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Closing the fiscal deficit in South Africa: Challenges and solutions to the current taxation framework

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DECLARATION

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ABSTRACT

South Africa faces persistent fiscal challenges, primarily driven by a widening budget deficit, inefficient revenue collection, and increasing public debt, exacerbated by global economic crises and the COVID-19 pandemic. Despite efforts to reduce debt-to-GDP ratios in the past, discretionary fiscal decisions and limited infrastructure investment have worsened fiscal imbalances. Debt servicing now consumes a significant portion of the national budget, surpassing allocations for education, health, and social protection, thereby hindering economic growth and public service delivery. Structural inefficiencies in the tax system, coupled with governance issues and a rising public sector wage bill, contribute to revenue shortfalls, in addition to corporate tax and VAT underperformance. This study investigated the relationship between fiscal deficits and revenue collection in South Africa, identifying the factors that result in insufficient revenue generation in South Africa. By focusing on strategies to bridge the deficit, the research aimed to inform policymaking, strengthen South Africa's fiscal health, and support sustainable economic development, while addressing global and regional fiscal trends. This study adopted a quantitative research design, leveraging measurable data and statistical techniques to analyse the relationship between fiscal deficit and revenue collection in South Africa. In particular, ordinary least squares and robust regression were used to determine the relationship. The study integrated systematic literature reviews to identify the factors resulting in insufficient revenue generation in South Africa. Secondary data from credible sources like the South African Reserve Bank, South African Revenue Services, National Treasury, World Bank, OECD, IMF, Google Scholar, Scimago, and other international organisations, were analysed to ensure validity and reliability. Construct validity was established through theoretical alignment and empirical testing, while data were presented via clear statistical methods, including meta-analyses for consistency. The findings reveal a persistent fiscal deficit averaging 4.4% of GDP, underpinned by stable but limited tax revenue at 25.1% of GDP. A weak correlation between tax revenue and fiscal balance underscores the greater influence of government expenditure efficiency and macroeconomic conditions on fiscal sustainability. Effective tax administration is impeded by issues like corporate tax avoidance, corruption, and difficulties in regulating the informal and digital economies. Key obstacles are outdated tax laws, institutional inefficiencies, and high informality. Digital transformation presents opportunities to enhance compliance and broaden the tax base, but these require supportive governance reforms and international collaboration. Anti-corruption measures, simplified tax systems, and targeted strategies for taxing digital services are crucial for sustainable revenue

generation. Addressing illicit trade, particularly in tobacco, demands coordinated inter-agency efforts. Recommendations emphasize improving expenditure efficiency, diversifying revenue streams through progressive taxes, leveraging digital tools for tax administration and strengthening intergovernmental relations. Future research should explore broader determinants of fiscal balance, governance quality, and the integration of sustainability considerations into tax policies. This multifaceted approach seeks to enhance fiscal stability, equity, and economic growth.

KEY WORDS: Fiscal deficit, Revenue collection, Public debt, Tax revenue, Government expenditure, Tax system inefficiencies, Digital transformation, Corruption, Sustainability, and Economic growth

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ACRONYMS

ADF	Augmented Dickey-Fuller
ARDL	Autoregressive distributed lag
AICPA	American Institute of Certified Public Accountants
ASEAN	Association of Southeast Asian Nations
BEPS	Base Erosion and Profit Shifting
BRICS	Brazil, Russia, India, China and South Africa
CD	Cross-sectional dependence
CIT	Corporate income tax
CGE	Computable general equilibrium
Covid-19	Coronavirus disease
CUSUM	Cumulative sum
CUSUMSQ	Cumulative sum of squares
EU	European Union
FAC	Financial and administrative corruption
FDI	Foreign direct investment
FE	Fixed effects
FIRS	Federal Inland Revenue Service
GDP	Gross domestic product
GMM	Generalized method of moments
GNI	Gross national income
ICT	Information and communication technology
IMF	International Monetary Fund
MNCs	Multinational Corporations
MOF	Ministry of Finance
Ms. Excel	Microsoft Excel
OECD	Organisation for Economic Co-operations and Development
OLS	Ordinary least squares
OPEC	Organization of the Petroleum Exporting Countries

PIT	Personal income tax
PP	Phillips-Perron
PP-GARCH	Generalized auto-regressive conditional heteroskedasticity
PPT	Petroleum profit tax
RE	Random effects
SA	South Africa
SARB	South African Reserve Bank
SARS	South African Revenue Services
SF	Stochastic frontier
SPSS	Statistical Package for Social Science
SSA	Sub-Saharan Africa
SVAR	Structural vector autoregressions
TI	Transparency International
UK	United Kingdom
US	United States
VAR	Vector autoregressive
VAT	Value added tax
VECM	Vector error correction model
WAEMU	West African Economic and Monetary Union
ZIMRA	Zimbabwe Revenue Authority

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 Introduction

Government expenditure can either be productive, contributing to economic growth, or unproductive, with limited impact on growth. At the same time, output taxes tend to inhibit growth. Importantly, a balanced government budget is not a prerequisite, as spending can be financed through various mechanisms. These include taxes, grants, and three forms of deficit financing: printing money, issuing domestic debt, or relying on external debt. While the effects of taxes and grants on economic growth are relatively straightforward, the impact of deficit financing is more nuanced. It depends on the combination of financing methods employed and the existing level of outstanding debt, making its relationship with growth more complex (Adam and Bevan, 2005). South Africa has been struggling to fast-track service delivery to its population due to fiscal deficit (National Treasury, 2024). South Africa is part of the world and is not exempt from issues that affect different countries in the world. Increased government debt inhibits its ability to provide services and make investments because more taxpayer money is being used to pay off the debt. Debt service expenses now account for 20% of government revenue and take up a greater portion of the budget than basic education, social protection, or health (National Treasury, 2024). This study focuses on the critical issue of reducing South Africa's budget deficit by evaluating the existing problems and possible solutions within the current taxation system. This mini dissertation seeks to analyse the current contributing factors to the deficit and propose innovative solutions to improve the effectiveness and efficiency of tax collection and the administration of the current tax system. The results from this study will offer significant perspectives and suggestions for decision-makers and interested parties who are continuously working towards improving the country's fiscal health.

1.2 Background to the Study

South Africa has grappled with persistent budget deficits since the 1980s, with only two budget surpluses recorded in 2007 and 2008, amounting to 0.3% and 0.7% of GDP, respectively due to economic growth which increased government revenue (Murwirapachena et al., 2013). The fiscal prudence of this period proved short-lived, as discretionary fiscal decisions post-2007, coupled with the global financial crisis, led to rising deficits and public debt (International Monetary Fund, 2009). Calitz et al. (2014) warned that unless the government took decisive measures, the sustainability of fiscal policy would be compromised.

While South Africa successfully reduced its debt-to-GDP ratio from 50% in 1994 to 27% in 2008, this came at the cost of a declining fixed capital-to-GDP ratio, which dropped from 90% to 55% (Burger et al., 2016). This decline in investment in infrastructure and services is a key contributor to the ongoing debate over whether South Africa's deficits stem more from ineffective governance or the scale of economic issues being addressed (Ramokgopa, 2021).

The COVID-19 pandemic further exacerbated fiscal pressures, necessitating increased government spending to support public health systems and social safety nets. Consequently, the budget deteriorated, with the Organisation for Economic Co-operations and Development OECD (2022) highlighting overspending and growing public demand. Structural reforms, such as tax benefit system redesigns, were recommended by OECD to address inequality while freeing fiscal space for growth-enhancing investments.

The fiscal challenges facing South Africa mirror broader trends in Sub-Saharan Africa (SSA). Public debt in the region has quadrupled since 2010, reaching \$583 billion in 2018, with debt-to-GDP ratios climbing from 24% in 2008 to 59% by 2018 (Abanikanda et al., 2023). The region's fiscal deficits have also widened, increasing from 4.8% in 2021 to 5.2% in 2022 (Abanikanda et al., 2023). These deficits are often driven by the dual imperatives of infrastructure development and social support, with temporary measures like tariff exemptions and subsidies used to mitigate economic hardships (Abanikanda et al., 2023).

South Asia's fiscal landscape highlights similar issues. Countries like Pakistan, India, and Sri Lanka report debt levels exceeding 70% of GDP and budget deficits surpassing 5% (Rajakaruna and Suardi, 2021). Persistent fiscal imbalances have led to deteriorating macroeconomic conditions, with rising interest costs on government debt further compounding the difficulties (Rajakaruna and Suardi, 2021). Pakistan, for instance, faced a budget deficit of 5.8% in 2017, while Sri Lanka's total deficit increased due to higher debt servicing costs (Rajakaruna and Suardi, 2021).

In developed economies, the COVID-19 pandemic intensified fiscal pressures, leading to unprecedented levels of deficit spending. Countries such as the United States (US), United Kingdom (UK), and Australia implemented expansive fiscal and monetary policies, including wage subsidies, tax exemptions, and emergency financial assistance, to stabilize their

economies (Makin and Layton, 2021). Central banks played a crucial role by cutting interest rates, purchasing government bonds, and facilitating credit to reduce debt servicing costs (Bordo and Levy, 2021). However, these measures came at the cost of surging debt levels. In the U.S., the budget deficit reached \$3 trillion in 2020, with national debt projected to exceed 160% of GDP by 2030 (Zhang, 2022). Similar trends were observed in Europe and Asia, underscoring the global nature of fiscal stress.

South Africa's fiscal problems share commonalities with SSA's infrastructure-driven deficits and South Asia's high debt burdens. However, unlike developed economies, where fiscal expansion is supported by robust monetary policies, South Africa's limited fiscal space and governance concerns constrain its ability to manage deficits effectively. Balancing fiscal consolidation with infrastructure investment by redirecting resources toward growth-enhancing infrastructure can address long-term service delivery deficits (Burger et al., 2016). Tax and governance reforms include redesigning tax systems to reduce inefficiencies and inequality while enhancing revenue mobilization (OECD, 2022).

1.3 Problem Statement

Since the 2008 global financial crisis, South Africa has struggled with persistent budget deficits as government expenditure has consistently exceeded revenue collection. This imbalance has led to a significant increase in public debt as a percentage of GDP, placing considerable pressure on the economy. The rising cost of servicing this debt—projected to reach R356 billion annually—has diverted resources from essential areas such as infrastructure development and public services. This diversion has adversely affected the quality of life for many South Africans and has hindered economic growth by limiting the government's capacity to invest in development priorities (National Treasury, 2023; OECD, 2022).

The underlying causes of these fiscal challenges are multifaceted. On the revenue side, corporate income tax, VAT, and mining royalties have underperformed in recent years, despite personal income tax meeting expectations (JUSTICE, 2023). On the expenditure side, escalating costs such as the anticipated unallocated increase in the public sector wage bill have exacerbated fiscal strain. Moreover, inefficiencies in the tax system, coupled with limited opportunities to increase revenue without imposing further economic distortions, have compounded the problem (OECD, 2022). As a result, the budget deficit is projected to widen from 4% of GDP in 2023/24 to 4.9%, signalling growing fiscal vulnerability.

The impact of this fiscal imbalance is far-reaching. Rising debt-servicing costs have constrained the government's ability to meet critical development goals, leaving South Africa trapped in a cycle of insufficient investment and stagnating economic growth. Furthermore, the country's ability to recover from revenue losses induced by global disruptions, such as the COVID-19 pandemic, remains limited, reflecting deeper structural weaknesses in its fiscal framework (OECD, 2022).

While much has been written about South Africa's fiscal challenges, existing studies often focus on macroeconomic outcomes without adequately addressing the role of inefficiencies within the tax system and their impact on revenue generation. There is a critical need for research that examines these inefficiencies and explores strategies to optimize the tax system's capacity to support fiscal sustainability. This study seeks to fill this gap by analysing the structural barriers to reducing South Africa's fiscal deficit and identifying actionable solutions. By doing so, it aims to contribute to a broader understanding of how fiscal reform can promote economic growth, enhance public service delivery, and align with the country's long-term development objectives.

1.4 Purpose and Aim

The objective of this study is to provide strategies on how to optimize the tax system to reduce the budget deficit in South Africa. The study will provide recommendations for improving South Africa's tax policy and compliance strategy as a way of narrowing the budget deficit.

1.5 Objectives of the Study

The research is guided by the subsequent precise objectives:

1. To determine the relationship between fiscal deficit and revenue collection in South Africa
2. To identify challenges that result in insufficient revenue generation in South Africa

1.6 Research Questions

The research is grounded on the subsequent research questions:

1. What is the relationship between fiscal deficit and revenue collection in South Africa?
2. What are the challenges that are preventing South Africa from optimizing revenue collection?

1.7 Significance of the Study

Tax policy presents a complex challenge for developing countries and emerging markets, particularly those striving to integrate into the global economy. An effective tax system must balance three key objectives: (1) generating sufficient revenue to fund critical expenditures without relying excessively on public sector debt, (2) fostering productivity and economic growth while minimizing barriers to economic activity, and (3) aligning tax policies with international norms and standards. However, developing nations often face significant obstacles in designing tax systems that are both effective and efficient, largely due to structural economic constraints, administrative inefficiencies, and limited enforcement capabilities.

In South Africa, these challenges are particularly pronounced. The country's economic structure, which is characterized by high unemployment, income inequality, and a large informal sector, complicates the process of imposing and collecting taxes. Additionally, the reliance on certain revenue streams, such as corporate income tax and VAT, has left the tax system vulnerable to global economic fluctuations and compliance gaps. These challenges are exacerbated by inefficient tax administration and loopholes that enable tax avoidance and evasion, further limiting revenue collection.

Given these circumstances, South African policymakers must understand the relationship between taxation and fiscal deficit reduction to make informed decisions about budgetary policies and revenue generation. Insights from this research aim to provide actionable recommendations for improving the country's tax system, with a focus on boosting economic stability, fostering growth, and mitigating fiscal risks. By analysing the link between taxation and budget deficit reduction, this study will identify strategies to enhance tax compliance, optimize revenue collection, and support sustainable fiscal management.

This research contributes to the existing literature on fiscal management, taxation policies, and economic development by offering a South African perspective on how to reform tax systems to achieve sustainable economic growth. While previous studies have explored taxation in developing economies, there is a notable gap in research addressing how South Africa's unique economic conditions affect the efficacy of its tax policies. This study seeks to bridge that gap by providing a tailored analysis that considers the country's structural and administrative challenges.

1.8 Delimitations (Scope) of the Study

The delimitations include the following:

1. **Geographical Scope:** The study specifically focuses on South Africa and does not extend to other countries or regions.
2. **Time Frame:** The research concentrates on the current taxation framework and recent challenges from 2014 to 2023.
3. **Fiscal Focus:** The study primarily examines issues related to fiscal deficit reduction and taxation policies, rather than broader economic policies or social issues.
4. **Policy Perspective:** The emphasis is on governmental and policy-driven solutions to fiscal deficit issues rather than private sector or individual behavioural aspects.
5. **Data Sources:** The research relies on official governmental data, policy documents, and scholarly literature relevant to South Africa's fiscal policies and taxation framework.
6. **Methodological Approach:** The study uses quantitative methods to analyse fiscal deficit trends and evaluate the effectiveness of taxation policies. Quantitative methods are most appropriate for this study on "Closing the Fiscal Deficit in South Africa: Challenges and Solutions to the Current Taxation Framework" because they provide a structured and data-driven approach to analysing fiscal trends and evaluating taxation policies. The use of quantitative methods aligns with the study's objective to provide actionable, evidence-based solutions to South Africa's fiscal deficit. The systematic and empirical nature of these methods ensures that the results are robust, reliable, and capable of informing effective policy interventions

1.9 Limitations of the Study

The study limitations are: the limited availability or reliability of data on fiscal deficits, taxation revenues, and economic indicators in South Africa, which could constrain the depth and accuracy of the analysis; the intricate nature of South Africa's taxation framework which may make it difficult to isolate the impact of specific tax policies on fiscal deficit reduction; political instability or changes in government policies that could affect the implementation and effectiveness of proposed solutions to address the fiscal deficit; external economic conditions, such as global economic trends or commodity prices, which may influence South Africa's fiscal deficit independently of domestic taxation policies; difficulty in assessing the broader social and economic impacts of taxation reforms aimed at closing the fiscal deficit; and the findings

and recommendations may be specific to South Africa's context and may not be directly applicable to other countries or regions with different economic and political landscapes.

1.10 Summary/Organisation of the Study

This study has six chapters and set out as follows:

Chapter 1: Introduction and Background

The opening chapter includes the study's introduction, background of the study, problem statement, research objectives, research questions, significance of the study, limitations and a summary of the chapter contents.

Chapter 2: Literature Review

The second chapter includes a review of literature such as the theoretical framework underpinning the study and an empirical literature review examining the relationship between fiscal deficit and revenue collection in South Africa and identifying the challenges that are resulting in insufficient revenue collection by South Africa.

Chapter 3: Research Methodology and Research Design

This chapter focuses on the study's research methodology, data collection method, which is secondary data, the data sources, and the model specification, which is the panel regression model and systematic literature review.

