PREDICTORS OF REVENUE TAX COLLECTION: A CASE OF CHIRUNDU BORDER POST

BY

MARK KAFWANKA

A Dissertation submitted to the University of Zambia in partial fulfilment of the requirements for the award of the Master's Degree of Science in Accounting and Finance

THE UNIVERSITY OF ZAMBIA

LUSAKA

2025

DECLARATION

I, **Mark Kafwanka**, do hereby declare that this work is my original work achieved through personal reading and research. This work has never been submitted to the University of Zambia or any other Universities. All sources of data used and literature on related works previously done by others, used in the production of this Dissertation have been duly acknowledged. If any omission has been made, it is not by choice but by error.

Signature: ....   Date: ....

APPROVAL

This Dissertation by **Mark Kafwanka**, is approved as a partial fulfilment of the requirements for the award of the Master's Degree of Science in Accounting and Finance

Examiner 1   Signature   Date

…………………………..   ………………………   ……………………

Examiner 2   Signature   Date

…………………………..   ………………………   ……………………

Examiner 3   Signature   Date

…………………………..   ………………………   ……………………

Chairperson   Signature   Date
Board of Examiners

…………………………..   ………………………   ……………………

Supervisor   Signature   Date

…………………………..   ………………………   ……………………

ABSTRACT

The purpose of this study was to assess the predictors of tax collection for the Zambian government at Chirundu Border Post with a view to resolve constricts impeding tax collection. A non-experimental concurrent mixed methods design has been adopted. A census was employed and 70 out of 92 respondents were enlisted in this study. In-depth interviews and a survey questionnaire were administered. Quantitative data was analysed using the Statistical Product and Service Solutions software, SPSS version 20. The main findings are that Just over half of the employees n = 38 (54.3%) rated Revenue Collection Performance and Chirundu Border Post to be high whereas n = 17 (24.3% and n = 15 (21.4%) rated Revenue Collection Performance as very high to somewhat low. An association was found between gender and customer category and offence commission (χ^2(1) =11.872; $p < 0.001$. The four predictors tend to have a surface influence on tax revenue collection performance as the p values were more than the α value of 0.05. Based on the study's findings, it has been demonstrated that there exists no significant relationship between the four predictor variables and revenue collection preference. However, qualitative data points to the occurrence of corruption, fraud, and tax evasion. The findings point to the fact that the revenue authority at Chirundu Border Post may benefit from information technology, support services and an improved number and quality of human resources.

Key words: Revenue collection, Revenue performance, Tax, Revenue Authority

ACKNOWLEDGEMENT

I would like to express my deepest gratitude to Professor Jason Mwanza for his invaluable guidance, insightful feedback, and unwavering support throughout the research and writing of this thesis. Their expertise and encouragement have been instrumental in shaping this work.

I am also grateful to the University of Zambia's Graduate School of Business for providing the necessary resources and a conducive environment for my academic pursuits. Special thanks to my lecturers, colleagues, and friends whose discussions, encouragement, and assistance have contributed to my intellectual growth.

To my family, your unwavering love, patience and belief in me have been my greatest motivation. Your support has given me the strength to persevere through this journey.

Finally, I extend my appreciation to all those who in one way or another contributed to this work. Your kindness and assistance will always be remembered.

Thank you.

DEDICATION

I dedicate this thesis to my lovely wife Edna, whose unwavering support, encouragement, and belief in my abilities have been my greatest source of strength throughout this journey.

To my Parents (Keep resting in Peace) for their unconditional love and sacrifices throughout my education. Thank you for believing in me and always encouraging to be my best and achieve the best in all I do. And to my family, my mentors and friends, for their guidance and inspiration.

And to all those who dream, persevere, and strive for knowledge- this work is a testament to resilience and dedication.

Thank you for being part of my journey.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ZRA…………….Zambia Revenue Authority

CES……………. Customer Effort Score

JCTR…………... Jesuit centre for theological reflection

OSBP…………... One stop border post

CHAPTER 1

INTRODUCTION

1.1 Overview

This chapter presents the introduction of this study. To do so, the chapter gives a background to the study by also presenting the statement of the problem. The chapter goes on to outline the research objectives, questions and the aim of the study. Thereafter, the chapter highlights the significance of the study, scope of the study and limitations of the study. Lastly, the chapter presents delimitation of the study and ethical considerations.

