated test statistics are less than the critical values of ADF at the 5% level. The ADF test results show all the variables, except GDP, Total Liabilities, Equity, and Employees Benefits that are stationary at the initial level. In addition, all the variables are stationary at the first differentials. Thus, the ADF results also show that none of the variables are integrated with order two I(2), affirming the study's decision to adopt the ARDL model

4.4.2. Normality test

The Jarque Bera test is carried out to detect non-normality in the estimated residual series of the model. It is a goodness of fit test that signals if the data has a normal distribution. The decision criterion is that the null hypothesis of a normal distribution is rejected with a P-value less than the significance level of 5%. While A P-value higher than the significance level implies that the null hypothesis is not rejected. The results of the Jacque Berra Test, as shown in Table 4, indicate that almost all the variables are normally distributed. This is further confirmed by the skewed and kurtosis test for normality, showing consistency in the results. The results for return on equity and taxation showed non-normality based on their significant value, and this was corrected by taking their log transformation.

Table 4: Normality Test

Variable	Skewness	Kurtosis	Jacque Berra Test
GDP	0.9636	0.7304	0.8343
Return on asset	0.2215	0.1519	0.3581
Return on capital	0.2716	0.2678	0.608
Return on equity	0.001	0.003	0.000
Operating Costs	0.9647	0.0648	0.5271
Total assets	0.0525	0.1010	0.1475
Total Liability	0.1365	0.6951	0.4495
Equity multiplier	0.0157	0.7307	0.0908
Net income/loss	0.1631	05401	0.393
Equity	0.0562	0.2928	0.1726
Employee benefits	0.7577	0.1027	0.546
Taxation	0.0125	0.0418	0.0225
Board size	0.8990	0.1045	0.5618
Gender diversity	0.9487	0.4042	0.9845
Non-executive	0.7707	0.1425	0.5770
Executive	0.999	0.017	0.4518
Interest cover ratio	0.7368	0.5311	0.9638
Operating profit/loss	0.9656	0.2780	0.6696

4.5. Ratio Analysis

Ratio analyses are used to measure four basic aspects of financial statements, namely:

Liquidity and efficiency ratios – measures the ability of the organisation to meet its short them obligations and to efficiently generate revenue.

Profitability ratios – these measure the ability of the organisation to provide financial rewards that are sufficient to attract and retain financing.

Solvency ratios – these measure the ability of the organisation to generate future revenues and meet its long-term obligations.

Activity ratios – these measure the ability of the organisation to efficiently manage working capital.

The results of the types of ration analysis is presented and discussed below:

4.5.1. Liquidity ratios

Figure 1: Liquidity Ratios

Year	Current Ratio
2019	0.31
2018	0.29
2017	0.36
2016	0.54
2015	0.41
2014	0.55
2013	0.55
2012	0.68
2011	0.82
2010	0.83
2009	0.86
2008	0.95
2007	0.80
2006	0.64
2005	0.78
2004	0.50

2003	**0.39**
2002	**1.12**
2001	**1.04**
Average	**0.65**

Liquidity ratios are concerned with measuring the organisation's ability to pay current debt obligations without the need to raise external capital. This type of ratio analysis therefore looks at the organisations ability to convert assets into cash in a quick and affordable manner. SAA is not involved inventories; hence, the quick ratio and current assets ratios are the same. The results show that the current ratio indicates how many times the current assets of an organisation can service its current debts. Generally, a current ratio of 2 is acceptable as it shows that the organisation can cover its current debts two times using its current assets. The results further show that SAA has an average current ratio of 0.65 over the period. This indicates that the current assets cannot cover the current liabilities. This is of great concern as this rate has been deteriorating since 2002 and currently standing lower than the average ratio.