Chapter 4: Data Presentation and Analysis

The chapter focus is on data analysis from the relationship between fiscal deficit and revenue collection in South Africa, using the regression method.

Chapter 5: Data Presentation and Analysis

The chapter focus is on data analysis to identify the challenges that are contributing to insufficient revenue generation by South Africa, using a systematic literature review.

Chapter 6: Summary, Conclusion, and Recommendations

The chapter brings together the key elements of the research study, providing a comprehensive overview of what was discovered, its implications, and recommended avenues for future exploration or application.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The objective of this chapter is to investigate how taxes might assist in narrowing the budget deficit in the South African economy. Therefore, this study addresses the subsequent essential research questions: What is the relationship between fiscal deficit and revenue collection in South Africa? What are the challenges that are preventing South Africa from optimizing revenue collection? The previous chapter provided an overview of the study, followed by a problem statement that emphasized the existing knowledge gap and justified the necessity for the investigation. The project's aims, targets, and research questions were stated, along with the study's predicted relevance. This chapter evaluates prior relevant research on taxes such as consumption taxes, company taxes, and personal income tax to assist in bridging the budget deficit. The chapter also evaluates different systematic challenges which result in inadequate revenue collection.

2.2 Theoretical Framework

This study adopts three key tax theories to examine South Africa's taxation framework, its obstacles to revenue generation, and potential solutions to reduce the fiscal deficit. These theories provide a conceptual foundation for understanding the interplay between taxation policies and economic outcomes. The selected theories are, firstly, the ABILITY-TO-PAY THEORY, advocating for progressive taxation, where individuals with greater income or wealth contribute a larger share. This approach is particularly relevant to South Africa's income inequality, necessitating policies that ensure equitable tax burdens while boosting revenue. Second is the SOCIAL CONTRACT THEORY, which is a philosophical concept that explains the legitimacy of authority and governance through an implicit agreement between individuals and the state. The third is the BENEFIT THEORY OF TAXATION, which suggests that taxpayers should contribute to public finances in proportion to the benefits they receive from government services. This principle highlights equity concerns in South Africa, where disparities in public service access affect perceptions of tax fairness.

2.2.1 Ability to Pay

The concept of taxes is often viewed as a form of sacrifice, supported by theories such as equal, equal-proportional, and least-sacrifice, which promote progressive taxation. Three underlying presumptions underpin these theories in turn: the presence of sacrifice resulting from tax payment, the decreasing marginal usefulness of money with a rise in its availability, and the quantitative articulation of that sacrifice (Kendrick, 1939). Taxation should consider the taxable person's ability to contribute and the fact that the tax burden should progressively rise in proportion to the applicable taxpaying capacity (Englisch, 2014). One way to conceptualize an "ability to pay" system incorporates wealth redistribution together with the benefits tax's objective (Pressman, 2018). The ability-to-pay principle is a fundamental concept that guarantees equitable taxation in modern tax systems for tax regulations with financial significance (Koritnik and Podlipnik, 2017). Adopting this principle in South Africa is particularly relevant given the country's high levels of income inequality and social disparity. In one of the world's most unequal societies, a progressive tax system based on the ability-to-pay principle can play a crucial role in redistributing wealth and addressing systemic inequalities. Integrating the ability-to-pay principle into South Africa's tax framework not only aligns with global practices of equitable taxation, but also addresses the nation's unique socioeconomic issues, fostering a fairer and more inclusive economy.

Therefore, the ability-to-pay theory is significant because it emphasizes fairness and equity in taxation. By taxing individuals based on their ability to pay, typically measured by income or wealth, the theory ensures that the tax burden is distributed proportionally to one's financial capacity. This helps mitigate income inequality and promotes social justice by ensuring that those who are more affluent contribute a larger share of their resources to fund public goods and services.

2.2.2. The Social Contract

The concept of the social contract is particularly associated with political philosophers from the 17th and 18th centuries. However, it did not start with them. Its origins lie in the public awareness of medieval society. Even earlier, the Greek Sophists had already foreseen it as a philosophical theory. The revival of intellect in Hellas after the Persian war, although simpler and less advanced, is comparable to the resurgence of rationalism and criticism after the deep slumber of the Middle Ages. Institutions are now being challenged rather than unquestioningly embraced; the value of these institutions is now determined by how well they respect individual

rights (Ritchie, 1891). Along with enforcement and facilitation, a comprehensive vision for tax reform emphasizes building confidence. This vision would recognize the importance of trust in encouraging voluntary tax compliance, mobilizing policy support for reform and establishing a more stringent welfare contract (Dom et al., 2022). In the context of Africa, an understanding of its history and the many social contracts that have greatly contributed to its distinctiveness is essential if we are to establish the kind of nations that would aid in the continent's economic development (Robinson, 2023).

In the social contract, taxpayers ensure government accountability for spending their money from tax payments. The proportion of tax revenues to spending is linked to increased government effectiveness, integrity, and a decrease in corruption, making it a crucial factor in achieving these goals of accountability. Through increasing the efficacy of political representation, taxes not only give nations the tools to gradually realize human rights, but they also encourage states to keep their commitment. Furthermore, the link is most significantly impacted by direct taxation, that is, taxes on income and profits as opposed to taxes on consumption (Cobham, 2022). The significance of the social contract theory in this study lies in its role in legitimizing the authority of governments to levy taxes. According to this theory, individuals consent to be governed and abide by the laws of society in exchange for the protection of their rights and interests. Taxation is seen as part of this mutual agreement between citizens and the state, where citizens contribute financially to support the functioning of government and the provision of public services. This theory helps foster compliance with tax obligations by framing taxation as a reciprocal relationship based on mutual obligations and benefits.

2.2.3. The Benefit Theory of Taxation

Theories of tax fairness evaluate tax burdens based on the benefits received by the taxpayer from the government. Reciprocity is the fundamental principle: a just tax system is one where an individual's taxes are in proportion to the advantages they receive from the government (Buehler, 1936, Hoffer, 2020, Lindsay, 2019, Neill, 2000). A benefit-based tax would be similar to a user charge for mail or utilities, imposed based on a taxpayer's reported preferences for and usage of government-provided products and services (Hoffer, 2020). The benefit principle is a fundamental one that describes the responsibility to pay taxes to the state revenue authority while simultaneously considering the validity of the state taxing practices (Stewart, 2015). When someone benefits more because of the state's activities, that person should pay

more taxes to the government, for example, those who have the pleasure of driving on public roads are accountable for paying the taxes that finance their maintenance and development (Chauke, 2023). The benefit concept of taxes has been used to explain specific judgments in inheritance tax, income tax, and personal property tax cases, but it has been most commonly applied in special assessment instances (Krauss, 1932).

This theory is significant to this study because it provides a rationale for taxation based on the benefits individuals receive from government expenditures. According to the theory, individuals should be taxed in proportion to the benefits they receive from public goods and services funded by taxes. This principle justifies user fees, tolls, and other forms of taxation that directly link the payment of taxes to the use of specific government services.

2.3 Empirical Literature

2.3.1. The Relationship Between Fiscal Deficit and Revenue Collection in South Africa

A review of the literature reveals multiple insights into how fiscal deficits, taxation, and economic growth interact in South Africa. Overall, findings consistently highlight the complex role of fiscal policy, tax revenue collection, and government spending in addressing South Africa's fiscal deficit and promoting economic stability. Studies by Tendengu et al. (2022), Van Rensburg et al. (2022), and Modise (2021) emphasize the importance of aligning government expenditure with productive investments, highlighting the risks associated with unproductive spending. Tendengu et al. (2022) argue for a reallocation of government funds from wasteful to productive areas, noting that well-targeted government spending can expand the economy, thereby improving fiscal health. This opinion aligns with Van Rensburg et al. (2022), who find that South Africa's debt levels and increased tax burdens have weakened fiscal expenditure multipliers, with the impact dropping significantly from 2010 to 2019. These studies collectively indicate that improving fiscal sustainability relies not only on increasing tax collection, but also on enhancing the productivity of government spending.

Further illustrating the connection between budget deficits and economic performance, Modise (2021) analysis highlights the nuanced effects of deficits over the long and short term. The Keynesian perspective shows that short-term deficits can stimulate growth through productive spending; however, Modise's findings support the neoclassical view that sustained budget deficits harm long-term economic growth by increasing debt burdens and stifling private

investment. This view reinforces that of Tendengu et al. (2022), that improved fiscal management, particularly through reallocation to productive investments, is essential for long-term stability.

Nuru (2020) and Pamba (2022) add another dimension by examining the influence of monetary and fiscal policies, with Nuru observing that coordination between the two is crucial for managing South Africa's macroeconomic stability. Nuru (2020) findings support the call for efficient government spending by Tendengu et al. (2022), showing initially low government spending multipliers, then peaking modestly, suggesting that strategic expenditure decisions are vital. Similarly, Pamba (2022) identifies a positive impact of specific tax revenues on economic growth, reinforcing the view that robust tax collection is a key instrument in fiscal deficit reduction.

Broadening the perspective, studies conducted in other contexts such as those by Shukla et al. (2022) on India, Oyedokun et al. (2021) on Nigeria, and Nazari et al. (2023) on Organization of the Petroleum Exporting Countries (OPEC) countries, provide comparative insights that can inform South African fiscal policy. Shukla et al. (2022) research investigated the relationship between taxation and macroeconomic factors in India's GDP from 2000-01 to 2018-19. The research used descriptive analyses to determine normality, examining correlations between variables, and using linear regression to assess the validity of outcomes and hypotheses. It found that fiscal deficit and GDP have an inverse relationship, while personal tax and GDP have a strong positive correlation. The null hypothesis was rejected, suggesting that policymakers should expand the tax base to increase personal tax revenue and decrease the fiscal deficit. This would mean that broadening the tax base and enhancing personal tax revenue could help South Africa achieve similar deficit reductions. Oyedokun et al. (2021) study on tax policy and revenue generation in Nigeria used primary data and a structured questionnaire to collect responses from the Federal Inland Revenue Service (FIRS), tax consultants, and taxpayers. This data were then analysed using multiple regressions to determine the link between the variables, showing that the indirect tax policy and tax incentive policy have a positive correlation of 0.279 and 0.265, respectively. The study found that tax policies have a considerable impact on Nigeria's income collection. In other words, tax policy has a direct effect on the government's tax revenue, extrapolating that strategic tax incentives and efficient collection methods could strengthen South Africa's revenue stream without placing undue burden on taxpayers. Nazari et al. (2023) highlight the detrimental impact of government

budget deficits in OPEC countries under uncertain economic conditions. Their findings showed that in uncertainty-free conditions, government deficits and tax revenue significantly decrease OPEC member countries' economic growth. In uncertainty-free conditions, production and oil revenue uncertainty significantly adversely affected both short-term and long-term economic growth, a finding that underscores the need for South Africa to build resilience in its fiscal management practices.

Taken together, these studies reveal a consistent theme: South Africa's fiscal deficit is intricately tied to its revenue collection efficacy and the productivity of government expenditure. While expanding tax revenue is critical for reducing fiscal deficits, this effort must be accompanied by strategic government spending that stimulates economic growth rather than merely covering consumption. Additionally, experiences from other countries suggest that South Africa could benefit from expanding its tax base, implementing targeted tax incentives, and fostering conditions that attract investment. Ultimately, these findings suggest a multifaceted approach to managing South Africa's fiscal deficit, balancing effective revenue generation with prudent expenditure. By redirecting resources toward productive sectors, improving tax collection systems, and coordinating fiscal and monetary policies, South Africa could potentially improve its economic stability and achieve sustainable growth.

2.3.1.1. Value-added Tax Contribution to Revenue Generation

A series of studies highlight the significant role of VAT in government revenue generation and its economic impact, with specific insights from South Africa and Nigeria that reveal both the potential benefits and limitations of VAT policy in South Africa. The Erero (2021) study used a dynamic computable general equilibrium (CGE) model to assess the economic impact of raising the VAT rate from 14% to 15%. Initially, this increase led to a marginal GDP decline of 0.0002% in 2018, yet GDP growth resumed in 2019, indicating a positive rebound. Erero (2021) forecasts an additional R3.2 billion in VAT revenue from this rate increase, showing VAT's potential as a revenue enhancer. However, Erero (2021) study also points to areas that warrant further exploration, such as the differential effects of VAT across income groups, which is crucial, given VAT's regressive nature. These distributional effects are vital for South Africa's policymakers, who aim to balance revenue generation with equitable tax policies.

Studies in Nigeria, such as those by Aminu et al. (2020) and Efuntade (2020), further reinforce VAT's importance for revenue, drawing attention to VAT's generally positive impact on

government finances. Aminu et al. (2020) found that VAT significantly boosts Nigeria's government revenue and argue for a stronger collection focus from Nigeria's Federal Inland Revenue Service. Like Erero (2021) findings, Aminu et al. (2020) indicate VAT's substantial revenue potential, but they also point out the need for improved enforcement mechanisms to maximize VAT collection. Contrastingly, Efuntade (2020) examined a broader range of taxes, including consumption and goods and services tax (GST), noting that VAT is among the most impactful for Nigeria's economy. Efuntade (2020) data from 1999 to 2019 provides a historical perspective, suggesting that VAT's impact on revenue generation is consistent over time, which adds weight to arguments for strengthening VAT administration.

One key link across these studies is the consensus on VAT's capacity to increase revenue without the need for additional tax bases, such as income or corporate taxes, which are often more politically sensitive. For both South Africa and Nigeria, improved VAT collection could fund critical public services, such as healthcare, education, and infrastructure. Both Erero (2021) and Aminu et al. (2020) emphasize that efficient VAT collection in unregulated sectors is crucial, as they often evade VAT, leading to revenue losses and giving unfair advantages to non-compliant businesses. Improved enforcement in unregulated and informal sectors can boost tax compliance and level the playing field, supporting fair competition and potentially drawing more businesses into the formal economy.

However, notable contrasts exist in these studies. Erero (2021) model, based in South Africa, suggests that VAT increases can have short-term negative GDP effects, though this is followed by a quick recovery. In contrast, Aminu et al. (2020) and Efuntade (2020) do not mention any GDP downturn resulting from VAT changes in Nigeria, perhaps reflecting different economic structures or VAT base compositions between the two countries. Furthermore, while Efuntade (2020) advocates for an expansion in the range of VAT-taxed goods, this policy could have contrasting outcomes in economies with high poverty rates, like South Africa and Nigeria. Without exemptions or adjustments, VAT can disproportionately burden lower-income households, a consideration that remains underexplored in the Nigerian studies.

Collectively, these studies underscore VAT's critical role in revenue generation for both South Africa and Nigeria. They indicate that VAT increases and efficient collection can boost government revenue without the need for more drastic tax reforms. However, the regressive nature of VAT necessitates careful policy design to mitigate adverse impacts on low-income

groups. Both countries could enhance VAT administration by focusing on compliance within unregulated and informal sectors, helping to secure a stable revenue stream while supporting fair competition. Addressing the distributional effects of VAT will also ensure that the tax burden is equitable, making VAT a more sustainable long-term revenue source for essential public services.

2.3.1.2. Corporate Income Tax Contribution to Revenue Generation

Corporate income tax (CIT) plays a pivotal role in revenue generation and economic growth, with several studies examining its impact across African countries. In Nigeria, John-Akamelu et al. (2022) explored CIT reforms' effect on revenue from 2004 to 2019, finding a significant positive impact. This study emphasizes the importance of continuous CIT reform, suggesting that aligning the tax system with the modern economy can improve revenue performance. However, while the study utilizes robust data and regression analysis, its findings could be enhanced by examining specific CIT reform measures and sectoral impacts, which would provide a more granular view of CIT's effect on diverse economic sectors.

Adegbite and Azeez (2022) study expands the scope of CIT analysis to SSA, focusing on CIT revenue's impact on economic growth in ten countries from 2000 to 2019. They found a negative correlation between CIT levels and GDP growth, with a 1% decrease in CIT leading to a 1.8% decrease in GDP over the long term and a 0.5% decrease in the short term. Their findings suggest that fiscal authorities should establish a comprehensive database to track companies' annual profits and tax obligations, a measure aimed at minimizing tax evasion and improving compliance. The study further proposes that CIT revenue should be allocated in ways that directly promote economic growth, advocating for stricter regulatory authority to enforce tax compliance. While this study highlights the negative economic impact of reducing CIT, it also underscores the role of CIT revenue as a source of growth-supportive public funding.

These studies both emphasise the essential role of CIT in revenue generation and economic health, while also addressing the problems posed by tax evasion and the informal economy. John-Akamelu et al. (2022) focus on Nigeria aligns with the broader SSA analysis by Adegbite and Azeez (2022), in their shared recommendation for improved tax compliance frameworks. Both studies advocate for a regulatory overhaul, especially within unregulated sectors, where tax evasion leads to significant revenue losses. There is a shared view that unregulated sectors

not only reduce potential tax income, but also create unfair competition for compliant businesses. By integrating these sectors through strengthened CIT enforcement, governments can increase revenue while promoting a fairer business environment.