1.2 Background of the Study

Issues of redistribution are often considered to be at the forefront of policy discussions and political differences in democracies. According to the fiscal contract literature, taxation lies at the heart of the relationship between government and its citizens, and governments seeking to expand its revenue are likely to be met by demands from citizens for increased responsiveness in exchange for tax-payments (Timmons, 2005, Tilly, 2009, Prichard, 2015). Since democracy implies majority rule, there is reason to believe that the majority will seek some sort of economic redistribution if it is relatively less well-off than the minority (Przeworski, 1991). It may therefore be expected that issues of taxation will figure centrally in policy promulgations, particularly in new democracies like Zambia were economic wealth is unequally distributed. However, this has not been the case in many new democracies in Sub-Saharan Africa. During the 1990s, numerous countries on the African continent saw the end of one-party rule and the return of multi-party politics and at least minimally competitive elections. But, the return of competitive electoral politics has not been followed by political discussions and political mobilization on the issue of tax policies (Lieberman, 2002, Bräutigam et al., 2008, Von Soest et al., 2011). The assumed connection between taxation and revenue collection at border posts is widely accepted in theory, yet few empirical studies have researched predictors of tax collection in contemporary developing contexts (Prichard, 2015: 6) and the fact that the tax-base is narrow and many countries are primarily relying on non-earned sources of income, such as rents from natural resources (Ross, 2001, Ross, 2004, Knack and Brautigam, 2004).

Taxes are levied on individuals, businesses, and other entities based on their income, profits, property ownership, or consumption (Leuthold, 1991). Revenue in form of taxation, excise

duties, customs, licenses or other sources is very crucial in ensuring smooth execution of government operations (Von Doepp, 2005). Taxation is one of the leading avenues of revenue collection by governments all over the world. It is asserted that, developed countries have advanced and successful tax policies which enhance revenue collection. Nevertheless, developing countries often have inefficient tax systems which hamper their tax collection efforts (Kayaga, 2007).

According to Addison and Levin (2010:2) tax revenue collection is of vital importance for the sustainability of both developed and developing countries particularly because of the following key justifications. Firstly, taxation is the main source of central government. This is because tax revenue is mandatory and consistent, thereby guaranteeing the stability of government income for public service delivery. Secondary, taxation meets government demand for income required to sustain public institutions such as the executive, legislature and judiciary as structures needed to govern society.

Bird (2008) notes that in most poor developing countries, a low tax-revenue/GDP ratio prevents these nations from undertaking ambitious developmental programs. Thus, a rapid increase in domestic revenue and a corresponding increase in public services is a policy priority. However, states need to be cautious about increased public spending and increased taxation, as distortionary taxes begin to reduce growth when pushed beyond certain levels, adds Bird (2008).

Like any other country in Sub-Saharan Africa, Zambia's tax performance is still poor. This is because of the many obstacles that these developing countries experience. According to Keen and Mansour (2009), tax collection is a complex process that presents various challenges for governments and tax authorities. Some of the common predictors affecting enhanced revenue collection in most developing poor countries are discussed below.

Individuals and businesses may engage in tax evasion and avoidance practices to reduce their tax liability. This includes underreporting income, inflating expenses, utilizing offshore tax havens, or exploiting loopholes in tax laws. Detecting and preventing these activities can be challenging for tax authorities. In some cases, tax laws can be intricate and constantly changing, making it difficult for taxpayers to understand their obligations and for tax authorities to enforce compliance. Complex tax codes may lead to confusion, errors, and non-compliance, requiring additional efforts to educate taxpayers and ensure compliance. In many

developing countries, a significant portion of economic activity occurs in the informal sector, where transactions are often cash-based and not fully recorded. This makes it challenging for tax authorities to accurately assess and collect taxes from these informal businesses and individuals (Addison and Levin, 2010).

In addition, Keen and Mansour (2009) argue that there is also a challenge of capacity. Tax authorities may face resource constraints, including limited staffing, technology infrastructure, and financial resources. These limitations can impede effective tax collection efforts, such as conducting audits, implementing robust compliance programs, and investing in advanced data analytics systems. Some taxpayers may deliberately or unintentionally fail to meet their tax obligations. This can be due to lack of awareness, financial hardship, or mistrust in the tax system. Encouraging voluntary compliance and addressing non-compliance require a combination of enforcement measures, taxpayer education, and outreach programs. Globalization has increased the complexity of tax collection, particularly with multinational corporations. Issues such as transfer pricing, profit shifting, and double taxation can arise, requiring international cooperation and coordination between tax authorities to ensure fair and effective tax collection (Kidd and Crandall, 2006).