4.5.2. Profitability ratios

Figure 2: Profitability Ratios

Year	Return on Assets	Gross profit Margin	Net profit Margin	Return on Equity
2019	**-35.21%**	**-9.79%**	**-18.68%**	**-39.13%**
2018	**-42.13%**	**-9.06%**	**-18.63%**	**-42.49%**
2017	**-33.58%**	**-8.57%**	**-17.22%**	**-41.12%**
2016	**-8.94%**	**1.16%**	**-4.91%**	**-11.57%**

2015	**-39.20%**	**-8.11%**	**-18.66%**	**-43.59%**
2014	**-16.16%**	**-1.24%**	**-8.56%**	**-20.09%**
2013	**-7.90%**	**-1.57%**	**-4.44%**	**-9.34%**
2012	**0.41%**	**-5.51%**	**0.25%**	**0.47%**
2011	**5.33%**	**4.45%**	**3.30%**	**5.79%**
2010	**3.77%**	**5.46%**	**2.48%**	**4.31%**
2009	**2.28%**	**7.07%**	**1.38%**	**3.26%**
2008	**-6.25%**	**-4.32%**	**-4.82%**	**-9.57%**
2007	**-5.82%**	**-6.64%**	**-4.28%**	**-7.78%**
2006	**0.46%**	**-3.32%**	**0.33%**	**2.25%**
2005	**3.76%**	**3.34%**	**3.72%**	**22.40%**
2004	**-50.99%**	**0.82%**	**-52.70%**	**-95.86%**
2003	**-38.42%**	**3.34%**	**-36.61%**	**-191.14%**
2002	**13.55%**	**-6.10%**	**15.69%**	**68.56%**
2001	**3.80%**	**-15.91%**	**3.76%**	**13.05%**
Averages	**-13.22%**	**-2.87%**	**-8.35%**	**-20.61%**

Profitability ratios are concerned with measuring the ability of an organisation to generate profit. This therefore measures the efficiency in which an organisation generates profit and the value it creates for its shareholders. SAA averages for the past 19 years indicate that no value has been created for shareholders and subsequently, the organisation is highly inefficient in generating a profit. SAA has been on the loss-making stage for a number of years. SAA only posted positive returns during the years 2001 – 2002 and 2009 – 2012.

The results on return on equity show that over the period of 2001 to 2019, the shareholders of SAA have incurred an average loss of 20% on the equity invested with the organisation. The use of SAA's assets also shows a negative average of

13.22%, this highlights the manner in which SAA is failing to deploy its assets in a manner that will generate sales and ultimately a profit.

4.5.3. Solvency ratios

Figure 4: Solvency Ratios

Year	Debt to equity	Debt Ratio	Equity Multiplier	Interest Cover
2019	2.13	1.75	1.11	1.85
2018	2.03	1.67	1.01	1.81
2017	2.62	1.43	1.22	1.62
2016	2.15	1.08	1.30	- 0.41
2015	1.83	1.18	1.11	4.98
2014	1.52	1.04	1.24	1.42
2013	1.25	0.85	1.18	2.23
2012	1.13	0.73	1.13	8.95
2011	1.06	0.68	1.09	- 5.99
2010	1.17	0.67	1.15	- 5.36
2009	1.37	0.64	1.43	- 5.23
2008	1.31	0.61	1.53	2.53

2007	**1.20**	**0.56**	**1.34**	**3.36**
2006	**4.43**	**0.59**	**4.84**	**1.49**
2005	**5.02**	**0.50**	**5.96**	**- 1.45**
2004	**2.18**	**0.88**	**1.88**	**- 0.25**
2003	**5.40**	**0.67**	**4.97**	**- 1.15**
2002	**3.13**	**0.41**	**5.06**	**1.95**
2001	**2.19**	**0.47**	**3.43**	**5.64**
Averages	**2.27**	**0.86**	**2.21**	**0.95**

Solvency ratios are primarily concerned with measuring the size of the organisation's profitability in relations to its liability obligations; it therefore gives a feel of how likely an organisation is to continue meeting its debt obligations.

Looking at the average debt to equity over the period of 2001 to 2021, SAA has twice as much external debt to equity; this describes a healthy relation between debt and equity. Therefore, the results show that for every R1 invested in SAA, 66 cents comes from debt and 33 cents is sourced from the shareholders. SAA is therefore more reliant on its external debt than it is to shareholders.