A notable contrast between the studies lies in their treatment of CIT's economic implications. John-Akamelu et al. (2022) view CIT reform as an opportunity for revenue growth within Nigeria, while Adegbite and Azeez (2022) caution that a reduction in CIT would harm GDP, highlighting the trade-offs that Sub-Saharan countries face when adjusting CIT rates. This discrepancy may reflect variations in each country's economic structure, suggesting that optimal CIT policy may vary widely across regions and income levels. While John-Akamelu et al. (2022) provide country-specific insights, Adegbite and Azeez (2022) encourage policymakers to consider country-specific factors influencing CIT impacts across Sub-Saharan Africa.

Collectively, these studies underscore CIT's critical role in revenue generation and economic stability across African economies. Both Nigeria-specific and Sub-Saharan African analyses emphasize that CIT revenue not only funds essential public services, such as healthcare, education, and infrastructure, but also plays a key role in fostering economic growth. Enhanced CIT collection, particularly within unregulated sectors, can level the playing field for businesses, fostering fair competition and supporting economic formalization. However, policymakers must navigate the balance between CIT rate adjustments and potential GDP impacts, as reductions in CIT could harm growth if revenues are not effectively redistributed to growth-supportive areas. To maximize CIT's benefits, a tailored approach that considers sector-specific impacts, regional economic variations, and comprehensive enforcement strategies will be essential for African policymakers aiming to optimize CIT contributions, while promoting sustainable economic growth.

2.3.1.3. Personal Income Tax Contribution to Revenue Generation

Personal income tax (PIT) remains a critical element of revenue generation, with studies highlighting its role in supporting public services, reducing income inequality, and promoting fiscal sustainability. Omodero et al. (2021) examined the impact of PIT on Nigeria's gross national income (GNI) between 2011 and 2020, employing the ordinary least squares technique to analyse data sourced from the OECD, Transparency International, and World Bank indicators. The study found that PIT positively influences GNI with corruption and inflation as

notable factors affecting taxpayer compliance. Omodero et al. (2021) recommend bolstering PIT administration to enhance revenue collection, while addressing corruption and inflation to encourage compliance. However, the study could be strengthened by examining additional factors influencing PIT compliance and considering Nigeria's socioeconomic landscape for a more nuanced policy approach. Furthermore, addressing potential endogeneity and investigating PIT's distributional effects on income inequality would provide a more comprehensive view for policymakers.

Dare et al. (2019) focused on South Africa's PIT system, utilizing a microsimulation approach with data from the Income and Expenditure Surveys of 2005/2006 and 2010/2011. Their findings highlighted significant revenue losses during these periods, particularly from non-salaried taxpayers, who accounted for 71.5% of the compliance gap in 2005 and 98.9% in 2010. While salaried taxpayers showed improved compliance over time, self-assessment among non-salaried individuals posed a major compliance obstacle, leading to significant revenue leakage. The study's implications point to the importance of strengthening compliance frameworks, particularly within unregulated industries, to capture a more accurate PIT revenue base. However, Dare et al. (2019) could further explore the causes of non-compliance among non-salaried taxpayers and propose policy measures to address the issue.

The findings of both studies underscore the essential role of PIT in supporting government revenue and public services, though they emphasize distinct compliance problems within different economic contexts. Omodero et al. (2021) spotlight Nigeria's issues with inflation and corruption, whereas Dare et al. (2019) focus on South Africa's compliance gap among non-salaried taxpayers. Despite these differences, both studies advocate for improving PIT administration as a means of securing consistent revenue. A notable link between them is that both studies suggest expanding the tax base to include traditionally unregulated or under-taxed segments, such as non-salaried workers in South Africa or individuals in informal sectors in Nigeria, to improve fiscal capacity.

Additionally, both studies highlight the importance of policy interventions that go beyond revenue collection, aiming for equity and economic stability. While the Nigerian study indicates that addressing corruption and inflation is key for compliance, the South African study suggests targeted enforcement among non-salaried taxpayers to bridge compliance gaps

and reduce revenue losses. By focusing on administrative and structural reforms, both studies acknowledge PIT's role in fostering economic equality and social welfare.

2.3.2. Factors Resulting in Insufficient Revenue Generation in South Africa

Several factors will be discussed under this heading. The studies by Mvunabandi et al. (2024) and Van der Spuy and De Jager (2023) provide complementary yet contrasting insights into the dynamics of tax evasion and avoidance and their broader implications on South Africa's economy. Both studies recognize that tax evasion and avoidance hold significant implications for the economy. Mvunabandi et al. (2024) identify that tax evasion and avoidance have a minimal impact on GDP when tax rates are rising, suggesting that South Africa has mechanisms to offset revenue losses. They highlight that the country's ability to surpass planned tax revenue indicates resilience in tax collection, contradicting prior assumptions of high economic detriment from tax evasion. Van der Spuy and De Jager (2023), on the other hand, focus on corporate tax avoidance, asserting its detrimental effects on public sector investment in critical areas like infrastructure, economic development, and poverty reduction. They emphasize that the inability of governments to allocate sufficient resources due to tax avoidance hampers equitable growth. While this aligns with the broader notion of harm caused by tax evasion, it shifts the focus from macroeconomic outcomes like GDP to societal impacts, suggesting potential inequality and underdevelopment as consequences. A key difference lies in the analysis of factors driving tax avoidance and evasion. Mvunabandi et al. (2024) adopt a structural and statistical approach, using longitudinal data to examine macroeconomic relationships. Their findings contradict earlier studies by demonstrating that tax evasion's impact on GDP is less significant than expected, emphasizing the role of compensatory revenue practices. Van der Spuy and De Jager (2023) introduce the "CEO effect" in corporate tax avoidance, exploring individual-level traits as determinants. While they ultimately find no significant influence of CEOs on tax avoidance practices, this microlevel focus contrasts with the macroeconomic lens used by Mvunabandi et al. (2024), highlighting the complexity of corporate decision-making in tax behaviour. Both studies provide useful policy insights. Mvunabandi et al. (2024) encourage reliance on detailed revenue data to craft policies that minimize tax evasion's economic impact. They also suggest that higher taxes, under certain conditions, can promote economic growth by compensating for revenue leaks. Conversely, Van der Spuy and De Jager (2023) underscore the need to address corporate governance and accountability to curb tax avoidance's social and developmental impact. The findings

collectively suggest that while South Africa has been relatively successful in managing the macroeconomic impact of tax evasion, problems at the corporate level still require attention.

Another layer of complexity presented is the digital economy, as discussed by Mpofu (2022), who analysed the challenges of applying VAT to digital transactions in Africa. His findings underscore the legislative and administrative issues of digital taxation, such as gaps in tracking cross-border digital transactions and establishing effective tax regimes for intangible goods. The cross-border problem is compounded in South Africa, where digital businesses often operate across borders, making tax enforcement difficult. Gomera et al. (2021) emphasis on digital technology complements Mpofu (2022) findings, as both studies suggest that technological advancements could aid tax collection, albeit in different contexts of micro businesses versus the digital economy at large. Both also imply that tax authorities must develop regulatory frameworks and international cooperation to address these problems effectively.

The issues detrimentally impacting tax revenue generation are complex, encompassing institutional weaknesses, compliance issues, and emerging economic dynamics. Epaphra and Massawe (2017) examined thirty African countries and found that corruption and governance are principal factors affecting tax revenue collection. Their results highlighted that corruption significantly lowers tax collection, while improved governance indicators such as government effectiveness and regulatory quality bolster revenue, especially from indirect taxes. Their study suggests that enhanced institutional capacity and minimized corruption are essential for strengthening tax revenue. Furthermore, the link between trade openness and tax revenue growth highlights the importance of economic policy alignment with trade frameworks. While the study provides a robust model, it could benefit from a closer examination of the specific channels through which governance reforms translate into increased tax revenue.

Similar governance and institutional problems are present in Somaliland, as Haginour (2018) found in his study on tax administration obstacles. His research indicated that issues such as outdated tax laws, inadequate tax knowledge, and a lack of trust in the government impede tax collection. While Epaphra and Massawe (2017) identify governance as a macro-level determinant, Haginour (2018) study brings attention to microlevel issues, such as public attitudes and institutional competence. Both studies converge on the need for institutional reform to address administrative inefficiencies and enhance public trust. However, Haginour

(2018) focus on the localized, cultural, and political issues within Somaliland suggests that institutional reform requires adaptation for specific national contexts, a factor that could enhance the policy recommendations of both studies.

Further complicating tax revenue generation, Umar et al. (2017) investigation of non-compliance in developing nations noted over sixty factors contributing to tax evasion. These findings underscore the pervasive issue of compliance, which Epaphra and Massawe (2017) also noted as a problem tied to corruption. Umar et al. (2017) recommend balancing incentives and penalties to encourage compliance, which parallels the emphasis on governance improvements in the Epaphra and Massawe (2017) study. Yet, while governance improvement is essential, Umar et al. (2017) study suggests that a nuanced approach to addressing individual compliance behaviours could be more effective. Both studies underscore the multifaceted nature of compliance issues, but suggest different levels of intervention, from institutional reforms to targeted incentives and penalties for individual taxpayers.

In Tanzania, Gomera et al. (2021) explored the potential of digital technology to aid tax collection among micro businesses, finding that existing tax systems are often inaccessible to small businesses due to their complexity. This finding aligns with Haginour (2018) on the need for streamlined tax administration and tax law updates to ensure accessibility and compliance. However, Gomera et al. (2021) emphasize technology as a solution, particularly for reaching informal businesses that remain outside formal tax channels. South Africa faces a similar struggle with tax evasion in the informal economy. As was noted, Haginour (2018) analysis suggests that digital solutions could potentially play a transformative role in broadening the tax base. Both studies reveal the difficulties of informal sector taxation, but approach the solution differently, with Gomera et al. (2021) advocating for technological interventions and Haginour (2018) highlighting foundational legal and knowledge-based reforms.

In conclusion, these studies collectively underscore the multifaceted issues that impede tax revenue generation across African nations, with a recurring emphasis on governance, institutional reforms, compliance, and adapting to modern economic structures. Governance and corruption emerge as fundamental barriers to tax revenue, as emphasized by Epaphra and Massawe (2017), further supported by Haginour (2018) findings on institutional inefficiencies. While institutional reforms are widely recommended, Umar et al. (2017) argue that addressing

compliance behaviour through incentives and penalties may provide an alternative pathway to improving tax collection in contexts where institutional capacity is limited.

The potential of digital solutions, highlighted by Gomera et al. (2021) and Mpofu (2022), presents an avenue for integrating informal businesses into the tax base and addressing the complexities of the digital economy. However, these solutions must be tailored to each nation's unique socioeconomic landscape and digital infrastructure, as generic solutions may not be feasible or effective.

Ultimately, a layered approach that addresses governance at the macro level, compliance, and administrative barriers at the institutional level, and modernizes tax systems through digital integration appears to be essential. Policymakers must prioritize institutional and regulatory reforms, especially those targeting corruption, while also considering technological innovations to enhance tax compliance and capture emerging economic activities. By doing so, African countries can overcome some of the structural barriers to tax revenue generation, ultimately achieving a more stable and sustainable revenue base.

2.3.2.1. Tax Revenue Lost Due to the Illicit Cigarette Trade

The literature collectively underscores that illicit cigarette trade significantly impacts tax revenue and is driven by complex socioeconomic factors. Vellios et al. (2020) and van der Zee et al. (2020a), (van Der Zee et al., 2020b) identify high excise taxes as a key driver, with the market for illegal cigarettes expanding as legitimate products become unaffordable for low-income consumers. These studies point to socioeconomic disparities such as lower income and education levels, as factors increasing the prevalence of illegal cigarettes among marginalized groups. This issue is exacerbated by high levels of socio-economic inequality, which create a fertile market for cheaper, illicit products. The high excise taxes and VAT imposed on cigarettes aim to reduce smoking prevalence and generate revenue but inadvertently incentivize the illegal trade of low-cost cigarettes. Against this backdrop, van der Zee et al. (2020a) conducted a study revealing that approximately 30% of cigarettes smoked in South Africa in 2017 were illegal. Building on this context, the study highlights that cigarettes priced below R20 per pack are likely illegal due to the high combined excise tax and VAT, which totalled R16.30 per pack. The findings show that illegal cigarettes are prevalent in all nine provinces.

Comparative Economic and Fiscal Impacts

The economic impact of illicit cigarettes is profound across regions, as evidenced by Erero (2020) in South Africa and Kasri et al. (2021) in Indonesia. Both studies illustrate substantial losses in tax revenue that weaken national fiscal stability. Erero (2020) use of the computable general equilibrium (CGE) model shows a direct link between illicit trade and GDP decline, while Kasri et al. (2021) research highlights potential revenue lost from Indonesia's extensive illicit market. These findings reinforce that unchecked illicit trade exacerbates economic inequality and undermines government revenue, impeding public services and economic growth.

Policy Measures and their Enforcement

Most studies advocate for robust policy tax evasion measures, such as the track-and-trace systems recommended by Vellios et al. (2020) and van Der Zee et al. (2020b), which aim to monitor production and prevent tax evasion. However, the practicality of such systems is questioned. Goodchild et al. (2022) and Mzhavanadze (2023) demonstrate the varied impact of these policies, depending on local economic conditions and regulatory capacities. For example, Georgia's enforcement success, as highlighted by Mzhavanadze (2023), resulted in a drastic reduction of the illicit market, though the effectiveness of tax policies is tempered by consumer shifts to alternative products like roll-your-own (RYO) cigarettes. This suggests that policy success is contingent upon enforcement resources and adaptability to local consumer behaviour.

International Perspectives and Broader Implications

Goodchild et al. (2022) provide a cross-national perspective, showing how the removal of illicit cigarettes leads to tax revenue gains and decreased consumption rates globally. This aligns with findings from South African studies, but highlights that these gains depend on broader international cooperation and synchronized enforcement to combat cross-border illicit trade. While South Africa, Indonesia, and Georgia face unique economic and social conditions, the overarching need for cooperative policy frameworks and capacity-building in enforcement agencies is evident.

These studies illustrate a clear pattern: high excise taxes, coupled with limited enforcement and socioeconomic disparities, fuel the illicit cigarette trade, resulting in significant tax revenue losses. Studies consistently recommend enforcement through track-and-trace systems, tax

policy adjustments, and public awareness campaigns. However, practical implementation is hindered by local conditions and resource constraints, suggesting that tailored, region-specific approaches are essential. Ultimately, this literature highlights the need for comprehensive tax reforms and enhanced institutional capacity to address illicit trade's fiscal and public health implications effectively. Governments must balance tax increases with policies that deter illicit consumption while considering socioeconomic factors to strengthen revenue collection and foster equitable economic growth.

2.3.2.2. Informal Sector Tax Administration Obstacles

Collectively, the reviewed studies highlight pervasive obstacles to achieving tax compliance within the informal sector across African nations, driven by structural, socioeconomic, and institutional factors. Mpofu (2023) and Etim and Daramola (2020) emphasize structural challenges in South Africa and Nigeria, noting that high tax rates, bureaucracy, and minimal social protection push many into informality to avoid burdensome tax obligations. Similarly, Mpofu (2021) finds that strict bureaucratic processes, corruption, and high rates deter compliance in Zimbabwe's informal sector, a trend that undermines revenue collection and creates barriers for informal businesses to formalize.

Institutional and Policy-related Barriers

Institutional weaknesses also play a significant role in non-compliance, with both Mpofu (2023) and Mpofu (2021) identifying corruption and insufficient tax authority capabilities as barriers to compliance in South Africa and Zimbabwe, respectively. These issues resonate with Lengaram (2023) findings, which reveal that poor governance and transparency limit tax mobilization across African nations, underscoring the need for systemic reforms to strengthen tax administration. These studies collectively advocate for increased resources, stakeholder engagement, and policy reforms to address the barriers. For example, Etim and Daramola (2020) suggest that policy incentives could encourage compliance by reducing financial burdens on informal sector participants, aligning with Mpofu (2023) recommendations for more inclusive dialogue and engagement.

Attitudinal and Behavioural Insights into Compliance

The literature also explores the unique behaviours and attitudes of informal operators toward tax compliance. Mokgatlhe (2023) and Bornman and Ramutumbu (2019) delve into specific subgroups within South Africa, revealing that while operators may have a favourable attitude

towards tax regulations, practical challenges deter compliance. For instance, Mokgathe (2023) finds that informal operators' choice of location, often influenced by feasibility and accessibility, complicates tax collection, so many are difficult for tax authorities to track. This aligns with Bornman and Ramutumbu (2019) findings that guest house owners in Soweto, reliant on cash transactions, face unique compliance risks due to income instability and limited record-keeping practices.

Broader Economic Implications and Strategies for Revenue Mobilization

These studies all underscore that non-compliance within the informal sector has substantial economic implications, particularly regarding revenue loss and economic stability. According to Lengaram (2023), reliance on informal trade, along with governance issues, significantly hinders tax income and public expenditure financing in African countries. Etim and Daramola (2020) comparative analysis supports this further by highlighting that informality, fuelled by unemployment and weak anti-corruption measures, limits economic growth in South Africa and Nigeria. Both studies suggest that tax authorities must implement more effective, nuanced tax strategies and reduce administrative burdens to encourage formalization and broaden the tax base.