Further, Khan (2001) observes that while technology can improve tax collection processes, it also presents challenges. Tax authorities need to keep pace with rapidly evolving technology to detect and address emerging issues like cryptocurrency transactions, digital platforms, and online sales, which may involve complex tax considerations. Other scholars, such as Morrissey and Clist (2010) reveal that tax collection can be a politically sensitive issue, as it involves decisions on tax rates, exemptions, and allocations of revenue. Public perception and acceptance of taxation policies can affect compliance rates and pose challenges in implementing effective tax collection measures. To address these challenges, tax authorities employ various strategies, such as enhancing tax compliance programs, investing in advanced data analytics and technology systems, promoting international cooperation, simplifying tax laws, and conducting taxpayer education and outreach initiatives.

In Zambia circumstances surrounding tax collection are not different from the general overview discussed above. The country's revenue collection is entrusted in the Zambia Revenue Authority (ZRA). ZRA is mandated to oversee the tax administration and collection for the government through various tax sources specifically customs ports. The Zambian tax

system broadly comprises income taxes (company income tax, pay as you earn, withholding tax and mineral royalty tax), consumption taxes (import and domestic VAT and excise duties) and trade taxes (customs duty and export duty). In addition, the tax system also comprises non-tax instruments, which include royalties and fees. These include fuel or road levy, rural electrification fund levy, medical levy, Carbon Emission Surtax (CES) and motor vehicle licensing fees (Jesuits Center for Theological Reflection [JCTR], 2011:5-6).

ZRA collects Customs duties and other forms of taxes to drive the developmental agenda for the nation. However, this exercise is being impeded by a number of challenges such as smuggling that are faced by most custom borders across the country like Chirundu Boarder Post. Chirundu Border Post is one of the busiest borders in the COMESA region and it is strategically located to provide a link between the North and the South. The border is also used by Zimbabwe for imports and exports as well as travelling (Chanda et al, 2011). Chirundu border post has a beautiful one storey modern building which accommodates different government departments, ministries and agencies such as Zambia Bureau of Standards (ZABS), Immigration, Health, Interpol, Agriculture, Road Transport and Safety Agency (RTSA), Zambia Revenue Authority (ZRA) etc. Zambia National Commercial bank (ZANACO) and Finance bank have also opened their branches. All these facilities have been built in order to curb smuggling and to have One Stop Border Post (OSBP) between Zambia and Zimbabwe. The boarder post is the most preferred entry point for commercial traffic into Zambia from South Africa and other commercial ports to the South, or through to and from Central and Eastern Africa. It is a very busy border with between 400 to 500 trucks crossing the border each day (JCTR, 2011).

Despite the seemingly effective organizational structure for revenue collection established at Chirundu broader post, it is alleged that ZRA faces significant challenges in collecting revenue at the border post. Among the alleged challenges include smuggling, political interference and limited technology for effective tax collection. Therefore, taking this background into perspective, this study assesses the predictors of revenue collection by Zambia Revenue Authority at Chirundu border post.

1.3 Statement of the Problem

For some time now, there has been a problem in the Zambia revenue authority's customs division particularly at Chirundu Border post. Despite countless interventions with regards to tax administration, collection strategies and introduction of security controls at tax collection

4

points on the border, the situation seems to deteriorate year in and year out. Revenue leakages on border posts are increasing at alarming rates and this is worrying because government is losing on the much-needed revenue through these taxes to carry out its economic agenda. Chirundu Border post generated an annual revenue of more than K4.98bn and close to K1bn of revenue was also lost through tax evasions and smuggling activities in 2021(MCTI.GOV.ZM). This report also notes that the situation is negatively affecting revenue collection targets set by ZRA which in turn has affected government's ability to fully fund its developmental agenda. A possible cause for failure by the border post is not known, and yet countless goods make their way through the border without paying the required taxes for the right class of goods, quantity and value. The difficulty arising from this problem is that some customs officials connive with the traders that engage in this illegal activity of smuggling goods without paying custom duties due for them. Perhaps a study of this nature which is focused on the predictors affecting revenue collection performance through border posts is long overdue noting that resources are needed by the government for a wide variety of expenditures, ranging from public administration and defence to the maintenance and provision of social services and infrastructure.