The debt ratio measures the extent to which organisations assets are financed through debt. Generally, a debt ratio of less than 0.5 indicates a good financial base, while a debt ratio of greater than 1 is highly worrisome. SAA's average debt ratio is at 0.86 indicating a negative outlook; however, still stable. It is worth noting though that the debt ratio has been greater than 1 since 2014, this indicates an extremely high risk on the financial future of SAA. Consequently, this implies that more assets

of the organisation are financed and funded through debt. This is further support by the average equity multiplier of 2.21,indicating that more than half of SAA's assets are financed through debt, SAA has, over the years, managed to reduce its equity multiplier; pointing to the fact that more equity finance has been needed over time. This is likely due to the fact that external financiers have been reluctant to finance SAA.

Furthermore, interest cover indicates if an organisation is earning enough income to cover its annual interest obligations, SAA has an average interest cover rate of 0.95; this indicates that SAA can only pay its obligations less than 1. Generally, an interest cover rate of 2 is considered adequate as it indicates the number of times an organisation can pay its interest obligations using its earnings. SAA average interest cover of 0.95 indicates that the slightly dip in revenue will results in SAA being insolvent. It is noteworthy to state that the interest cover rate has improved since 2017 and is generally around 2; therefore, indicating a high improvement in SAA's ability to serve interest.

4.5.4. Activity ratios

Figure 5: Activity Ratios

Year	Receivables turnover	Receivables days	Payables turnover	Payables days	Fixed asset turnover	Total assets turn over
2019	**18**	**20**	**9**	**41**	**376.69 %**	**188.53 %**
2018	**-15**	**-25**	**-42**	**-9**	**320.03 %**	**226.17 %**
2017	**-21**	**-17**	**7**	**49**	**297.57 %**	**195.03 %**

2016	11	32	27	14	257.37 %	181.97 %
2015	-14	-26	97	4	231.80 %	210.04 %
2014	15	25	8	44	241.99 %	188.81 %
2013	-230	-2	12	30	158.42 %	177.69 %
2012	-44	-8	22	17	146.08 %	164.39 %
2011	-50	-7	-56	-6	151.77 %	161.31 %
2010	-31	-12	-36	-10	150.73 %	152.13 %
2009	-22	-16	-113	-3	143.65 %	165.43 %
2008	7	54	11	32	148.04 %	129.73 %
2007	13	28	60	6	102.63 %	136.08 %
2006	-14	-26	-54	-7	93.92%	139.82 %
2005	-22	-17	-3	-137	80.99%	101.01 %
2004	5	75	4	98	156.84 %	96.75%
2003	-5	-69	4	87	91.40%	104.94 %
2002	7	52	11	34	74.60%	86.33%

2001	**2**	**176**	**2**	**146**	**91.59%**	**100.96 %**
Averages	**-20**	**12**	**-2**	**23**	**175%**	**153%**

Activity ratios are a measure of how the organisation is leveraging its assets to generate revenue and cash.

The receivables day's measures the average days in which on organisation receives payment from its suppliers; while the payables days measure the average days in which debts are paid. Over the average days for the 19 years, SAA has been delaying to settle its debtors. This is comparison to the average days it takes for it to be paid by its customers. This is further complimented by the high total assists and fixed assets turnover rate. The results highlight that SAA has an average rate of 153% in respect of total assets; thereby indicating that its assets are leveraged to generate cash. This is indicative on the industry in which SAA operates in, the industry is categorised by mainly customers who pay in order to use the service.

However turnover rates paint a different picture of the organisation. Therefore, this highlight that SAA is failing to holistically leverage its assets to generate any revenue. The results showed that the turnover rate of receivables is an average of -20% thus painting a picture of struggles to collect from customers. These might be indicative of SAA major business, government and other clients who would primarily take time to pay their debts.

4.5.5. Conclusion

Liquidity ratio shows that SAA is struggling to pay its current liabilities using its current assets. The ratio indicates that SAA is unable to serve all of its current

liabilities using its available assets. Profitability ratios show that SAA is highly inefficient in generating profit and a return for its shareholders. The profitability ratios indicate that SAA is not creating any value for its equity holders and that capital advanced into the business has been eroded in value, it shows an organisation that is not effective and efficient in deploying its assets in a manner that bring in returns.