The literature reveals a multifaceted and complex issue in addressing tax compliance within the informal sector. High tax rates, institutional corruption, bureaucratic obstacles, and limited awareness deter informal operators from compliance, exacerbated by limited record-keeping and identification within mobile or cash-based businesses. While most studies call for structural reforms, such as policy incentives, stakeholder engagement, and enhanced governance, the solution lies in a balanced approach that combines supportive policies with strong, transparent enforcement. Overall, the findings suggest that without significant institutional reforms and tailored policies, African nations may continue to struggle with mobilizing revenue from the informal sector, thereby impacting economic growth and fiscal stability.

2.3.2.3. Impact of Corruption on Tax Revenue

The reviewed studies consistently highlight the significant negative impact of corruption on tax revenue, a finding supported across diverse regional contexts. Abebe and Fikre (2020) underscore that corruption directly reduces tax revenues, with those countries experiencing low corruption levels collecting approximately 6% more revenue. Similarly, Igbinoia and Ekwueme (2020) find that corruption notably decreases revenue generation in Sub-Saharan

Africa, suggesting collective action against corruption to improve tax systems. The work of Dramane (2022) also aligns with these findings, emphasizing how corruption obstructs revenue growth in the West African Economic and Monetary Union (WAEMU) countries and calling for anti-corruption reforms. Together, these studies underscore that reducing corruption would enhance tax revenue, especially in developing regions with high corruption rates.

Governance Quality as a Moderating Factor

Beyond corruption, governance quality emerges as a crucial factor that influences tax revenue. Pamba (2023) study on South Africa reveals that governance elements like voice, accountability, and regulatory quality have a generally negative correlation with tax revenue, while control of corruption has a positive effect. This view is echoed by Mohamed et al. (2022), who note that poor governance reduces tax revenue in Mogadishu, with regulatory and political instability being contributory factors. Similarly, Duong (2022) study on the Brazil, Russia, India, China and South Africa (BRICS) economies highlights that governance quality, along with the size of the shadow economy, has complex effects on tax revenue. Improved governance could mitigate corruption's impact and support effective tax collection, a view that is consistent across the studies and underscores the need for transparent and accountable institutions.

Complex Relationship Between Informality, Governance, and Tax Revenue

A nuanced theme in the literature is the interplay between the informal, or shadow, economy and governance quality in shaping tax revenue. Duong (2022) suggests a nonlinear relationship: moderate levels of informality may enhance tax revenue by increasing the tax base, but high levels of informality ultimately reduce revenue by allowing tax evasion. Bhuana and Wijaya (2024) also find that the shadow economy negatively affects tax revenue in South Asia and the Asia-Pacific, stressing that government effort to combat corruption and regulate the shadow economy is essential. These findings suggest that a targeted approach to the informal sector, alongside anti-corruption measures, could positively influence tax collection.

Comparative Analysis Across Regions

Regional comparisons across the studies reveal that corruption and governance impact tax revenue differently, depending on institutional capacities and regional contexts. For instance, YILANCI and ŞAŞMAZ (2023) identify a unique two-way relationship in EU transition economies, where corruption paradoxically increases tax revenue, but also skews tax burden

distribution, limiting public services and increasing taxpayer resistance. In Africa, Kuttu et al. (2024) find that robust anti-corruption measures enhance sustainable resource management and tax policy efficacy, while Hussain et al. (2022) reveal that governance improvements are essential for combating corruption's negative impact on revenue. Together, these studies point to the importance of contextualized governance reforms, suggesting that policy interventions must be tailored to regional capacities and economic structures.

Policy Recommendations and Practical Implementation

The literature presents several policy recommendations to mitigate corruption's effects on tax revenue, though practical implementation remains problematic. Abebe and Fikre (2020) recommend strengthening democratic institutions and legislative reforms to monitor and reduce corruption. Pamba (2023) advocates for improving governance indicators in South Africa, particularly in corruption control, while Jaafar and Muhammad (2024) emphasize institutional reforms to address financial and administrative corruption (FAC) for public budget stability. However, many of the studies highlight the need for further research into the practical applications of these policy suggestions, especially in politically unstable or economically diverse regions.

From these studies it is evident that corruption profoundly diminishes tax revenue, but improved governance and targeted anti-corruption measures could mitigate this effect. Governance quality and institutional transparency emerge as key factors that could foster compliance and expand tax bases, especially in developing regions. Furthermore, understanding the nuances of the informal economy is essential to crafting effective tax policies that balance revenue generation with equitable tax distribution. Overall, these studies collectively highlight that combating corruption and improving governance are foundational to effective tax revenue generation. However, the practicalities of implementing these reforms across diverse socio-political landscapes remain a critical difficulty, pointing to a need for continued research on region-specific policy interventions and institutional capacity-building.

2.3.2.4. Tax Administration Inefficiency

The studies reveal a widespread issue of inefficiency within African tax administrations and point to broader matters related to technological adaptation in tax collection. Mackenzie et al. (2022) highlight that many African tax authorities are operating below capacity, with inefficiencies ranging from 3% to 79% of potential performance. Their findings suggest that

achieving operational independence, better categorizing of taxpayers, and addressing the informal economy could significantly improve tax collection efficiency. Similarly, Mpofu (2022) examines the application of VAT to the digital economy in Africa, noting that while VAT offers opportunities for increased revenue, obstacles such as legal ambiguities, capacity limitations, and knowledge gaps hinder efficient implementation. Together, these studies underscore that improving tax administration in Africa requires not only operational and structural reforms, but also specific strategies to address the unique challenges presented by the digital economy.

Digitalization in Tax Systems: Potential and Limitations

The potential for digitalization to improve tax efficiency is a recurrent theme, yet studies reveal mixed results on its effectiveness. For instance, Audu and Ishola (2021) report that Information and communication technology (ICT) had an insignificant impact on Nigeria's tax revenue, suggesting that digitalization alone may not improve tax efficiency without supportive policies and capacity-building measures. This finding is contrasted by Pylypenko et al. (2022), who argue that digital transformation holds significant promise for improving tax administration by promoting transparency and curbing tax evasion. They stress the need for global collaboration in developing new tax strategies for digital commerce, indicating that digitalization may be transformative if paired with appropriate reforms and international cooperation. Tambunan and Rosdiana (2020) echo the call for reforms, observing that Indonesia's current tax regulatory and organizational structures are insufficient to address taxation challenges posed by the digital economy. Collectively, these studies suggest that while digitalization offers efficiency benefits, its effectiveness hinges on supportive regulatory frameworks, stakeholder collaboration, and enhanced institutional capacities.

Tax Avoidance and Multinational Corporations in the Digital Age

Several studies focus on the complexities of taxing multinational corporations (MNCs) in the digital economy, a significant barrier to efficient tax administration. Apriadi and Monalysa (2021) examine Google's tax avoidance strategies in Indonesia, where the "Double Irish Dutch Sandwich" scheme enables profit shifting to tax-friendly jurisdictions (base erosion and profit shifting (BEPS)). This underscores the challenges governments face in taxing MNCs that lack a permanent establishment, a finding supported by Pylypenko et al. (2022) who advocate for international cooperation to prevent tax evasion in digital commerce. This issue is particularly pressing in Africa, where Mpofu (2022) points to both opportunities and difficulties in

implementing VAT on digital services. These studies all illustrate the jurisdictional and legal complexities that hinder tax authorities from effectively taxing digital businesses, especially in countries with limited regulatory reach over MNCs.

Socioeconomic Impacts and the Need for Inclusive Policy Frameworks

The studies also highlight the broader socioeconomic implications of inefficient tax administration and the need for policies that balance revenue goals with inclusive growth. Mpofu (2022) points out that higher VAT on digital services could reduce accessibility, exacerbating inequality and limiting digital inclusion in Africa. Similarly, Tambunan and Rosdiana (2020) emphasize the importance of stakeholder engagement in Indonesia, suggesting that effective tax policy must consider the impact on economic growth and address regulatory inadequacies. These findings suggest that tax policies for the digital economy should not only aim at revenue generation, but should also consider socioeconomic impacts to avoid disproportionate burdens on vulnerable populations.

Together, these studies illustrate the multifaceted complexities of tax administration inefficiencies in both traditional and digital economies, underscoring that solutions require a multi-pronged approach. African tax authorities, for example, must address operational inefficiencies, the informal economy, and dependency on non-tax revenue, while simultaneously adapting to digital transformation. Although digitalization offers a path toward transparency and efficiency, its effectiveness remains limited without supportive regulatory frameworks, capacity-building, and collaboration between governments and the private sector. Addressing tax avoidance by MNCs requires robust international cooperation and innovative policy tools, as conventional taxation methods fall short in the digital age. Overall, a balanced approach is essential, one that combines efficiency improvements, digital adaptation, and inclusive policies to ensure equitable tax systems capable of fostering sustainable development. Further research is needed on region-specific reforms, capacity-building, and stakeholder engagement strategies to enhance tax administration efficiency in diverse economic contexts.

2.4. Conclusion

In conclusion, this chapter examined the complexities and opportunities of taxing the digital economy, focusing on critical areas such as revenue determination, cross-border transactions, international cooperation, and digital tax solutions. It highlighted significant challenges, including the difficulty of calculating taxable income due to tax avoidance, aggressive tax

strategies, and errors in optimization. Despite numerous efforts to address these issues, no globally accepted solution for digital taxation has been achieved, reflecting a lack of international consensus.

A key gap identified in the literature is the persistent challenge of aligning national tax policies with the realities of a rapidly evolving digital economy. While previous studies have extensively explored tax optimization strategies, avoidance techniques, and international tax cooperation, they fall short of providing actionable frameworks that consider the unique needs of developing countries, such as South Africa. These nations face distinct challenges, including limited administrative capacity, reliance on traditional revenue streams, and vulnerabilities to tax base erosion from digital activities.

This study addresses this gap by focusing specifically on the South African context, providing a nuanced analysis of how the country's current tax framework can be adapted to close digital taxation gaps while balancing revenue generation and economic growth. By incorporating local realities, such as underperforming tax categories and inefficiencies in enforcement, this research offers practical recommendations for South Africa that are underexplored in global literature.

The next chapter presents the research design and methodological framework, including model specification, variable justification, data types and sources, collection methods, validation techniques, and the analysis plan. These elements ensure the study's findings are tailored to address the unique fiscal and regulatory challenges of taxing the digital economy in South Africa, setting it apart from existing research.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

In the previous section of this mini dissertation, the empirical and theoretical literature on taxation as an instrument in closing the fiscal gap was examined. The literature contributed comprehensive knowledge of tax reform as a tool for increasing revenue collection and reducing the fiscal deficit in the South African economy. This chapter presents and outlines the strategies used to attain the study's objectives. It highlights methodological concerns that were addressed in this study, such as research design, research strategy, and data collecting and analytic methods.

3.2 Research Design

This study employed a quantitative research design. Quantitative methodology uses measurable data and mathematical, statistical, or computational techniques for research analysis. It focuses on objective measurements and manipulation of data through polls, questionnaires, surveys, or computational methods. This methodology measures attitudes, opinions, behaviours, and makes conclusions applicable to a wider sample population (Babbie, 2020, Leedy et al., 2014). The aim of this quantitative study was to examine the relationship between specific variables and their impact on the problem or outcome, using statistical methods to analyse data collected from a specific source or population. To ensure neutrality, an objective quantitative overview can be presented in the third person and past tense, demonstrating a clear understanding of research methods. Hence this will help in gaining a better understanding of the issue (Creswell, 2014).

Quantitative research methodology utilizes deductive reasoning to analyse numerical data, apply findings to a broader population, and build evidence to support or disprove theories (Leavy, 2022). It centres on numerical data and charts, while by comparison, qualitative research highlights language and interpretation. In general, qualitative research typically relies on observations, interviews, and existing publications, while quantitative methods make use of mathematics, surveys, and practical experiments. Therefore, if researchers aim to comprehend concepts such as experiences, observations, and thoughts, qualitative research is the better choice. Alternatively, quantitative research is beneficial for scientists if they need to verify or

experiment with a theory or hypothesis (Sardana et al., 2023). Generally, researchers develop theories and conduct literature reviews to identify gaps in existing knowledge.

3.3 Model Specification

This research employed regression models to analyse the relationship between taxation and closing the financial gap in the South African economy. Additionally, a systematic literature review was conducted to identify the underlying issues contributing to insufficient revenue generation in the country. Regression models were particularly suitable for this study due to their ability to account for both cross-sectional and time-series variations in the data. These models allow for a detailed analysis of the relationship between variables while controlling for individual heterogeneity and time effects. This approach is especially valuable when working with longitudinal data or datasets comprising multiple entities (cross-sections) observed over several time periods (time series), enabling a comprehensive understanding of taxation's impact on fiscal sustainability. Zdaniuk (2024) states that ordinary least-squares (OLS) models operate under the premise that the analysis estimates a relationship model between one or multiple explanatory variables and a continuous or, at least, interval outcome variable, aiming to minimize the sum of squared errors. An error is defined as the gap between the actual and predicted values of the outcome variable. The most prevalent analytical technique that employs OLS models is linear regression (either with one or several predictor variables). The sample requirements are dependent variables: fiscal deficit closure and independent variables tax revenue, economic growth, government expenditure, tax compliance, and income inequality. The formula for the OLS regression can be expressed as follows:

$$y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_p x_{ip} + \epsilon_i$$

where:

- y_i : dependent variable for observation i ,
- x_{ij} : j -th predictor variable for observation i ,
- β_0 : intercept,
- $\beta_1, \beta_2, \beta_p$: coefficients of the predictor variables,
- ϵ_i : error term for observation i .

Robust regression analysis offers an alternative to a least squares regression model when the essential assumptions are not met due to the characteristics of the data (Yaffee, 2002). Robust regression (RREG) is an alternative to OLS that is less sensitive to outliers or violations of

assumptions, such as homoscedasticity. An RREG method assigns weights to observations to reduce the influence of outliers.

One common robust regression method is iteratively reweighted least squares (IRLS), which minimizes a weighted sum of squared residuals by applying weights that diminish the influence of outliers. The data that is collected from SARS and World Bank. For the IRLS version of robust regression, the equation is:

$$\min_{\beta} \sum_{i=1}^n w_i (y_i - \hat{y}_i)^2$$

where:

- w_i : weight assigned to observation i , determined iteratively based on residuals.

Systematic reviews aim to provide a fair and impartial overview of literature by identifying relevant studies on a specific topic, often locating unfavourable ones in obscure publications or conference proceedings to counterbalance the outcomes of easily accessible positive studies (Nightingale, 2009). Systematic literature reviews are systematic studies that transparently and reproducibly consolidate scientific evidence to address a specific research question by including all available published evidence and evaluating its quality (Lame, 2019). Systematic reviews assess consistency in research results across different populations, environments, and treatment options, while meta-analyses improve the strength and accuracy of findings on treatment effects and exposure risks, thereby reducing bias (Mulrow, 1994). Systematic review principles enhance the rigour and breadth of literature reviews (Mallett et al., 2012). According to Page et al. (2021) the PRISMA 2020 statement is primarily intended for systematic reviews assessing the effects of health interventions, regardless of the study designs included. However, its checklist items are also relevant for systematic reviews focused on other types of interventions, such as social or educational interventions. Additionally, many of the checklist items can be applied to systematic reviews with objectives beyond evaluating interventions, such as exploring aetiology, prevalence, or prognosis. PRISMA 2020 can be used for systematic reviews that involve synthesis methods (like pairwise meta-analysis or other statistical techniques) or those that do not include synthesis, such as when only a single eligible study is available. Furthermore, Kahale et al. (2021) state that systematic reviews play a crucial role in synthesizing evidence to guide policy and practice. A key aspect of these reviews is

documenting and reporting the number of records identified during the literature search, along with the details of the selection process.

3.4 Justification of Variables

The rationale behind using the variables in the research is, firstly, to close the fiscal gap (dependent variable). The fiscal gap represents the disparity between the amount of money the government spends and the amount it earns, serving as a crucial gauge of fiscal sustainability. It is essential to close this gap to sustain a stable macroeconomic environment and promote long-term economic growth. A second rationale concerns tax revenue (independent variable). Tax revenue is an essential part of government income and is vital in filling the fiscal deficit. Boosting tax revenue can aid in closing the fiscal gap by enhancing the government's capacity to fund its expenses. Tax revenue collection often faces various difficulties such as tax revenue lost due to illicit cigarettes, informal sector tax administration problems, corruption in tax revenue, and tax administration inefficiency.