1.4 Aim of the Study

The aim of this study was to assess the predictors of tax collection for the Zambian government at Chirundu Border Post with a view to resolve constricts impeding tax collection.

1.4.1 Specific Objectives
The specific objectives of the study were:

1. To describe the patterns of revenue collection at Chirundu Border post.
2. To explore the predictors of revenue collection at Chirundu Border Post.
3. To understand from the point of view of staff at Chirundu Border Post circumstances surrounding reduced revenue collection.

1.5 Research Questions
The study was sought to answer the following questions.

1. What are the patterns of revenue collection at Chirundu Border Post?

2. What are the predictors of revenue collection at Chirundu Border Post?
3. How can revenue collection at Chirundu Border Post be enhanced?

1.6 Conceptual Framework

From the reviewed literature, a conceptual framework was conceived. Conceptual framework is a group of concepts that are broadly defined and systematically organized to provide a focus, a rationale, and a tool for the integration and interpretation of information, usually expressed abstractly through word models Kothari (2004). The conceptual framework of this study also explains the relationship between independent variables and dependent variables. Independent variables in this study are political instability, information technology, human resources and support systems. The dependent variable of this study is Revenue Collections Performance.

```
┌──────────────────────┐
│ Political Instability │ ────────┐
└──────────────────────┘         │
                                 ▼
┌──────────────────────┐    ┌──────────────────────┐
│ Information Technology│ ──▶│  Revenue Collection   │
└──────────────────────┘    │     Performance       │
                            └──────────────────────┘
┌──────────────────────┐         ▲
│    Support System     │ ────────┤
└──────────────────────┘         │
┌──────────────────────┐         │
│    Human Resource     │ ────────┘
└──────────────────────┘
```

Figure 1.1: Conceptual Framework

1.7 Definition of Key Terms

This section gives the working definitions of key concepts in this study which are revenue collection, predictors and tax.

Revenue collection

This refers to the process of collecting funds or income for a government or an organization. It typically involves the collection of taxes, fees, duties, tariffs, and other sources of income to finance public expenditures and support government operations (ActionAid, 2022).

Tax

The act of levying taxes is called taxation. A tax is a compulsory charge, or fees imposed by government on individuals or corporations. This is one of the most important sources of revenue of a government (OECD, 2003).

1.8 Study Scope

The study was conducted in Lusaka province with a focus on Chirundu district. Particularly, it confined itself to the Zambia Revenue Authority, Chirundu border post. The data of the study was collected from both Lusaka ZRA headquarters and from ZRA Chirundu boarder post.

CHAPTER 2

LITERATURE REVIEW

2.1 Overview

This chapter reviews various literature that has a bearing on the topic of this study which is "predictors affecting enhanced revenue collection by ZRA at Chirundu boarder post". The literature in this chapter is divided into five sections. The first section is literature on administration and revenue collection, the second section looks at literature on revenue collection and smuggling, the third section on revenue collection and corruption, the fourth section on revenue collection and political interference and firth and last section literature on revenue collection and information technology.

2.2 Revenue Collection

Revenue collection is an important activity for all organizations (Edem, 2017). Revenue denotes the inflowstherefore an important preoccupation of private enterprises, government and non-Governmental organizations (NGOs). The inability to meet revenue collection targets may lead to liquidity problems (Liquidity Preference Theory) and financial distress (Financial Distress Theory), a situation where organizations are unable to meet their current and future obligations (Song 'e, 2015). According to Allen and Highfield (2013), the primary goal of a revenue body is to achieve the highest possible level of compliance with the prevailing laws or, so it is generally described. In this way, the total revenue collected which can be made available for government programs is maximized. Developing effective revenue management strategies involves the guidance of revenue managers (Beck et al., 2012) and the presence of an effective tax system. More efficient tax systems can also enable the private sector to play an important role in creating jobs.

The Zambian budget has over the years been running in deficit, having closed the year 2021 with a deficit of 10.4 percent of Gross Domestic Product (GDP). This shows the need for enhanced domestic resource mobilisation to reduce the budget deficit and ensure public service delivery. The analysis has revealed that social sector spending has been crowded out by the country's commitment to debt service in the past few years. This is perceived to lead to advancing poverty and inequality in the country. The timely attainment of macroeconomic

stability will be heavily reliant on debt restructuring and fiscal consolidation efforts (Chizonde, 2019).