The solvency ratio indicate that the company is highly dependent on external funding to service its debts, this emphasis the fact that SAA is not making sufficient turnover to cover its costs and therefore relies on debt to bring the gap. These ratios also indicate that any dip in revenue or interruption in SAA's services would be catastrophic to the financial wellbeing on the organisation. The activity ratios indicate that SAA is not efficient in turning over its receivables and therefore its credit policies are inefficient.

4.6. Regression Analysis

4.6.1. Objective One

Table 5 presents the results of the time series regression model to determine the factors influencing the profitability of SAA. An ordinary least square regression technique was used in this analysis. The results showed an R^2 of 0.897, which indicates that the independent variables explain about 89% of the variation in the dependent variable. The Prob. > F is statistically significant at 1% (0.000), showing that all the variables are fit to be used in the regression model. Two performance indicators were used thus return on assets and return on equity. These two measures were used to determine how much profit is generated from the assets of SAA and the amount they earn concerning the equity put into the SOE.

The results in Table 5 show that several factors influence the performance of SAA. It is shown that total assets have a positive impact on the profitability of SAA. This was consistent in both models, where the return on asset and return on equity were used as dependent variables. The relationship was statistically significant at a 1% level for both models. The results indicate that an increase in the asset of SAA is more likely to affect their performance. Net income also showed similar results. Table 5 reveal that net income has a positive relationship with both performance indicators. Equally, the relationship between net income and return on assets was also statistically significant at 1%. This is not surprising since high-income levels are expected to have an enhancing impact on the performance of a firm.

In addition, the results on total liabilities showed a significant negative relationship with the two performance indicators. The results imply that when SAA rely more on debt to finance their business, they are more likely to experience reductions in their profitability. Equity, which shows the value of shares issued by SAA, was positive. The relationship was also statistically significant at 1% and 5% for return on asset and equity, respectively. In the same vein, employee benefits reveal a significant positive relationship with return on asset and return on equity at 1% and 5%, respectively. A negative relationship was found between taxation and both performance indicators, and this was statistically insignificant.

Table 5: What are the factors that influence the profitability of SAA?

	(1)	**(2)**
VARIABLES	**Return on asset**	**Return on equity**
Total Assets	0.939***	5.748***
	(0.111)	(0.826)
Net Income	0.0322**	0.112
	(0.00830)	(0.0664)

Total Liability	-0.490***	-2.773***
	(0.0611)	(0.459)
Equity	0.102***	0.466**
	(0.0137)	(0.102)
Employee Benefits	0.111***	0.753**
	(0.0225)	(0.176)
Taxation	-0.00175	0.00232
	(0.00132)	(0.00895)
Constant	-11.15***	-69.67***
	(1.446)	(10.94)
Observations	11	11
R-squared	0.897	0.894
Prob>F	0.000	0.000

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

4.6.2. Objective Two

The second objective of this study sought to examine the impact of corporate governance on the performance of SAA. Four corporate governance factors were considered which are: size, gender diversity, non-executive directors and executive directors of SAA board. The $R^{2,}$ which shows how much of the independent variables explain the variation in the dependent variables, was 0.422; indicating that the independent variables explain only 42% of the variation in the dependent variable. The Prob. > F is statistically significant at 1% (0.000), showing that all the variables are fit to be used in the regression model. Similar to objective one, return on assets and equity were used as measures of performance.

According to the results in Table 6, it is found that board size, which explains the total number of directors on a company's board, positively affected SAA's performance. This relationship was statistically significant across all the models. Gender diversity revealed an inverse relationship, but this was statistically

insignificant. In addition, the number of non-executive directors on the board was negative and was significant on return on equity. The negative relationship indicates that having females on the board and non-executive directors weakens the performance of SAA. This may be attributed to the fact that women are considered as subordinates; hence, have less power to influence board decisions. In terms of the executive directors, the study found a positive relationship, and this relationship was significant with return on equity.

Regarding the control variables, the equity multiplier revealed a significant positive relationship. This was consistent throughout the models. This explains the risk taken by SAA. The positive relationship shows that higher risk taken to finance debt directly impacts SAA performance. Also, the interest cover ratio, which narrates how easily a company can pay interest on its outstanding liabilities, was positive with return on assets, but this was insignificant. The relationship between interest cover ratio and return on equity was also positive and significant at a 10% level.