3.5 Data Types and Sources

The method of data collection must be carefully chosen to align with the research objectives. This study aimed to use secondary data to analyse journals, articles, and policies of tax reform strategies used by different countries to reduce fiscal gaps such as CIT tax rate reduction, broadening the tax base, tax incentives to encourage investments, improving tax compliance, increasing environmental tax rates, improving tax administration and enforcement, strengthening international tax cooperation, consumption taxes, excise taxes, and pay-as-you-earn. Accessing secondary data offers the main benefit of saving time, which is particularly evident when scholars rely more on digital data rather than physical materials stored in libraries (Allen, 2017, Bryman, 2016). Secondary data collection is often more cost-effective than primary data collection, since it eliminates the need for researchers to gather data themselves. This can save both time and financial resources, especially for studies requiring large sample sizes or extensive datasets (Hair et al., 2019). Secondary data may include time series or longitudinal data, allowing researchers to examine trends and changes over time. This enables researchers to conduct longitudinal analyses and investigate the dynamics of phenomena across different periods (Groves et al., 2011). Moreover, it is often freely accessible through the internet, books, or other public forums, where permission for further use and analysis is generally implied. Nonetheless, it is essential to acknowledge the ownership of the original data. Conversely, if the data originates from another research project and is not publicly

available except to the original research team, explicit written permission must be obtained from that team. This permission should also be included in the application for ethical clearance to ensure compliance with ethical standards (Tripathy, 2013). The internet has had a very significant impact on this aspect. Simply having access to the internet is usually the only requirement for obtaining this information. With just one click, a large amount of information can be obtained, but it is essential to verify the reliability of the data (Allen, 2017). Cost savings related to utilizing secondary data are a direct result of reduced costs, which is closely linked to the advantages mentioned earlier. Overall, it is much more affordable compared to alternative data collection methods. Government surveys can be used to analyse large data sets at no cost (Allen, 2017, Boslaugh, 2007). A researcher gathers primary data with a particular objective in mind, such as addressing a research question or achieving specific goals. While secondary data sources can provide a substantial amount of information, the abundance does not necessarily mean it is appropriate (Allen, 2017, Boslaugh, 2007). Government and other official agencies often make assurances about the accuracy of their data, though this is not always the case. Consequently, when using secondary data, it is important to evaluate quality (Allen, 2017).

3.6 Data Collection Methods and Instruments

This study relied on secondary data sources, which is data that was previously obtained by others and statistically analysed (Mazhar et al., 2021). This study used statistical data from the South African Reserve Bank (SARB), the National Treasury, the South Africa Revenue Services (SARS), the World Bank, the International Monetary Fund (IMF), the OECD, local universities and research institutions. In addition, online databases such as Google Scholar, Research Gate, Emerald, Postgraduate Environments, and Scimago Journal were used to identify relevant academic research and publications.

3.7 Data Validity and Reliability

In order to ensure the validity and reliability of the data used in this study, the research assessed construct validity. Carmines and Woods (2005) state that construct validity plays a crucial role in situations where there is a lack of consensus on the content domain for a phenomenon and no applicable criteria available. This validity type centres on the theoretical assumptions related to a specific empirical measure. Therefore, construct validity is driven by theory. By applying theory, the researcher makes theoretical hypotheses regarding the presence, orientation, and magnitude of connections between measurable signs of distinct theoretical ideas. If the results

seen through observation match the theoretical predictions, it means the measure is construct valid. Validation of the construction requires three separate stages. Initially, the theoretical connection between the concepts needs to be established. Next, the connection between the measurements of the ideas needs to be investigated. Ultimately, it is necessary to interpret the empirical data to understand how it enhances the construct validity of the specific measure. Research validity is the extent to which a research tool can confirm the accuracy and credibility needed to measure the specific variables under study and demonstrate that the findings obtained are reliable. The use of data from SARB, the National Treasury, SARS, the World Bank, IMF, OECD, local universities and research institutions, and the aforementioned online databases will ensure robustness and credibility of the research findings.

3.8 Data Presentation and Analysis Plan

Data analysis is the process of examining raw data from which to draw conclusions. Its primary goal is to transform disorganized data into a format that is easier to understand, clearer, more conclusive, and supportive of decision-making processes. The entire data analysis process starts with the question, "What is to be measured?" The answers to this question help researchers gain a clear understanding of the primary objective that the analysis should address. The true power of data analysis lies in its ability to uncover insights that address research objectives and enhance decision-making processes. To ensure meaningful outcomes, it is essential to structure analysis around questions aligned with the study's goals. Equally important is identifying potential challenges or limitations that may affect the effective interpretation and presentation of data, ensuring a coherent and actionable analysis plan. This approach helps in establishing the analysis's objective and justifying its necessity (Bhatia, 2017).

In OLS models, it is assumed that the analysis fits a model of a relationship between explanatory variables and an outcome variable that minimizes the sum of square errors, where an error is the gap between the actual and predicted outcome variable value. The primary analytical technique that uses OLS models is linear regression (Zdaniuk, 2024). Systematic reviews including meta-analyses, are crucial for decision-makers in research and policy fields also offer valuable insights into current knowledge and areas needing further research, ensuring consistency and generalizability across different populations and settings. In conclusion, Meta-analyses combine results from multiple quantitative studies using statistics, providing a comprehensive overview of the subject matter (Owens, 2021).

3.9 Conclusion

This chapter outlined the methodological framework for the study, emphasizing its quantitative research design and reliance on secondary data sources. The quantitative approach focused on measurable variables and employed statistical tools such as regression analysis to explore the relationship between taxation and fiscal deficit reduction in South Africa. The study incorporated systematic literature reviews to identify problematic issues and synthesize existing evidence, adhering to PRISMA guidelines to ensure rigor and transparency. The chapter also justified the selection of variables, highlighting the importance of tax revenue, economic growth, government expenditure, tax compliance, and income inequality in addressing the fiscal gap. Secondary data collection methods were detailed, leveraging credible sources such as SARB, the National Treasury, and international institutions like the IMF and OECD. To ensure validity and reliability, the research assessed construct validity and evaluated the credibility of data sources. The data presentation and analysis plan included the use of visual tools and robust statistical techniques like OLS and robust regression to derive meaningful insights. The following chapter deals with the data analysis result of regression analysis, focusing on the relationship between fiscal balance and tax revenue.

CHAPTER 4: DATA PRESENTATION AND ANALYSIS

4.1. Introduction

The previous chapter dealt with the study's research methodology. This chapter shows the relationship between fiscal balance and tax revenue, both expressed as percentages of GDP. Fiscal balance indicates the government's overall financial position, with negative values representing deficits and positive values representing surpluses. Tax revenue reflects the government's revenue-raising capacity as a percentage of GDP. Understanding the connection between these two indicators is essential for policymakers, as it can offer insights into how fiscal policies impact government budgets. The data for fiscal deficit was collected on the World Bank Cross-Country Database of Fiscal Space and tax revenue data from SARS. Using data from 16 observations from 2008 to 2023, this analysis employs descriptive statistics, correlation, and regression techniques to evaluate the significance and strength of the relationship. The data were analysed using STATA 18.0. The data analysis results provide insights into the relationship between two economic variables: The fiscal balance of GDP and tax revenue of GDP. Following, is a meaningful description of the findings:

4.2. Descriptive Statistics:

Fiscal Balance as a Percentage of GDP

The average (mean) value is -0.044, indicating that on average, there is a fiscal deficit, meaning government expenditures exceed revenues by about 4.4% of GDP. The standard deviation is 0.018, suggesting there are small fluctuations around this average. The deficit ranges from a minimum of -9.6% to a maximum of -0.5%.

Tax Revenue as a Percentage of GDP

The mean is 0.251, meaning that, on average, tax revenues account for about 25.1% of GDP. The standard deviation is 0.011, indicating little variability. Tax revenue ranges from 22.5% to 26.4% of GDP, showing a relatively stable tax revenue trend.

Table 4.1: Descriptive Statistics

```
. summarize FiscalbalanceofGDP TaxrevenueofGDP
```

Variable	Obs	Mean	Std. dev.	Min	Max
Fiscalbala~P	16	-.0444719	.0179718	-.09612	-.00488
Taxrevenue~P	16	.2509375	.0113811	.225	.264

Source: Stata Corp. (2023).

4.3. Correlation Analysis:

The correlation coefficient between fiscal balance and tax revenue is 0.0381, which is very close to zero. This suggests a very weak positive relationship between the two variables, meaning that changes in tax revenue as a percentage of GDP have little to no association with the fiscal balance. A weak correlation implies that simply increasing tax revenue as a share of GDP may not have a significant impact on improving or worsening the fiscal balance.

Table 4.2: Correlation Analysis

```
. corr FiscalbalanceofGDP TaxrevenueofGDP  
(obs=16)
```

	Fiscal~P	Taxrev~P
Fiscalbala~P	1.0000	
Taxrevenue~P	0.0381	1.0000

```
. pwcorr FiscalbalanceofGDP TaxrevenueofGDP
```

	Fiscal~P	Taxrev~P
Fiscalbala~P	1.0000	
Taxrevenue~P	0.0381	1.0000

Source: Stata Corp. (2023).

4.4. Statistical Significance:

The p-value for the correlation is 0.8885, which is much higher than the common significance threshold of 0.05. This high p-value indicates that the correlation observed is statistically insignificant. In other words, any slight association between the variables could be due to random chance rather than a genuine relationship. Since the relationship is not statistically significant, we cannot confidently say that there is any meaningful association between fiscal balance and tax revenue based on the available data.

Table 4.3: Statistical Significance

```
. pwcorr FiscalbalanceofGDP TaxrevenueofGDP, sig
```

	Fiscal~P	Taxrev~P
Fiscalbala~P	1.0000	
Taxrevenue~P	0.0381 0.8885	1.0000

Source: Stata Corp. (2023).

4.5. Ordinary Least Squares Regression:

Model Summary: Number of observations (obs): 16, and R-squared: 0.0015, indicating that Tax revenue of GDP explains only 0.15% of the variance in Fiscal balance of GDP. This suggests a very weak explanatory power. Adjusted R-squared: -0.0699, which is even lower, implying that the model does not effectively describe the variation in the fiscal balance. F-Statistic (F (1,14)): 0.02 with a p-value (Prob > F) of 0.8885, indicating that the model as a whole is not statistically significant. Regression Coefficients: Tax revenue of GDP: Coefficient: 0.0602, with a standard error of 0.4217. t-Statistic: 0.14 and p-value: 0.889, suggesting that Tax revenue of GDP does not significantly predict Fiscal balance of GDP. 95% Confidence Interval: From -0.845 to 0.965, which includes zero, reinforcing the lack of statistical significance. Intercept (cons): Coefficient: -0.0596, suggesting that when Tax revenue of GDP is zero, the Fiscal balance of GDP would be around -0.0596. t-Statistic: -0.56, p-value: 0.583, indicating the intercept is not statistically significant. The regression suggests no significant linear relationship between Tax revenue of GDP and Fiscal balance of GDP. The coefficients are not significant, and the model explains virtually none of the variance in the Fiscal balance, implying other factors might be more relevant.

Table 4.4: Ordinary Least Squares Regression

```
. regress FiscalbalanceofGDP TaxrevenueofGDP
```

Source	SS	df	MS	Number of obs	=	16
Model	7.0381e-06	1	7.0381e-06	F(1, 14)	=	0.02
Residual	.004837768	14	.000345555	Prob > F	=	0.8885
				R-squared	=	0.0015
				Adj R-squared	=	-0.0699
Total	.004844806	15	.000322987	Root MSE	=	.01859

Fiscalbalance~P	Coefficient	Std. err.	t	P> t	[95% conf. interval]
TaxrevenueofGDP	.0601863	.4217247	0.14	0.889	-.8443233 .9646959
_cons	-.0595749	.1059285	-0.56	0.583	-.286769 .1676193

Source: Stata Corp. (2023).

4.6. Robust Regression (rreg):

Robust regression minimizes the influence of outliers and provides more reliable coefficients when data may not meet standard OLS assumptions. Iteration Steps: Huber and biweight iterations were performed to adjust for the impact of outliers. Model Summary: Number of observations (obs): 16, F-Statistic (F (1,14)): 0.84, with a p-value (Prob > F) of 0.3763, indicating that even after adjusting for robustness, the model is not statistically significant. Regression Coefficients: Tax revenue of GDP: Coefficient: 0.1509, slightly higher than in the OLS but still weak. T-Statistic: 0.91 and p-value: 0.376, suggesting that the Tax revenue of GDP remains an insignificant predictor of the Fiscal balance of GDP even with a robust model. 95% Confidence Interval: From -0.203 to 0.505, which still includes zero, further indicating no significant impact. Intercept (_cons): Coefficient: -0.0802, with a t-statistic of -1.93 and p-value: 0.074, slightly more substantial, but still not reaching the typical threshold of 0.05. Even after using robust regression, there is no evidence of a significant relationship between the Tax revenue of GDP and the Fiscal balance of GDP. The slightly higher coefficient does not change the conclusion; the relationship remains weak and statistically insignificant.

Table 4.5: Robust Regression (rreg)

```

. rreg FiscalbalanceofGDP TaxrevenueofGDP

      Huber iteration 1: Maximum difference in weights = .85263452
      Huber iteration 2: Maximum difference in weights = .08588358
      Huber iteration 3: Maximum difference in weights = .02448658
      Biweight iteration 4: Maximum difference in weights = .2003777
      Biweight iteration 5: Maximum difference in weights = .00818132

Robust regression                               Number of obs   =           16
                                                F( 1,          14) =           0.84
                                                Prob > F         =           0.3763

```

Fiscalbalance~P	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
TaxrevenueofGDP	.1509834	.165222	0.91	0.376	-.2033825	.5053493
_cons	-.080225	.0415003	-1.93	0.074	-.1692344	.0087844

Source: Stata Corp. (2023).

4.7. Conclusion

Both the OLS and robust regression analyses indicate that the Tax revenue of GDP does not significantly predict or influence the Fiscal balance of GDP. The weak coefficients, high p-values, and low R-squared values suggest that changes in tax revenue as a percentage of GDP have little to no linear association with changes in the fiscal balance. These results imply that other factors are likely to contribute more significantly to the fiscal balance, and policymakers might need to consider a broader set of economic indicators or reforms to address fiscal deficits. The following chapter will present data analysis results using systematic literature reviews.

CHAPTER 5: DATA PRESENTATION AND ANALYSIS

5.1. Introduction

The reviewed literature presents a complex, multifaceted landscape of impediments to South Africa's tax revenue generation. Through systematic analysis, several recurring themes emerged: the role of tax evasion and avoidance, the influence of the digital economy, the impacts of corruption and governance, and the problems posed by informal sector taxation. These themes illustrate the intricate interplay of structural, institutional, and behavioural factors that shape tax compliance and revenue mobilization. The literature reviewed also provided an in-depth examination of tax administration inefficiencies and the associated challenges of digital adaptation, with a particular focus on the unique contexts of African economies and the broader implications in the global digital age. Below is a comprehensive analysis and interpretation of the findings.

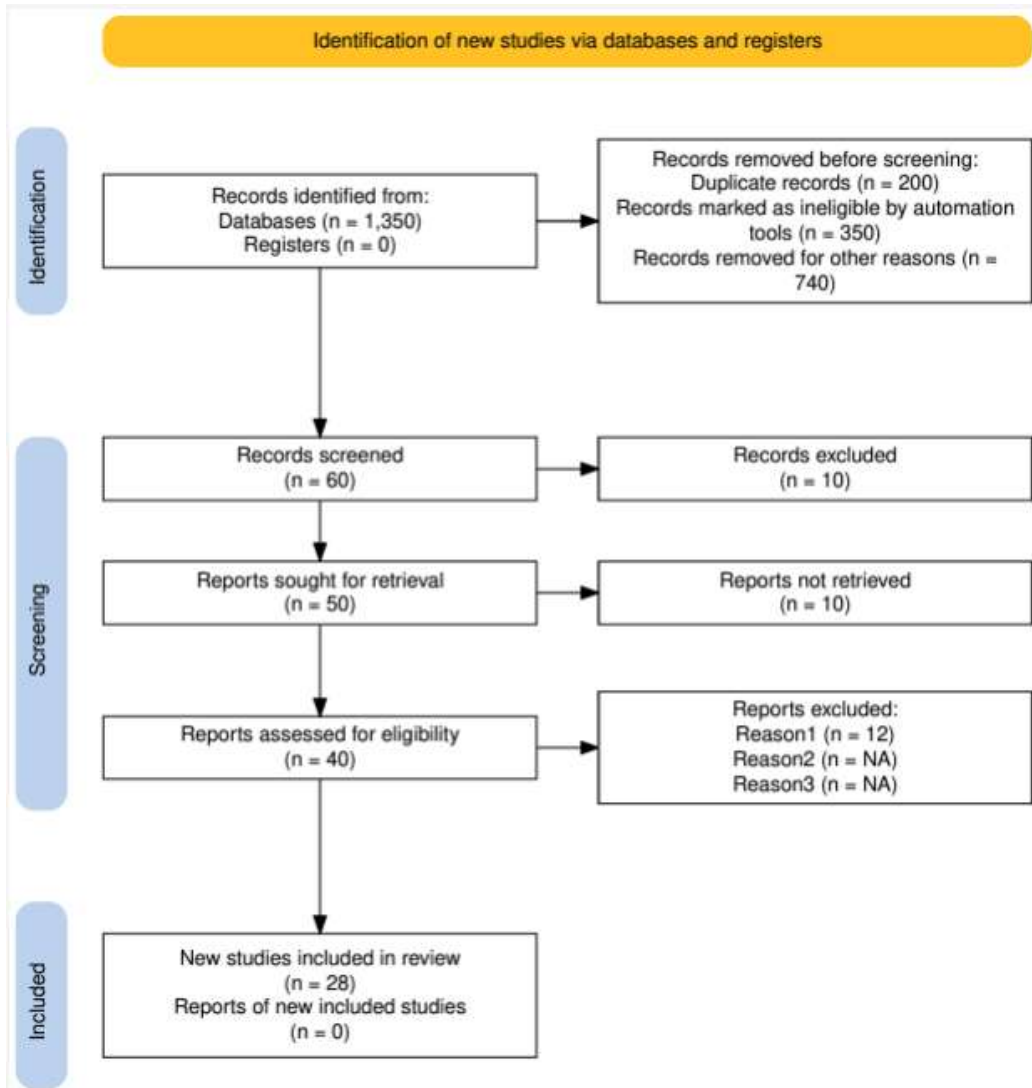
5.2. Challenges that Result in Insufficient Revenue Generation by South Africa

The systematic literature review process revealed critical insights into the interplay between governance, corruption, and tax revenue, and these findings are visually summarised in Figure 5.1 and detailed in Table 5.1, with further supporting information provided in Appendix A.