The tax system in Zambia has a mix of progressive and regressive taxes, but overall, the system is progressive. However, caution must be exercised in developing a healthy mix of direct and indirect taxes to avoid making the tax system regressive, which would exacerbate the plight of the marginalised. Further, just like any developing country, the Zambian tax system has revenue leakages and challenges that should be attended to in order to improve its performance (Nalishebo and Halwampa, 2014). The challenges in the Zambian Tax system range from lack of information, weak monitoring techniques, inadequate funding towards tax collection efforts, political interference, to tax havens. Tax revenue in Zambia is lost due to evasion, avoidance, contestation, non-payment, the hidden economy, and other means such as the failure to tax (Grown and Valodia, 2010).

2.3 Empirical Studies

Various empirical studies found beneficial to the present study were appropriately reviewed to strengthen the present study and thereby build strong foundation. The present study reviewed these past studies under the classifications; performance of revenue collection performance; staff capacity, revenue collection systems, ICT and revenue source.

Performance of revenue collection in county governments Olowu and Wunsch's (2003) study found that sound revenue systems for county governments fostered political and administrative accountability, hence empowering grassroots socioeconomic development. Later, the study by Ziria (2008) shows that high performance of revenue collection by local government importantly ensures financing of recurrent and development expenses of the local government and completion of projects. This guarantees sustainability of service delivery, development and promotes autonomy of local governments. This is to say that local (county) government would need to maintain an effective revenue collection to ensure achievement of its objectives. Although the studies by Olowu and Wunsch (2003) and Ziria (2008) showed the importance of high revenue collection at the county government, it fell short of showing what high performance is and how it was measured, which is what the present study sought to determine.

Another study by Lutfunnahar (2007) concluded that governments with low tax effort (less than unity index) were not utilizing their full capacity of tax revenue and therefore lacked the

potential for financing budgetary imbalance through raising tax revenue. Mwakalobo's (2009) study established that when the government lacked adequate revenue collection, the public spending is drastically affected. As the government revenue decline and revenue collection is inadequate, service delivery and development retards drastically. Additionally, Chaudhry & Munir's (2010) study established that tax revenue collection is very vital to socioeconomic development in the country. The results further suggest that boosting the openness, money supply and political stability has the potential to raise the level of taxation. Owolabi's (2011) study found that there were revenue allocation wastages and mismanagement of funds and recommended that there was need for policies to enhanceimproved revenue collection performance by local government, placing more emphasis on the internal revenue generation and budget monitoring and implementation. Moreover, a local study by Okech and Mburu (2011) concludes that a large percentage of tax revenue comes from discretionary tax policy and not from pure responsiveness of tax revenue to changes in national income. Muriithi's (2013) study established that tax leads to continuous increase in revenue obtained by government. However, the study concluded that the rate of economic growth has been gradual.

Another local study by Ngotho and Kerongo (2014) showed that compliance levels and tax rates were predictors that mainly affected revenue collection. The study recommended to the government to initiate tax compliance campaigns to sensitize citizens on the importance of tax to the life and self-sustenance of a nation. 2.3.2 Influence of revenue sources on revenue collection the study by Arye (2003) established that low revenue collection was influenced by poor revenue collection capacity and poor access to the revenue base, as well as the reliability of the revenue sources, among others. These findings conformed to those of Adedokun (2007), which confirmed that the reliability of the revenue sources affected the revenue collection performance. The study by Arye (2003) found that low revenue collection resulted from poor access to the revenue base.

Jepkemboi's (2008) study revealed that poor tax performance in governments, in terms of raising enough revenue was due to reliability on a single tax source, which caused deficiencies in revenue collection. The sources of financing government are user fees and charges, property revenue, and revenue from persons in gainful employment. A study by Abiola and Asiweh (2012) concluded that diversification of revenue sources is very important for economic development. There is urgent need for a review and restructuring of the nation's tax policy and administrative system. The government should take step to address the

perennial annual budget deficits and tax gap while the citizens should wake up to their civic responsibilities in terms of tax compliance. Balunywa et al. (2014) hence, recommended that local governments should diversify their tax revenues.