Table 6: The influence of Governance on the performance of SAA

	(1)	**(2)**	**(3)**	**(4)**
VARIABLES	**Return on asset**	**Return on asset**	**Return on equity**	**Return on equity**
Board size	0.0793***	0.0310**	0.192***	0.0960**
	(0.0261)	(0.0140)	(0.0577)	(0.0394)
Gender diversity	-0.00518	-0.00518	-0.0916	-0.0916
	(0.0209)	(0.0209)	(0.0595)	(0.0595)
Non-executive	-0.0483		-0.0961**	
	(0.0300)		(0.0481)	
Executive		0.0483		0.0961**
		(0.0300)		(0.0481)
Equity multiplier	0.0649***	0.0649***	0.0992***	0.0992***

	(0.0111)	(0.0111)	(0.0340)	(0.0340)
Interest cover ratio	0.00325	0.00325	0.0234*	0.0234*
	(0.00398)	(0.00398)	(0.0130)	(0.0130)
Observations	76	76	76	76
R-squared	0.422	0.422	0.195	0.195
Prob>F	0.000	0.000	0.000	0.000

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

4.6.3. Objective three

The third objective of this study sought to investigate the impact SAA performance has on the economic growth of South Africa. The GDP of South Africa was used as a proxy for economic growth. Several independent variables were considered for the analysis. A relatively high R^2 shows how well the independent variables explain the variations in the dependent variable. The results in Table 7 narrate that all the independent variables jointly explain economic growth by 82% in the model.

Regarding the independent variables, the results also show that the impact of return on assets on economic growth is negative but statistically insignificant; showing that return on asset has no effect on growth. Return on capital and return on equity significantly recorded a significant positive effect on economic growth at 10% and 1%, respectively. Thus, an increase in the returns on capital and equity will significantly influence economic growth in South Africa. In the case of taxation, the study found a positive relationship, and this was significant at 1%. This means that the payment of taxes by SAA to the South African government is vital in driving economic growth.

The estimated results for total assets of SAA were positive; however, this was statistically insignificant. Also, the coefficient for employee benefit was positive, suggesting that the higher benefit employees receive, the more eager they are to increase productivity, promoting economic growth. The relationship was found to be statistically significant at 1%. Regarding the operating profit/loss of SAA, the

relationship was negative and significant at 10%. This is due to the fact that SAA have been experiencing operating losses. This is supported by the negative mean value (-648105.26) in the descriptive analysis. Hence, the argument is that higher losses made by SAA are more likely to have an adverse effect on the growth of South Africa.

Table 7: The impact of SAA on the economic growth of South Africa

	(1)
VARIABLES	**GDP**
Return on asset	-0.943***
	(0.146)
Return on capital	6.491*
	(3.394)
Return on equity	0.612***
	(0.0725)
Taxation	3.33e-07***
	(1.00e-07)
Total assets	1.85e-08
	(1.60e-08)
Employee benefits	2.07e-07***
	(3.19e-08)
Operating profit/loss	-2.07e-07*
	(1.18e-07)
Constant	13.75***
	(0.229)
Observations	74
R-squared	0.824
Prob>F	0.000

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

5. CHAPTER FIVE – DISCUSSION OF FINDINGS

5.1. Introduction

The previous chapters outlined the study's rationale and objectives of the study. The study sought to examine the factors that affect the performance of SAA and its impact on the economic growth of South Africa. The study followed a quantitative approach to respond to the research objectives and questions. Data was collected from secondary sources and analysed using content analysis and time series analysis. This chapter discusses the findings of the study. This is done by identifying the key implications of the findings for research. The conclusion addresses the study's limitations and also make suggestions for future research.