Figure 5.1 outlines the PRISMA flow diagram, illustrating the study selection process at each stage. Initially, 1,350 records were identified, with 200 removed due to duplication, and 350 excluded by automation tools during the identification phase. Of the 740 records screened for eligibility, 60 were retained for further assessment, of which 10 were excluded based on content. Among the 50 sought for retrieval, 10 could not be accessed, leaving 40 reports for eligibility evaluation. After excluding 12 studies for reasons such as not meeting the 2017-2024 timeframe or low-quality assessments, 28 studies ultimately satisfied the inclusion criteria. Table 5.1 provides a detailed summary of the included studies, highlighting their methodologies, focus areas, and key findings. It serves as a concise representation of the evidence base used to derive policy recommendations. Appendix A contains the complete list of included studies with detailed descriptions, offering transparency and a comprehensive resource for further exploration. This appendix ensures that readers can verify the robustness of the included studies and their relevance to the research objectives.

Together, this section provides a coherent narrative of the systematic review process, from initial identification to final inclusion, and present a structured basis for the subsequent analysis and recommendations.

Figure 5.1: PRISMA Flow Diagram



Source: Haddaway et al. (2022)

Table 5.1: Summary of the Literature review

No.	Authors	Title	Method of study	Key findings
1.	Mvunabandi et al. (2024)	The Effect of Tax Avoidance and Tax Evasion on the Performance of South African Economy	Secondary data	Tax evasion and avoidance have minimal impact on GDP when tax rates increase due to effective revenue offset mechanisms. South Africa demonstrates resilience in tax collection, with planned tax revenue often surpassed.
2.	Van der Spuy & De Jager (2023)	Corporate tax avoidance: Is South African society negatively affected by chartered accountant CEOs?	Secondary data	Corporate tax avoidance negatively impacts public sector investment in critical areas like infrastructure and poverty reduction. Governance and accountability reforms are crucial to curb tax avoidance.
3.	Mpofu (2022)	Taxing the Digital Economy through Consumption Taxes (VAT) in African Countries: Possibilities, Constraints, and Implications	Secondary data	<ul style="list-style-type: none"> • Difficulties include tracking cross-border transactions and establishing effective tax regimes for intangible goods. Emphasizes the need for international cooperation and regulatory frameworks to address these issues. • Obstacles to VAT implementation for digital services

				<p>include legal ambiguities and capacity limitations, despite opportunities for revenue growth.</p> <ul style="list-style-type: none"> • Higher VAT on digital services can reduce accessibility and exacerbate inequality, highlighting the need for inclusive tax policies.
4.	Gomera et al. (2021)	Enhancing Tax Administration to Micro Businesses Through Digital Technology: An Exploratory Study in Dar Es Salaam, Tanzania	Primary data	Existing tax systems are inaccessible for small businesses, but digital technology offers potential solutions for tax collection and integration of informal businesses.
5.	Epaphra & Massawe (2017)	Corruption, governance, and tax revenues in Africa	Secondary data	Corruption significantly lowers tax collections, while improved governance bolsters indirect tax revenue. Suggests reforms to strengthen institutional capacity and reduce corruption.
6.	Haginour (2018)	The challenges of tax administration in Somaliland Ministry of	Mixed method research approach (qualitative	Outdated tax laws, inadequate knowledge, and lack of trust in the government hinder tax

		Finance: A critical analysis of institutional perspective	interviews and quantitative data questionnaires were used).	compliance. Institutional reforms must be adapted to national contexts.
7.	Umar et al. (2017)	Challenges of tax revenue generation in developing countries: Adopting the carrot and stick approach	Secondary data	Recommends balancing incentives and penalties to address compliance behaviours. Governance improvements alone are insufficient without targeting individual behaviours.
8.	Vellios et al. (2020)	Illicit cigarette trade in South Africa: 2002-2017	Surveys	High excise taxes drive illegal cigarette trade, especially among low-income groups. Enforcement is undermined by institutional instability.
9.	Erero (2020)	The effects of illicit cigarette trade in South Africa: A CGE analysis	Secondary data	Illicit cigarette trade causes significant tax revenue losses and GDP decline. Calls for stricter enforcement and anti-illicit trade policies.
10.	Goodchild et al. (2022)	The potential impact of eliminating illicit trade in cigarettes: A demand-side perspective	Secondary data	Removing illicit cigarettes increases tax revenue and reduces consumption, but success depends on international cooperation and enforcement capacity.
11.	Mpofu (2023)	Challenges affecting informal sector tax administration, enforcement, and	Mixed method research approach (qualitative interviews,	High tax rates, bureaucracy, and corruption deter informal sector compliance. Suggests stakeholder engagement and simplified tax systems.

		compliance in African countries: Evidence from Zimbabwe	observation, document analysis, and quantitative data questionnaires were used).	
12.	Etim & Daramola (2020)	The Informal Sector and Economic Growth of South Africa and Nigeria: A Comparative Systematic Review	Secondary data	High tax rates and unemployment drive informality. Suggests policy incentives and reduced financial burdens to improve compliance.
13.	Bornman & Ramutumbu (2019)	A tax compliance risk profile of guesthouse owners in Soweto, South Africa	Mixed method (semi-structured questionnaires were used).	Cash-based businesses face compliance risks due to income instability and poor record-keeping. Compliance is hindered by practical challenges despite favourable attitudes toward taxation.
14.	Lengaram (2023)	Tax effort and capacity in developing countries: Unravelling the impact of the informal economy	Secondary data	Poor governance and reliance on informal trade hinder tax mobilization. Suggests reforms to improve governance and transparency.
15.	Abebe & Fikre (2020)	Econometric Analysis of the Effects of Corruption on	Secondary data	<ul style="list-style-type: none"> • Low corruption levels increase tax revenue collection by approximately 6%.

		Government Tax Revenue: Evidence from Panel Data in Developed and Developing Countries		Anti-corruption measures are crucial for strengthening tax systems. <ul style="list-style-type: none">Advocates strengthening democratic institutions and legislative reforms to monitor and reduce corruption.
16.	Mohamed et al. (2022)	Effect of Corruption and Governance on Tax Revenue in Mogadishu, Somalia	Primary data (Questionnaires)	Poor governance and regulatory instability reduce tax revenue. Advocates for institutional reforms to improve regulatory quality.
17.	Duong (2022)	Corruption, Shadow Economy, FDI, and Tax Revenue in BRICS: A Bayesian approach	Secondary data	Moderate informality can increase tax revenue by expanding the tax base, but high levels of informality reduce tax revenue due to tax evasion.
18.	Bhuana & Wijaya (2024)	Control Of Corruption in Moderating the Effect Of Per Capita Income and Shadow Economy on Tax Revenue	Secondary data	The shadow economy negatively impacts tax revenue. Anti-corruption measures and better governance are essential for improving tax collection.
19.	Yilanci & Şaşmaz (2023)	The Effect of Corruption on the Tax Revenues:	Secondary data	Corruption increases tax revenue temporarily, but skews tax burdens, limiting

		Case of EU Transition Economies		public services and increasing taxpayer resistance.
20.	Kuttu et al. (2024)	Corruption, Taxation of Natural Resources and Sustainable Development in Africa	Secondary data	Anti-corruption measures improve sustainable resource management and tax efficiency in Africa.
21.	Hussain et al. (2022)	Corruption, Governance, and Government Revenue	Secondary data	Governance improvements are crucial to reducing corruption and improving tax revenue in developing regions.
22.	Pamba (2023)	Does the Quality of Governance Affect Tax Revenue in South Africa?	Secondary data	Emphasizes the need to improve governance indicators, particularly in corruption control, to increase tax revenue in South Africa.
23.	Mackenzie et al. (2022)	Assessing the efficiency of tax administration in Africa	Secondary data	Tax administration inefficiencies range from 3% to 79%, with recommendations for operational independence and better taxpayer categorization.
24.	Audu & Ishola (2021)	Digital economy and tax administration in Nigeria	Secondary data	ICT alone has an insignificant impact on tax revenue without supportive policies and capacity-building measures.

25.	Pylypenko et al. (2022)	Digital Transformation in Tax Administration	Scientific abstraction, logic, graphics, visual reflection and analytics.	Digitalization improves transparency and reduces tax evasion, but effectiveness depends on supportive reforms and international cooperation.
26.	Tambunan & Rosdiana (2020)	Indonesia Tax Authority Measure on Facing the Challenge in Taxing Digital Economy	Constructivism paradigm and qualitative research method.	Indonesia's tax structures are insufficient for digital economy adversities, emphasizing the need for reforms and stakeholder collaboration.
27.	Apriadi & Monalysa (2021)	Tax Avoidance in the Form of Base Erosion and Profit Shifting in Digital Economic Transactions by Multinational Companies	Secondary data	Highlights how MNCs exploit loopholes (e.g., "Double Irish Dutch Sandwich") to shift profits to tax-friendly jurisdictions, hindering domestic tax revenue.
28.	Jaafar & Muhammad (2024)	The Impact of Financial and Administrative Corruption on Tax Revenues for Financing State Public Budget	Primary data	The findings demonstrated a clear connection between financial and administrative corruption (FAC) and tax revenue. They also highlighted a strong relationship between FAC and the financing of the state's public budget, revealing that it significantly impacts both tax revenue and public budget funding. Therefore, the results

				emphasize a close interrelationship between FAC, tax revenue, and public budget financing, showcasing the extensive influence of FAC on these critical areas.
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Source: Researcher own work

Tax Evasion and Avoidance: Contrasting Macro and Microeconomic Impacts

The studies by Mvunabandi et al. (2024) and Van der Spuy and De Jager (2023) provide contrasting insights into the impacts of tax evasion and avoidance. Mvunabandi et al. (2024) argue that South Africa’s macroeconomic resilience, demonstrated by its ability to exceed planned tax revenue, minimizes the impact of tax evasion on GDP. In contrast, Van der Spuy and De Jager (2023) highlight the microeconomic and societal detriments, particularly the erosion of public sector investment in infrastructure and poverty alleviation due to corporate tax avoidance. This dichotomy underscores the duality of South Africa’s tax system, where robust compensatory mechanisms exist at a macroeconomic level, but governance and corporate accountability deficiencies hinder equitable resource allocation. These findings suggest that while tax evasion might not disrupt GDP significantly, its broader societal implications, including perpetuating inequality, require targeted policy interventions.

Digital Economy and Technological Solutions

The digital economy represents opportunities for tax revenue collection, but not without addressing impediments. Mpfu (2022) highlights the complexities of applying VAT to digital transactions, compounded by cross-border trade and the intangible nature of digital goods. Complementary findings by Gomera et al. (2021) suggest that digital technologies could enhance tax collection by improving accessibility for micro businesses and tracking informal transactions. However, both studies emphasize the need for tailored frameworks and international cooperation to effectively address digital tax enforcement. South Africa’s position as a regional leader in digital adoption makes these insights particularly relevant, suggesting that adopting advanced technological solutions could strengthen its tax base while addressing loopholes inherent in the digital economy.

Corruption and Governance: Structural Barriers to Revenue Mobilization

Corruption emerges as a central factor impeding tax revenue generation. Studies such as those by Epaphra and Massawe (2017) and Pamba (2023) reveal the profound negative effects of corruption on tax collection, exacerbated by weak governance structures. The correlation between governance quality and revenue mobilization highlights the potential for systemic reforms to mitigate corruption's impact. For instance, countries with improved governance indicators and reduced corruption consistently exhibit higher tax collection rates. Moreover, regional comparisons, such as those by Hussain et al. (2022), illustrate that tailored anti-corruption measures aligned with local economic structures are essential for effective implementation. These findings indicate that addressing governance deficiencies could significantly enhance South Africa's capacity to generate sustainable revenue.

The Informal Sector: Administrative and Compliance Challenges

Non-compliance in the informal sector, driven by high tax rates, bureaucracy, and corruption, represents another significant hurdle for taxation participation. Studies by Mpofu (2023) and Etim and Daramola (2020) reveal that structural barriers discourage formalization, while attitudinal studies by Mokgathe (2023) and Bornman and Ramutumbu (2019) highlight practical compliance obstacles, such as cash-based transactions and income instability. These findings indicate a dual need for administrative simplification and targeted incentives to encourage informal sector participation. Furthermore, Gomera et al. (2021) suggest that leveraging digital technology could address informal sector taxation by streamlining processes and enhancing accessibility. For South Africa, where the informal economy plays a substantial role, a nuanced approach to balancing enforcement with supportive policies is essential to broaden the tax base.

Illicit Cigarette Trade: Socioeconomic Implications

The illicit cigarette trade exemplifies how socioeconomic disparities and enforcement weaknesses undermine tax revenue. Vellios et al. (2020) and Van der Zee et al. (2020) demonstrate that high excise taxes, combined with low-income levels, drive the demand for illegal cigarettes. The fiscal losses from this trade not only weaken public finances, but also exacerbate inequality, as marginalized groups are disproportionately impacted. Policy measures, such as track-and-trace systems, show promise, but they require substantial resources and enforcement capacity. The comparative success in countries like Georgia, as highlighted by Mzhavanadze (2023), underscores the importance of adapting enforcement

strategies to local contexts. For South Africa, addressing illicit trade requires a balance between maintaining excise revenue and mitigating affordability concerns among low-income populations.

Tax Administration Inefficiency

The reviewed studies collectively indicate that tax administrations across Africa operate significantly below potential, with inefficiencies ranging from 3% to 79% (Mackenzie et al., 2022). This variance highlights the uneven capabilities of tax systems within the region, stemming from limited operational independence, inadequate taxpayer categorization, and the problems posed for taxation by the informal economy. These findings underscore the systemic nature of inefficiency, suggesting that a singular reform approach is unlikely to succeed. Instead, targeted strategies, such as restructuring tax authority governance and enhancing the categorization process, are essential. The informal economy's impact is particularly pronounced in Africa, where it constitutes a significant share of economic activity, presenting a dual demand of increasing tax compliance, but without stifling grassroots entrepreneurship. The inefficiencies identified also point to broader issues of technological underutilization, which, if addressed, could mitigate operational bottlenecks.

Digitalization: Potential Versus Realized Outcomes

The potential for digitalization in transforming tax systems remains a recurring theme, yet the results highlight its limitations in practice. For instance, the findings by Audu and Ishola (2021) reveal an insignificant impact of ICT adoption on Nigeria's tax revenue. This suggests that digitalization alone is insufficient for improving tax efficiency, particularly in the absence of supportive regulatory frameworks and capacity-building measures. Conversely, Pylypenko et al. (2022) argue that digital transformation, when paired with transparency initiatives and global cooperation, could significantly curb tax evasion, and enhance efficiency. This duality underscores a critical insight: the success of digitalization initiatives hinges on a synergistic relationship between technology and institutional reforms. Moreover, the context-specific impediments, such as Indonesia's inadequate tax regulatory structure (Tambunan & Rosdiana, 2020), illustrate that digital tools need to be adapted to the socioeconomic and legislative realities of each region. For Africa, prioritizing investments in digital infrastructure alongside training for tax officials could bridge the gap between potential and realized outcomes.

Challenges in Taxing Multinational Corporations

The complexities of taxing MNCs in the digital economy emerge as a key barrier to effective tax administration. Apriadi and Monalysa (2021) reveal how schemes like the "Double Irish Dutch Sandwich" allow MNCs to shift profits to low-tax jurisdictions (BEPS), making it difficult for countries to claim rightful tax revenues. These strategies exploit legal ambiguities around the concept of a "permanent establishment," which is particularly difficult to deal with for African nations with weaker regulatory frameworks. Mpofu's (2022) observations on the application of VAT to digital services in Africa highlight the opportunities for revenue enhancement, yet they also underscore the need for clarity in policy design and enforcement mechanisms. The findings suggest that without international cooperation and innovative policy frameworks, taxing MNCs in the digital space will remain a persistent difficulty. Global agreements, such as the OECD's initiatives on digital taxation, may provide a pathway, but their effectiveness for African economies will depend on regional adaptation and enforcement capabilities.