2.3.1 Influence of revenue collection administration strategies on revenue collection

Arye (2003) established that low revenue collection resulted from poor revenue collection administrative capacity and lack of effective enforcement of the revenue collection. These findings conformed to those of Adedokun (2007), which identified the various predictors affecting revenue collection performance. The findings also indicated fiscal decentralization as a measure to improve revenue performance, enabling better planning for revenue collection. This is because fiscal decentralization was observed to reduce cases of tax evasion, enabling the local unit to get more sources of revenue and that making it easy to handle taxation disputes.

A study by Agyapong (2012) revealed that the county was not sufficiently empowering itself through revenues collection, because it had not developed new and sustainable strategies to improve its performance in revenue collection. Ndyamuhaki's (2013) study established that that revenue collection performance is constrained by administrative inefficiencies, lack of general sensitization, and absence of enough relevant information about taxes. The study recommended for tax reforms to change the tax structure, change the tax system from being regressive to progressive among other recommendations. Moreover, the study by Makokha et al. (2014) established that failure to educate tax payers, insufficient supervision during revenue collection, and lack of sensitization of taxpayers about benefits of paying taxes leads to low local revenue collection.

2.3.2 Influence of information communications technology on revenue collection

Otieno et al. (2013) established that there is a relationship between ICT systems and both efficiency and effectiveness in revenue collection. Further, the study established a strong positive relationship between internal control systems and revenue collection, and that resistance to change by the council staff was derailing the full implementation of ICT. Additionally, Segal and Sen (2011) established that efficient and effective management of revenue collection depends greatly on administrative framework. The study found that the technological knowledge was a challenge to revenue collection in the ministry. Other challenges to the use of technology were inadequacy of facilities for the use of technology,

lack of knowledge and skills on the use of ICT in the collection of revenue among the revenue collection staff and resistance to change by the employees in the ministry. Other challenges included inadequate ICT infrastructure in the ministry and the incorporation of the non-automated system of revenue collection. The study concluded that the use of technology, integrity, and revenue collection staff were a challenge to the collection of revenue in the ministry while government policy was not a challenge.

2.3.3 Influence of staff capacity on revenue collection

Adedokun (2007) study asserts that staff capacity covering competence, and the number of staff needed to deliver services to the clients is important for revenue collection performance. Training and development enable the employees to acquire skills for higher performance thus organizations must use training and development to create skill in their work force that will lead to organizational effectiveness. Adedokun's (2007) study further identified the shortage of trained personnel, and lack of capacity to attract and retain personnel as the main predictors affecting prudent revenue collection performance. The study found that there was shortage of 19 well trained and qualified personnel supposed to serve in collection of revenue at the local level and even the few available are not properly trained in efficient budgetary and financial management systems. The study by Balunywa et al. (2014) found that the revenue collection staff in the ministry was inadequate and that they were not properly trained which affected the revenue collection performance. Moreover, Balunywa et al. (2014) indicated that there was poor revenue performance in local governments due to retaining unskilled revenue collection staff and recommended for better skilled manpower that would help enhance revenue performance. The study also recommended that political leaders should be restricted from interfering with the work of technical staff and the government should increase minimum qualifications for councillors so as to attract capable leaders who understand government programmes better. This is expected to reduce political interference and inefficiency. Makokha et al. (2014) established that staff competence and staff remuneration affect revenue maximization potential. Specifically, incompetent staff adversely affects the revenue collection performance. Further, Mugambi and Theuri (2014) observed that revenue collection performance increased by enhancing staff capacity building within the county treasury staff, making efforts to deploy the right staff in the revenue collection.

Ebeke and Ehrhart (2010), in a policy paper titled *Governmental policies to reduce tax evasion: coerced behaviour versus services and values development* while examining the sources and consequences of the instability of tax revenue in Sub-Saharan African Counties, using a panel of 30 countries including Zambia over the period of 1980 – 2005, found that tax revenue instability in Sub Saharan Africa is leading to public investment and government consumption instability which in turn generate lower public investment ration and therefore detrimental to the long run economic growth. This study revealed that fluctuation in tax revenue in any nation can lead to fluctuation in economic growth and infrastructural provision for the citizen. There was evidence that countries with high tax revenue instability tend to have high total expenditure instability.