5.2. Discussion on Descriptive Statistics

The study's findings revealed that SAA has been making more losses than profits. In recent years, a growing number of SOEs) have been struggling, with some on the verge of failure (Nyatsumba & Pooe, 2021). Therefore, the case of SAA is not different. This argument is confirmed by the negative average for the three profitability indicators (i.e., return on assets, return on equity, and return on capital). This implies that the return SAA makes over the 2001 to 2021 period is less than their assets. This also indicate that SAA is experiencing high financial distress. These results are further established by net income/loss and operating profit/loss, which are also negative. The challenges facing SAA can be related to several operational and leadership issues. This is a great call to the government and SAA to ensure that actions are taken to reduce costs related to operational activities and enhance performance.

According to Vermooten (2020), SAA has a history of poor leadership and has been losing money since 2012. For Example, the SOE lost a total of R26, 9 Billion between 2007 and 2019. In order to address this shortcoming, several strategic

decisions were made. Some of these include the implementation of the Long-term Turnaround in 2013 (Joffe, 2019); and the SAA Business Restructuring Plan in 2014. Despite these reforms, the performance of SAA continued to deteriorate due to frequent change in leadership and political interference. Other reasons found include shareholders' slow decision-making, under-capitalisation of the airline, unstable political leadership, unhealthy board dynamics, leadership instability, and lack of management skills (Nyatsumba & Pooe, 2021). If SAA is going to enjoy positive returns, management must ensure that these factors are addressed. The discussion on the objectives of the study is provided below:

5.3. Objective One

The first objective of this study sought to determine the various factors driving the performance of SAA. Given the levels of inequality and the government's failure to deliver basic services, the deteriorating financial position of SOEs in South Africa has become a growing source of concern for the general public. This has sparked the debate about the effectiveness and value of SOEs. To overcome these challenges, several factors were considered in this study, and two main outcome variables were applied as measures of profitability. That is, return on assets and return on equity. These were adopted to determine how much profit is generated from the assets of SAA and the amount earned with regard to the equity put into the business.

The firm size, which determines the extent of growth in a company, was positive and statistically significant. This relationship holds for both return on assets and return on equity. The study found that the performance of the airline is highly influenced by the extent of growth experienced. This is because larger firms have more capabilities and resources to employ the right expertise; hence, improving business success Kifle (2016). Subsequently, big businesses grow faster than smaller businesses because they benefit from economies of scale and generate more revenues (Olakunle & Oni, 2013). Again, the findings revealed that the impact

of net income on the performance of SAA is positive and significant. Though SAA has been making good returns during the period under review, the study revealed that improved performance, which leads to higher income, will increase its profitability (Sithomola, 2019).

Equity and employee benefits also disclosed a significant positive relationship with the two performance indicators. The findings suggest that the issue of shares to the general public attracts more financial resources to SAA, which ensures stability and higher performance (Mhlanga et al., 2018). The findings regarding employee benefits indicated that the airline must adopt different forms of non-monetary and monetary compensation for employees (Barros & Peypoch, 2009). This will serve as a source of motivation and make them committed to the organisation's strategic objectives. According to the stakeholders' theory, stakeholders feel a sense of belonging when the organisation responds to their needs; hence, more inclined to work harder to increase productivity (Klimczak, 2005).

The findings for total liabilities were negative and significant at a 1% level of significance. This was consistent with the two performance measures. The finding is not surprising because higher debt is more likely to lead to financial distress, which may have an adverse impact on the performance of SAA (Chilenga, 2016; Omarjee, 2020). Similarly, taxation unveiled an inverse relationship with return on assets.

5.4.1. Objective Two

Objective two sought to examine the role of corporate governance on SOEs. Corporate governance is the process by which businesses are directed and controlled by the state (Ntsene, 2020). Corporate governance is one of the critical factors that can help an SOE attract domestic and foreign investors, and maximise the societal benefits of investment. However, SAA has recently emerged as one of

the worst underperformers among the existing SOEs. This is due to leadership crises and poor corporate governance systems.

The findings revealed that board size had a positive impact on the performance of SAA. This relationship was statistically significant across all models. This shows the size of the board is a great determinant of performance at SAA. This is also because the board is in charge of establishing the values to which a company must follow (Ntsene, 2020). This finding confirms the assertion made by Nyatsumba and Pooe (2021), which highlighted that more stable and large board size is recommended to enhance the SAA performance. This can only be possible if the boards have the necessary authority, competencies, and objectivity to provide strategic guidance and managerial oversight (Makoni, 2015). Ntsene (2020) adds that SOEs must ensure that the management and board conduct is consistent with the established values as enshrined in the King III report.