Socioeconomic Impacts of Tax Policies

The broader socioeconomic implications of inefficient tax systems are significant, with potential trade-offs between revenue generation and inclusive growth. Higher VAT on digital services, as noted by Mpofu (2022), could reduce accessibility, exacerbating inequality and limiting digital inclusion. These findings underscore the need for inclusive policy frameworks that balance the revenue needs of governments with the socioeconomic realities of their populations. Similarly, Tambunan and Rosdiana (2020) emphasize that stakeholder engagement is critical for designing policies that foster economic growth while addressing regulatory gaps. For African economies, this highlights the importance of integrating tax reforms with broader developmental goals, such as promoting financial inclusion and reducing income inequality.

5.3. Conclusion

In conclusion, the systematic review highlights that while tax administration inefficiencies pose significant challenges, they also present opportunities for transformative reforms. Addressing these inefficiencies will require a coordinated effort that combines technological advancements, policy innovation, and collaborative governance at both national and international levels. Future research should focus on region-specific reform models and the role of public-private partnerships in enhancing tax efficiency. While South Africa exhibits

resilience in certain aspects of tax revenue generation, persistent obstacles require comprehensive, multi-dimensional solutions. Policymakers must prioritize governance reforms, technological integration, and inclusive policy designs to strengthen the country's fiscal stability and ensure equitable economic growth. This balanced approach, informed by both macroeconomic resilience and microeconomic vulnerabilities, could address the structural barriers impeding tax revenue generation and support long-term sustainable development.

CHAPTER 6: SUMMARY, CONCLUSION, AND RECOMMENDATIONS

6.1 Introduction

This chapter concludes the study by presenting a comprehensive overview of its key findings, addressing the research questions, and proposing actionable recommendations based on the results. The chapter begins with a summary of the study, providing an executive synopsis of its objectives, methodology, and findings. This is followed by concise conclusions that directly respond to the research questions, avoiding any repetition of the results. Subsequently, practical recommendations are outlined, targeting stakeholders who can implement changes to address the identified challenging issues or leverage opportunities. Finally, the chapter concludes by suggesting areas for future research, offering directions for further exploration in this critical area.

6.2 Summary of the Study

South Africa's persistent fiscal deficit is fuelled by insufficient tax revenue, economic factors, and systemic inefficiencies in the taxation framework. Economic factors such as high unemployment, widespread informality, corruption, and illicit trade exacerbate the problem. Tax avoidance, evasion, and weak governance further strain the system, with high tax rates and limited enforcement discouraging compliance, particularly in the informal and cash-based sectors. Institutional weaknesses, outdated tax laws, and ineffective taxation of the digital economy compound these issues, while illicit trade in high-excise goods like cigarettes results in substantial revenue losses.

The study utilized OLS regression models to explore the relationship between taxation and fiscal deficit closure. By leveraging cross-sectional and time-series data, OLS enables the analysis of predictor variables such as tax revenue, economic growth, government expenditure, tax compliance, and income inequality on fiscal deficit closure. Robust regression was employed as an alternative to address violations of OLS assumptions, mitigating the influence of outliers through techniques such as IRLS.

To complement the quantitative analysis, the study conducted a systematic literature review to identify key issues hindering revenue generation. The review highlighted outdated tax policies,

corruption, and administrative inefficiencies as critical barriers. Governance issues, high compliance costs, and the exclusion of the informal sector from the tax base also emerged as significant contributors to the fiscal deficit.

The key obstacles are outdated tax laws, an ineffective approach to taxing the digital economy, and corruption that diverts public funds and undermines tax collection efforts. Moreover, illicit trade in high-excise goods, such as cigarettes, leads to significant revenue losses. The informal sector's exclusion from the tax base further deepens the fiscal gap, as poor record-keeping, bureaucracy, and high compliance costs deter participation. Governance issues and administrative inefficiencies also reduce the effectiveness of tax collection and enforcement mechanisms.

6.3 Conclusions

The findings of this study provide a comprehensive view of the fiscal and taxation landscape in South Africa, emphasizing both the trends and the difficulties faced. The analysis of fiscal deficits revealed an average deficit of 4.4% of GDP, with minimal fluctuations over the study period. This stability indicates a persistent imbalance between government revenue and expenditure, which, if unchecked, could undermine long-term fiscal sustainability. Tax revenue contributes an average of 25.1% of GDP, displaying consistent trends with low variability. This stability in tax revenue highlights a reliable revenue source for the government, but it also underscores the limitations for expanding the tax base to address fiscal deficits more effectively.

The weak correlation between fiscal balance and tax revenue ($r = 0.0381$) and the lack of statistical significance ($p = 0.8885$) indicate a negligible relationship between these variables. This suggests that factors beyond tax revenue, such as government spending efficiency and macroeconomic conditions, play a more critical role in influencing fiscal balance. The OLS regression results further support this finding, showing that tax revenue accounts for only 0.15% of the variance in fiscal balance ($R\text{-squared} = 0.0015$), with insignificant coefficients. Similarly, robust regression techniques, designed to account for outliers, revealed no meaningful relationship between tax revenue and fiscal balance, affirming that tax revenue alone is insufficient to predict or stabilize fiscal performance.

The resilience of South Africa's tax system, despite issues of tax evasion and avoidance, is notable. Effective offset mechanisms appear to mitigate the immediate GDP impact of these practices. However, corporate tax avoidance remains a critical issue, as it undermines public investments in infrastructure and poverty alleviation, highlighting the need for enhanced governance and accountability measures to ensure that corporate contributions align with developmental objectives.

The taxation of the digital economy poses unique challenges, such as legal ambiguities, capacity limitations, and difficulties in tracking cross-border transactions. While higher VAT rates on digital services could increase revenue, they may exacerbate social inequality, emphasizing the need for inclusive and equitable tax policies. On the other hand, leveraging digital technology to integrate informal micro businesses into the tax system could enhance compliance and broaden the tax base, demonstrating the transformative potential of digitalization in modern tax administration.

Governance and corruption were identified as significant factors affecting tax revenue. Corruption erodes revenue collection, while improved governance enhances tax efficiency, particularly for indirect taxes. Anti-corruption initiatives are, therefore, vital for ensuring sustainable revenue streams and fostering public trust in the tax system. Similarly, problematic tax administration issues such as outdated laws, institutional inefficiencies, and a lack of trust, underscore the need for reform. Stricter enforcement and international cooperation are crucial to address illicit trade, such as the illicit cigarette market, which causes substantial revenue losses.

The issue of tax compliance within the informal sector also presents a significant challenge to revenue, with high tax rates, bureaucratic barriers, and corruption being some of the compliance deterrents. Simplified tax systems and stakeholder engagement are essential to encourage participation from this segment. The shadow economy, characterized by informality, further complicates tax collection efforts. While high levels of informality negatively impact revenue, moderate levels, if effectively regulated, could expand the tax base.

Digital transformation of the taxation system emerges as a promising solution for improving tax transparency and reducing evasion. However, its success depends on supportive reforms and international collaboration to address cross-border tax difficulties. Issues such as BEPS

highlight how multinational corporations exploit loopholes, necessitating stronger regulatory frameworks to protect the tax base.

Lastly, financial, and administrative corruption significantly undermine tax revenue and public financing. This reinforces the urgency of governance reforms to ensure efficient tax administration. Wide variations in tax administration efficiency across African countries further highlight the importance of operational independence and targeted improvements to build more robust and effective systems.

These findings collectively emphasize the complex interplay between governance, economic policy, and tax administration. Addressing these issues requires a multifaceted approach that combines technological innovation, policy reform, and enhanced governance to ensure sustainable revenue generation and fiscal stability.

6.4 Recommendations

The Relationship Between Fiscal Deficit and Revenue Collection in South Africa

The analysis highlights a weak and statistically insignificant relationship between tax revenue as a percentage of GDP and fiscal balance as a percentage of GDP. Based on these findings, policymakers should adopt a multifaceted approach to fiscal sustainability. Merely increasing tax revenues as a share of GDP is unlikely to resolve fiscal deficits. Efforts should instead focus on improving the efficiency of government expenditures. This includes reducing waste, eliminating inefficiencies, and ensuring that public funds are directed toward high-impact investments that promote economic growth. Additionally, implementing fiscal rules that cap deficits or link spending to revenue growth could enhance fiscal discipline over the long term.

Tax reforms should also focus on diversifying and stabilizing revenue streams. Policymakers might explore alternative forms of taxation, such as progressive wealth or environmental taxes, which could reduce reliance on narrow revenue sources. Furthermore, enhancing tax compliance through improved administration, digitalization, and reducing loopholes would help governments capture unrealized revenue without raising tax rates. Policies that promote economic growth, such as incentivizing private-sector investment and productivity enhancements, could indirectly improve the fiscal balance by broadening the tax base.

Factors that Result in Insufficient Revenue Generation in South Africa

The findings highlight several critical areas for improving tax administration and compliance, particularly in developing countries. To address the difficult issues of tax evasion, tax avoidance, and illicit trade, governments should focus on governance reforms and institutional strengthening. Enhanced transparency and accountability mechanisms are essential for combating financial and administrative corruption, which significantly undermines tax revenue and public budget financing. Anti-corruption strategies, such as strengthening democratic institutions such as SARS and implementing robust regulatory frameworks, would increase revenue collection efficiency. Furthermore, international cooperation is vital in addressing issues like cross-border tax evasion, illicit trade, and digital economy taxation.

Digital transformation offers significant potential to improve tax administration by increasing transparency, reducing evasion, and facilitating the integration of informal businesses into the formal tax system. However, these efforts need to be supported by adequate infrastructure, capacity-building measures, and legal reforms to address barriers such as outdated tax laws and limited administrative capacity. Simplified tax systems, stakeholder engagement, and tailored approaches for informal sector taxation would improve compliance and broaden the tax base, especially in countries where high tax rates and bureaucracy deter participation.

A further recommendation is the introduction of targeted measures to regulate and tax the digital economy, which is considered essential as technological advancements outpace current tax systems. Collaboration between governments, international organizations, and digital platforms would thus be necessary to establish effective regimes for taxing these intangible goods and services. However, special attention should be given to minimizing inequalities that may arise from increased consumption taxes on digital services.

To enhance tax collection and effectively regulate the informal sector and the illicit cigarette trade, it is recommended that inter-governmental relations between SARS and key stakeholders be strengthened, which includes law enforcement agencies, municipalities, provincial departments of economic development, and the Department of Trade, Industry and Competition (DTIC). This can be achieved by fostering closer collaboration through shared intelligence, joint task forces, and coordinated enforcement efforts. SARS should work with law enforcement to improve the detection and disruption of illicit tobacco trade networks, while municipalities can play a vital role in ensuring local compliance with tax regulations and

facilitating the formalization of informal businesses. Provincial economic development departments, in partnership with DTIC, would support policy alignment and the implementation of tax incentives to encourage informal traders to register and pay taxes, thereby reducing reliance on the informal economy. Additionally, creating integrated data-sharing platforms between SARS and other agencies would streamline the monitoring of tax compliance, allowing for more effective audits and detection of tax evasion. By enhancing coordination, sharing resources, and aligning objectives, the government can improve tax collection, reduce illicit trade, and bring more informal businesses into the formal tax system, fostering long-term economic growth and public revenue.

6.5 Suggestions for Further Study

For future research, a broader investigation into the determinants of fiscal balance is crucial. The limited explanatory power of tax revenue on fiscal balance suggests that other factors, such as public debt levels, external trade balances, monetary policies, and macroeconomic stability, play a more significant role. Future studies should explore these variables using larger datasets across multiple countries to assess whether the findings are consistent across different economic and institutional contexts. Longitudinal analyses tracking fiscal policies over time may reveal dynamic relationships that cross-sectional studies fail to capture. Researchers should also consider the role of political and institutional factors, such as governance quality, corruption levels, and the effectiveness of fiscal oversight, in shaping fiscal outcomes.

Future research should explore the impact of governance quality on tax revenue mobilization, with a focus on developing tailored anti-corruption and tax compliance strategies. Studies could also examine the effectiveness of digital tools in addressing tax administration inefficiencies, especially for integrating informal businesses. Further investigations into the implications of tax policies on social equity, particularly in the context of VAT and digital services, are warranted. Additionally, longitudinal studies on the impact of illicit trade enforcement measures and international cooperation on tax revenue would provide valuable insights. Finally, exploring the intersection of environmental sustainability and taxation, particularly in resource-rich economies, could guide policy development for managing natural resources and enhancing tax efficiency.

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APPENDICES

Appendix A: Data Extraction Sheet

Systematic Literature Review Selection Index						
No.	Authors	Database	Title	Method of Study	Abstract Summary	Inclusion Status
1.	Mvunabandi et al. (2024)	EconJournals	The Effect of Tax Avoidance and Tax Evasion on the Performance of South African Economy	Secondary data	Used longitudinal data (1994-2021) and OLS regression to assess the impact of tax evasion and avoidance on GDP in South Africa. Results indicated minimal effects, with economic growth correlating positively with tax revenue collection. Policy insights suggest rising tax rates as a strategy to mitigate evasion and avoidance without negatively affecting growth.	Included
2.	Van der Spuy & De Jager (2023)	Scientific Electronic Library Online	Corporate tax avoidance: Is South African society negatively affected by chartered accountant CEOs?	Secondary data	Examined the influence of CEOs' tax knowledge on corporate tax avoidance in 112 Johannesburg Stock Exchange companies (2004-2018). Found no observable link between chartered accountant CEOs and tax avoidance,	Included

					alleviating concerns about their societal impact.	
3.	Mpofu (2022)	Google Search	Taxing the Digital Economy through Consumption Taxes (VAT) in African Countries: Possibilities, Constraints, and Implications	Secondary data	Analysed VAT as a mechanism for taxing Africa's digital economy. Opportunities included revenue gains and regulatory frameworks, while problems involved legal ambiguities and capacity gaps. VAT can increase costs, limit access, and exacerbate inequality. Highlights the need for equitable strategies to enhance taxation efficiency without undermining inclusion and development	• Included
4.	Gomera et al. (2021)	Academia	Enhancing Tax Administration to Micro Businesses Through Digital Technology: An Exploratory Study in Dar Es Salaam, Tanzania	mixed method research approach (qualitative interviews and quantitative data questionnaires were used)	Explored the role of digital technology in improving tax administration for micro businesses in Tanzania. Findings identified current tax practices, obstacles (e.g., lack of education, compliance issues), and potential tech-based solutions to enhance efficiency and compliance.	Included

5.	Epaphra & Massawe (2017)	Central and Eastern European Online Library	Corruption, governance, and tax revenues in Africa	Secondary data	Investigated corruption and governance's impact on tax revenues across 30 African countries (1996-2016). Results showed corruption reduces revenue, while good governance enhances it, especially for indirect and trade taxes. Recommendations were reducing corruption, improving tax administration, and enhancing trade openness.	Included
6.	Haginour (2018)	Google Search	The challenges of tax administration in Somaliland Ministry of Finance: A critical analysis of institutional perspective	Mixed method research approach (qualitative interviews and quantitative data questionnaires were used)	Assessed tax administration challenges in Somaliland's Ministry of Finance. Issues included were outdated laws, lack of training, and low public trust. Recommended professional training, automation, performance systems, and policy updates to improve revenue collection and system transparency.	Included
7.	Umar et al. (2017)	Research Gate	Challenges of tax revenue generation in developing countries: Adopting the	Secondary data	Identified tax noncompliance as a key issue in developing countries, suggesting a "carrot and stick" approach. Proposed socioeconomic incentives (carrot) alongside audits and	Included

			carrot and stick approach		sanctions (stick) to improve compliance. Highlighted the importance of citizen engagement and tax service quality in addressing the challenges.	
8.	Vellios et al. (2020)	Google Search	Illicit cigarette trade in South Africa: 2002-2017	Surveys	Analysed the rise in the illicit cigarette trade (2002-2017) and its impact on tax revenues and public health. An estimated 30-35% of the market in 2017 was illicit, with reduced enforcement contributing to growth. Urged for tracking systems to combat illicit trade and improved fiscal outcomes.	Included
9.	Erero (2020)	Sciendo	The effects of illicit cigarette trade in South Africa: A CGE analysis	Secondary data	Used a CGE model to evaluate the R8 billion revenue loss from illicit cigarette trade in 2015. Found negative impacts on GDP and employment, recommending a cigarette governing body for monitoring and strategies to address organized crime and corruption.	Included