Moreover, a negative relationship was found between gender diversity and SAA performance, but it was statistically insignificant. On the same note the number of non-executive directors on the board was negative, which had a significant impact on return on equity. The negative relationship indicates that having female board members and non-executive directors reduces SAA's performance. This could be due to the fact that they have less power to influence board decisions. According to the Howard and Seith-Purdie (2005) and the National Planning Committee (2019) report, the appointment of independent directors to serve on the board of SAA is problematic. This is because the corporate governance principle of appointing members is either not properly interpreted or applied. Panicker and Manimala (2015) confirm that some of the board members are being appointed because of their political standing. According to van Deventer (2018), there is currently a high level of non-compliance within corporate governance. Again, the poor interpretation and application of corporate governance principles are likely to make the diversities

on the board ineffective. This will likely affect the inclusion of females and non-executive directors' influence on the board.

In terms of executive directors, the findings discovered a positive relationship, which was significant concerning return on equity. Executive directors are mostly involved in steering the organisations. The result shows that having qualified executive directors is very essential because they possess the needed experience and oversight over SAA. Nyatsumba and Pooe (2021) suggest that the airline should hire appropriately qualified executives with the necessary aviation industry skills and expertise.

5.4.2. Objective Three

Despite a strong economic policy framework, job creation and productivity growth remain too low in many countries, including South Africa. Therefore, the support of the required rapid and sustained GDP per capita growth is being neglected. SOE contribute significantly to economic development OF South Africa and the globe. This is done through attracting capital equipment, finance, and partnerships. It is on this note that this study examines the impact of SAA on the economic growth of South Africa.

The findings of this study showed that return on assets has a negative impact on economic growth. This relationship was found to be statistically insignificant, indicating that return on assets does not affect growth. The negative results suggest that return on assets has an adverse impact on the performance of the South African economy. This is due to the fact the SAA has not been making any profits over the period of 2001 to 2021. This is also confirmed by the negative average values in the descriptive statistics. According to Ward (2021), the airline continues to lose profits due to the poor strategies adopted by the government and leadership of SAA. Vermooten (2020) affirms this assertion by stating that SAA has a history of poor leadership and this has resulted in the loss of revenue since 2012. For

instance, SAA had 14 CEOs between the period1994 and 2020, with half of them serving as Acting CEOs Nyatsumba and Pooe (2021). This instability affects the operations of the airline, which obviously leads to bad performance.

On the other hand, the findings revealed that return on capital and return on equity both had a significant positive effect on economic growth. However, the relationship was weakly significant for return on capital. The positive results indicate that an increase in capital and equity returns will have a significant impact on South African economic growth. It also suggests that efficient management of the airline will improve profitability, which will also promote economic growth (Tleane, 2020). In the case of taxation, the study discovered a positive relationship, which was statistically significant at 1%. This means that SAA's tax payments to government are critical in driving economic growth. This is consistent with other studies which suggested that the imposition of taxes on businesses stimulates economic growth (Baaziz, 2015; Burger & Calitz, 2021); this is because it provides revenue to the government to carry out its developmental projects (Ncanywa & Masoga, 2018).

In addition, the coefficient value for total assets was positive. The size of a business reveals the extent of operation and growth in every aspect of the business over a given period of time. The positive results explain that employing the right resources and capabilities to manage SAA will improve the success of the business (Chilenga, 2016; Mhlanga et al., 2018). One of way of defining size is by looking at the number of employees an entity has. The coefficient value for this variable is consistent with total assets. The relationship was discovered to be statistically significant at 1%. The result implies that employees who receive higher benefits are more likely to work harder in order to increase productivity. In terms of SAA's operating profit/loss, the relationship was negative and significant at 10%. This is due to SAA's primary operating losses. The descriptive analysis's negative mean value supports this (-648105.26). As a result, greater SAA losses are more likely to have a negative

impact on South Africa's economic growth. The summary and recommendations of the study are discussed below.

6. Chapter 6 – Summary and conclusion

6.4. Summary and conclusion

This study seeks to understand the factors that affect the performance of SAA and the impact it has on the economic growth of South Africa. Various methods were used to measure and analyse publicly available financial information on SAA. SAA is a company in financial distress and has been kept afloat by continuous financial bailout from government. Conversely, SAA last recorded a profit in 2011, and has been in continuous decline ever since. The findings indicated that almost all the variables are normally distributed. This was further confirmed by the skewed and kurtosis test for normality; showing consistency in the results. The results for return on equity and taxation showed non-normality based on their significant value, and this was corrected by taking their log transformation.

SAA has over the years accumulated more liabilities and operational costs than assets. This was highlighted and affirmed by the negative mean values. The study found that more than half of SAA's assets are financed through debt and other interest bearing liabilities; hence the average equity multiplier of 2.209.This is likely to affect performance as all the returns made are used to pay debts, leaving no room for acquisition of assets. The asset turnover rates showed that SAA is failing to leverage its assets to generate revenue; therefore, the turnover rate of receivables is an average of -20% painting a picture of struggles to collect from customers. These might be indicative of SAA major business, government and other clients who would primarily take time to pay its debts.

The findings also highlighted the interest cover ratio which has a mean value of 0.947, this is less than the required average of 1.5 for healthy companies. The study

found that an interest ratio highlights that SAA is overburden by its liabilities therefore affecting the ability to recapitalize which is likely to increase maintenance and fuel consumption. SAA has however, over the years managed to reduce its equity multiplier pointing to the fact that more equity finance has been needed over time; this is likely due to the fact that external investors have been reluctant to finance SAA.

SAA average interest cover rate indicates that SAA can only pay its obligations less than once. Generally, an interest cover rate of 2 is considered adequate as it indicates the number of times an organisation can pay its interest obligations using its earnings. SAA average interest cover of 0.95 indicates that the slightly dip in revenue will results in SAA being insolvent. It is noteworthy to state that the interest cover rate has improved since 2017 and is generally around 2; therefore, indicating a high improvement in SAA's ability to serve interest.

The study also found that the executive members are less represented on the board in comparison to non-executive directors. There is a strong correlation between executive and non-executive directors, thus indicating that executive directors are less represented on the board. This affects the ability to make decisions that are rooted in the day to day problems of the airline. In respect of gender diversity, 60% of the board members are females

SAA has an average current ratio of 0.65, which is quite bad considering an acceptable current ratio is 2, this is significant as it indicates that the current assets of SAA cannot cover the current liabilities, thus should all current assets be recalled SAA would not be able to settle them. The profitability of SAA highlights that no value has been created for shareholders over the past 19 years, subsequently the organisation is therefore highly inefficient in generating a profit. The return on equity also confirms this as it shows that shareholders have on average lost 20% on the equity invested in SAA.

6.5. Limitations

A few limitations were encountered during the process of conducting the research. SAA declined doing an interview due to the fact that they were in business rescue and subsequently an agreement to have an equity partner. Due to the fact that SAA was technically insolvent and the effects of the closure of travelling by the covid-19 SAA failed to publish the 2019, 2020 & 2022. The chosen strategic partner has also been clouded in secrecy, further stifling access to additional in depth information.

Due to government's secrecy in canvasing for a strategic equity partner and corruption related to government transaction, sensitive financial and none financial information might be hidden or not reported on in order to present favourable information to the prospective buyer.

6.6. Recommendation for further studies

The following are some of the areas that can be considered for future research:

- The cost implications of subsiding the SAA in the light of the socio-economic conditions affecting South Africa. Further to that, the strategic importance of SAA to the region and African continent at large must be enhanced.
- The strategic need of airlines regarding the movement of goods and people should be strengthened to boost the tourism sector.
- The importance of evaluating the need of a national carrier for South Africa, considering the size of the South African tourism industry must be emphasized.
- There should be a further study to evaluate the cost and effect of none profitable routes that are of strategic importance to the South African government and the economy of the country.
- There must be further investigations on the policy failures and prohibition of various acts that hinder the competitiveness of SOEs in general and SAA in specific.

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