10.	Goodchild et al. (2022)	Google Search	The potential impact of eliminating illicit trade in cigarettes: A demand-side perspective	Secondary data	Analysed 36 countries to assess the impact of eliminating illicit cigarettes. Found reductions in consumption and smoking rates alongside increased tax revenues. Highlighted the fiscal and health benefits of eradicating illicit trade, advocating for comprehensive control measures under the Protocol to Eliminate Illicit Trade in Tobacco Products.	Included
11.	Mpofu (2023)	Google Search	Challenges affecting informal sector tax administration, enforcement, and compliance in African countries: Evidence from Zimbabwe	Mixed method research approach (qualitative interviews, observation, document analysis and quantitative data questionnaires were used)	Examined the challenges in taxing the informal sector, citing structural issues, tax system complexity, lack of stakeholder engagement, high tax rates, and corruption. Recommended tax policy reviews, dialogue, and increased capacity for tax authorities.	Included
12.	Etim & Daramola (2020)	Google Search	The Informal Sector and Economic Growth of South Africa and Nigeria: A	Secondary data	Investigated drivers of informality in South Africa and Nigeria. Identified challenges such as excessive tax burdens and inflation.	Included

			Comparative Systematic Review		Recommended policies to support informal sector growth and economic contributions in both countries.	
13.	Bornman & Ramutumbu (2019)	Sabinet African Journals	A tax compliance risk profile of guesthouse owners in Soweto, South Africa	Mixed method (semi-structured questionnaires)	Profiled tax compliance risks of guesthouse owners. Highlighted factors such as fairness perception, lack of tax knowledge, and decision framing that lead to non-compliance. Recommended taxpayer education and improved communication from revenue authorities.	Included
14.	Lengaram (2023)	Research Gate	Tax effort and capacity in developing countries: Unravelling the impact of the informal economy	Secondary data	Explored tax effort in 25 African countries, showing informal economy, corruption, and governance issues constrain tax mobilisation. Suggested structural reforms and governance improvements to optimise tax revenue collection.	Included
15.	Abebe & Fikre (2020)	Research Gate	Econometric Analysis of the Effects of Corruption on Government Tax	Secondary data	Found corruption significantly reduces tax revenue, with less corrupt countries collecting 6% more revenue. Suggested legislative reforms and	Included

			Revenue: Evidence from Panel Data in Developed and Developing Countries		democratic institution strengthening to combat corruption.	
16.	Mohamed et al. (2022)	Google search	Effect of Corruption and Governance on Tax Revenue in Mogadishu, Somalia	Primary data (Questionnaires)	Identified corruption and governance issues as barriers to tax revenue. Recommended training tax officers and providing efficient tax services to improve revenue collection.	Included
17.	Duong (2022)	Montenegrin Journal of Economics	Corruption, Shadow Economy, FDI, and Tax Revenue in BRICS: A Bayesian Approach	Secondary data	Examined how corruption and shadow economies affect tax revenue in BRICS nations. Highlighted the importance of well-designed tax systems to ensure financial stability and economic growth.	Included
18.	Bhuana & Wijaya (2024)	Google search	Control of Corruption in Moderating the Effect of Per Capita Income and Shadow Economy on Tax Revenue	Secondary data	Examined how corruption and shadow economies affect tax revenue in BRICS nations. Highlighted the importance of well-designed tax systems to ensure financial stability and economic growth.	Included

19.	Yilanci & Şaşmaz (2023)	Research Gate	The Effect of Corruption on the Tax Revenues: Case of EU Transition Economies	Secondary data	Found a long-run relationship and bidirectional causality between corruption and tax revenue in EU transition economies. Suggested reforms to address corruption for improved tax revenue.	Included
20.	Kuttu et al. (2024)	Springer Nature	Corruption, Taxation of Natural Resources and Sustainable Development in Africa	Secondary data	Highlighted corruption as a barrier to effective taxation and sustainable resource management in Africa. Suggested robust anti-corruption measures and cohesive policies for resource-based revenue optimisation and sustainable development.	Included
21.	Hussain et al. (2022)	Journal of History and Social Sciences	Corruption, Governance, and Government Revenue	Secondary data	Examined how corruption negatively impacts government revenue while governance positively influences it. Using panel data from 96 countries (2005–2020), analysed via fixed effect and D&K techniques, the findings emphasized the need for improved governance to enhance tax revenue and	Included

					control corruption levels in the economy.	
22.	Pamba (2023)	Research Gate	Does the Quality of Governance Affect Tax Revenue in South Africa?	Secondary data	Assessed governance quality's impact on tax revenue in South Africa (1996–2020). Using multiple regression, it found most governance proxies negatively affect tax revenue except for corruption control. Recommended addressing poor governance to improve tax revenue outcomes.	Included
23.	Mackenzie et al. (2022)	Sabinet African Journals	Assessing the efficiency of tax administration in Africa	Secondary data	Analysing data from 27 African countries, evaluated tax administration efficiency using stochastic frontier and data envelopment techniques. Findings suggested inefficiencies, with improvements needed in autonomy, informal sector management, non-tax revenue, and taxpayer segmentation. Highlighted the importance of enhancing revenue authorities' efficiency to bolster fiscal capacity.	Included

24.	Audu & Ishola (2021)	Research Gate	Digital economy and tax administration in Nigeria	Secondary data	Investigated the impact of digitalization on tax administration in Nigeria (2010–2017). Linear regression revealed ICT has a negligible impact on tax revenue and tax evasion. Recommendations were adopting policies to align tax authorities with digital economy advancements.	Included
25.	Pylypenko et al. (2022)	Springer Nature	Digital Transformation in Tax Administration	Scientific abstraction, logic, graphics, visual reflection, and analytics	Explored how advanced digital technologies enhance tax administration efficiency. Findings highlighted that integrating real-time digital tools transforms tax administration and emphasized key factors influencing effectiveness. Recommended leveraging technology to modernize tax processes.	Included
26.	Tambunan & Rosdiana (2020)	Academia	Indonesia Tax Authority Measure on Facing the Challenge in	Constructivism paradigm and qualitative research method	Examined Indonesia's tax authority's response to challenges in taxing the digital economy. Findings showed progress in regulations, organizational reforms, and technology adoption, but	Included

			<p>Taxing Digital Economy</p>		<p>highlighted gaps in comprehensively addressing digital economy challenges. Recommendations focused on multi-agent collaboration for regulatory improvements.</p>	
27.	<p>Apriadi & Monalysa (2021)</p>	<p>Google search</p>	<p>Tax Avoidance in the Form of Base Erosion and Profit Shifting in Digital Economic Transactions by Multinational Companies</p>	<p>Secondary data</p>	<p>Explored Google's tax avoidance in Indonesia using profit-shifting schemes. Identified policy gaps and recommended multilateral tax regulations to address cross-jurisdictional tax avoidance by multinational corporations.</p>	<p>Included</p>
28.	<p>Jaafar & Muhammad (2024)</p>	<p>Research Gate</p>	<p>The Impact of Financial and Administrative Corruption on Tax Revenues for Financing State Public Budget</p>	<p>Primary data</p>	<p>Investigated the relationship between financial and administrative corruption (FAC) and tax revenue in financing public budgets. Data from 50 employees of the General Tax Authority indicated FAC significantly reduces tax revenue and impacts public budget financing. Recommendations stressed addressing FAC to enhance tax revenue and fiscal sustainability.</p>	<p>Included</p>

29	Şentürk et al. (2024)	Google search	The Relation between Corruption and Tax Revenues: An Assessment of Transitional Economies	Secondary data	Investigated the impact of corruption on tax types in six transition economies (1998-2021). Using the Bootstrap Panel Granger causality method, it found causality patterns between corruption and tax revenues, with personal and corporate taxes being more affected by corruption compared to indirect taxes like VAT and SCT.	Excluded
30	Lewis and Alton (2015)	Google Search	How can South Africa's tax system meet revenue raising challenges?	Secondary data	Analysed South Africa's tax system and its reforms, highlighting challenges in generating revenue for social spending without hindering growth. Suggested broadening tax bases, improving municipal property tax systems, and exploring environmentally related taxes.	Excluded
31	Bird (2008)	SSRN	Tax challenges facing developing countries	Secondary data	Reviewed strategies for developing tax systems in developing countries, focusing on base broadening, rate reduction, and administrative improvements. Emphasized	Excluded

					transparency and institution building as critical for sustainable reform.	
32	Akinwande (2014)	African Journals Online	The prospects and challenges of the proposed carbon tax regime in South Africa: Lessons from the Nigerian Experience	Secondary data	Discussed South Africa's proposed carbon tax and its potential to reduce greenhouse gas emissions. Drew lessons from Nigeria's experience with environmental taxes while analysing South Africa's commitments under international climate change agreements.	Excluded
33	Letsoalo (2014)	Google Search	Challenges faced by tax compliant microenterprises in Midrand	Primary data	Examined the challenges of tax compliance for microenterprises in South Africa, including financial costs, complex regulations, and lack of expertise. Highlighted the need for an enabling environment to support these businesses.	Excluded
34	Rukundo (2020)	Google Search	Addressing the Challenges of Taxation of the Digital Economy:	Secondary	Analysed the taxation challenges posed by the digital economy in African countries. Suggested participation in global tax reforms while tailoring solutions to local	Excluded

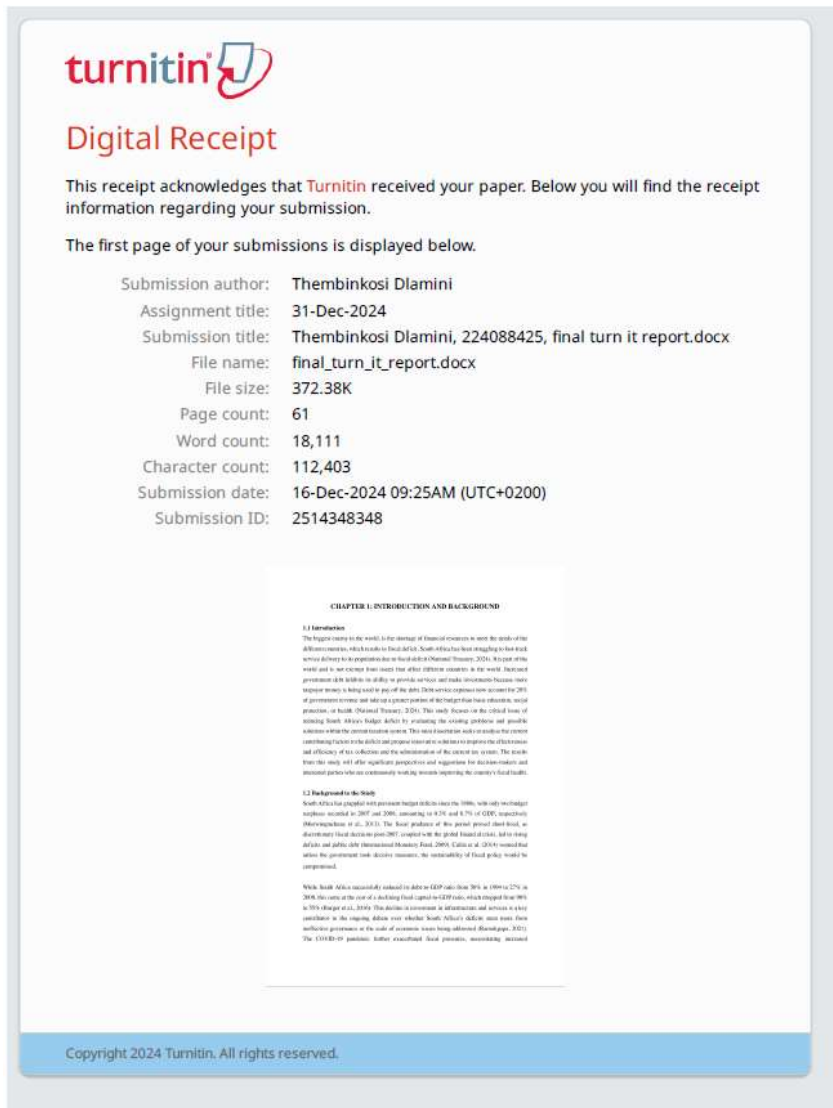
			Lessons for African Countries		needs to address revenue generation and policy gaps.	
35	Mascagni et al. (2014)	Institute of Development Studies	Tax Revenue Mobilisation in Developing Countries: Issues and Challenges	Secondary data	Highlighted the challenges of mobilizing domestic tax revenue in developing countries. Discussed factors like tax evasion, exemptions, and inequities in resource rent-sharing, while proposing recommendations to improve tax collection.	Excluded
36	Arendse and Stack (2018)	Sabinet African Journals	Investigating a new wealth tax in South Africa: Lessons from international experience	Secondary data	Explored the viability of introducing a wealth tax in South Africa to address revenue deficits and economic inequality. Examined lessons from international wealth tax systems and their applicability to the South African context.	Excluded
37	Bird (2007)	SSRN	Tax Challenges Facing Developing Countries: A Perspective from Outside the Policy Arena	Secondary data	Reviewed challenges in creating sustainable tax systems in developing countries. Suggested that building domestic policy capacity is more effective than imposing external solutions. Emphasized improving tax	Excluded


					structure, administration, and transparency.	
38	Bell and Bowman (1997)	Google Search	Local Property Taxation in South Africa: Current Performance and Challenges for the Post-Apartheid Era	Secondary data	Examined post-apartheid property taxation in South Africa, emphasizing its importance for local government revenue. Highlighted inconsistent assessments and suggested reforms for improving valuation and uniformity.	Excluded
39	Umar and Tusubira (2017)	Google Search	Challenges of tax administration in developing countries: Insights from the 5th Annual Tax Administration Research Centre Workshop, 2017	Secondary data	Analysed systemic challenges in tax administration in developing countries, such as low revenue collection and political interference. Emphasized the need for structural reforms and improved governance to address these issues.	Excluded
40	Blecher and Drope (2014)	Google Search	South Africa's land restitution challenge: Mining alternatives from evolving mineral taxation policies	Secondary data	Discusses regional tobacco tax harmonization in Africa as a means to enhance tax revenue and public health. Highlighted the technical and political challenges of harmonizing	Excluded

policies in diverse economic contexts.

Source: Researcher own work

Appendix B: Turn it Report.



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CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 Introduction

The paper centers on the world's 10 top strategies of financial resources to meet the needs of the African countries, which include South Africa. South Africa has been struggling to face the economic delivery to its population due to the global financial crisis (GFC) in 2008, the global economic crisis and the economic crisis that affected different countries in the world. Increased government debt burden in ability to provide services and make investments because they require money to bring capital to pay for the debt. This economic crisis was caused by the 2008 of government revenue and led to a systemic collapse of the financial system, social protection, or health (National Treasury, 2020). This study focuses on the critical issue of meeting South Africa's budget deficit by analyzing the existing conditions and possible solutions within the current economic system. This study is conducted to analyze the current conditions of the public sector program, investment in education to improve the effectiveness and efficiency of its collection and the sustainability of the current tax system. The results from this study will offer significant perspectives and suggestions for decision-makers and investment policies when considering meeting needs supporting the country's fiscal health.

1.2 Background to the Study

South Africa has experienced economic budget deficits since the 1980s, with only one budget surplus recorded in 2007 and 2008, amounting to 0.2% and 0.7% of GDP, respectively (Munyaho et al., 2013). The basic problem of the period period deficit, or the current fiscal deficit, has been 2007, caused by the global financial crisis. After being affected and public debt (International Monetary Fund, 2009). Galina et al. (2014) stated that when the government took decisive measures, the sustainability of fiscal policy would be compromised.

While South Africa successfully reduced its debt to GDP ratio from 76% in 1994 to 57% in 2004, this ratio rose to over a 100% (fiscal deficit) to GDP ratio, which ranged from 90% to 100% (Munyaho et al., 2013). The decline in investment in infrastructure and services is a key contributor to the ongoing decline since 2008. South Africa's deficit ratio rose from 10% before the start of the economic crisis to 100% (Munyaho et al., 2013). The 100% deficit ratio indicates that the government is unable to meet its obligations, necessitating increased

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Appendix C: Ethical Clearance Letter



28-08-2024
Mr Thembinkosi Perceverance Dlamini (224088425)
School Of Acc Economics&Fin
Westville

Dear Mr Thembinkosi Perceverance Dlamini,

Original application number: 00025773
Project title: Closing the fiscal deficit in South Africa: challenges and solutions to the current taxation framework

Exemption from Ethics Review

In response to your application received on 22 July 2024, your school has indicated that the protocol has been granted EXEMPTION FROM ETHICS REVIEW.

Any alteration/s to the exempted research protocol, e.g., Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through an amendment/modification prior to its implementation. The original exemption number must be cited.

For any changes that could result in potential risk, an ethics application including the proposed amendments must be submitted to the relevant UKZN Research Ethics Committee. The original exemption number must be cited.

In case you have further queries, please quote the above reference number.

PLEASE NOTE:

Research data should be securely stored in the discipline/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours sincerely,

A black rectangular box redacting the signature of Prof. Claire Lauren Vermaak.

Prof Claire Lauren Vermaak
Academic Leader Research
School Of Acc. Economics&Fin

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Appendix D: Editor Letter



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This serves to confirm that the above document was edited substantively by members of the KZN Language Institute's professional English language editing team. The document was returned to the author with tracked changes and comments intended to correct errors and to clarify meaning. It was the author's responsibility to attend to these changes.



J. Kerchhoff

Director of the KwaZulu-Natal Language Institute

KZN Language Institute - Transforming Words