Hamudi (2022) in a study titled *an Assessment of the Effectiveness of Tax Revenue Collection: Case Study of Zimbabwe* argues that the effectiveness of tax collection has been a persistent issue of great concern in both developed and developing countries. Taxes are now an increasingly important revenue source for national budgets. It is, therefore, crucial for tax revenue authorities to carry out their mandate of raising much-needed government revenue effectively. The results of the study reveal that tax revenue collection effectiveness is yet to be attained, and that the revenue authority faces challenges because of low levels of tax education amongst taxpayers, ineffective taxpayer identification methods, and poor monitoring and assessment procedures. The findings also show that the tax authority in Zimbabwe is yet to enforce a solid revenue collection methodology that will curb corruption activities and raise the morale of the workforce. The results from this study highlight the need for intensive taxpayer education and show that the revenue authority should partner with the telecommunications industry, discover ways of motivating taxpayers, and privatize some of its departments. These recommendations could help to improve the effectiveness of tax revenue collection in Zimbabwe.

Githua and Ngahu (2018) in a study titled *Effect of Administrative Capacity on Revenue Collection* in Nyeri County, Kenya state that taxation is one of the leading avenues of revenue collection by governments all over the world. Therefore, this study sought to establish the influence of administrative capacity on revenue collection in Nyeri County, Kenya. The study was anchored on optimal theory of taxation. The study established that administrative capacity had a positive correlation with revenue collection in Nyeri County, Kenya. Administrative capacity has a crucial role in determining revenue collection in Nyeri

County. Analysis of Variance indicated that administrative capacity has a significant influence on revenue collection in Nyeri County, Kenya. The study concluded that administrative capacity has a significant influence on revenue collection. The study recommended that the county government should enhance the revenue administrative capacity in order to enhance revenue collection.

Fjeldstad and Heggstad (2012) in a study titled *Local government revenue mobilisation in Anglophone Africa* examined opportunities and constraints facing local revenue mobilization in Anglophone Africa. They addressed political and administrative limitations that various revenue instruments face and tax compliance by citizens. It was deduced that, as exemplified by numerous cases in Anglophone African countries, mobilization of revenue by local government authorities though necessary, is hitherto inadequate to develop and supply requisite services to the public. A fundamental requirement when further redesigning the local revenue system is greater emphasis on the cost-effectiveness of revenue collection, considering not only the direct costs of tax administration, but also the overall costs to the economy, including the compliance costs to the taxpayers. In addition, losses through corruption and tax evasion need to be reduced. To achieve these aims, there is a need further to simplify the business license and fee structures by reducing the number of rates and coverage. Moreover, local taxes and licences should be harmonized with central government tax bases, to avoid double taxation and conflicts with national development policies, such as job creation and private sector development. The experiences from Kenya with the one-stop-shop Single Business Permit systems are promising for future reforms.

Akitoby, Honda, and Primus (2020) in a study titled *Tax Revenues in Fragile and Conflict-Affected States —Why Are They Low and How Can We Raise Them?* States that raising revenues has been a formidable challenge for fragile and conflict-affected states (FCS), a fact confirmed once again in the COVID-19 crisis. Nonetheless, achieving sizable gains in tax collection in fragile environments is not impossible. This paper—with empirical analyses and case studies—contributes to policy discussions on tax reform in such challenging environments. Our analyses show that many FCS achieved some recovery of tax revenues, even though they found it challenging to sustain the momentum beyond three years. We also find that changes in the quality of institutions are a key contributory factor to their tax performance. Next, we investigate the tax increase episodes of four countries (Liberia, Malawi, Nepal, and the Solomon Islands). Although each FCS is unique, their experiences

suggest two lessons: (i) tax reforms can be pursued even with initially weak institutions; and (ii) strong political commitment is important to sustain reform efforts and realize long-lasting, sizable gains.

Ababneh and Rawabdeh (2018) in a paper titled *Predictors Affecting the Collection of Revenue as Perceived by the Employees of Local administration in Jordan* argue that municipalities are facing financial challenges and problems mainly in the collection of revenues. Findings revealed that the most important predictors affecting revenues collection were organizational, social and personal, legal, and economic respectively. Participants reported that mayors and municipality council are lenient in forcing the administrative process of revenues collection for re-electability purposes. In addition, results showed that the lack of allocated human, financial, and technical resources are crucial obstacle in collecting revenues in the Jordanian municipalities. Findings indicate that tribe and family relations with the employees of the municipality were considered crucial in not forcing taxpayers to fulfil their financial dues.

Kidd and Crandall (2006) in a paper titled *Revenue Authorities: Issues and Problems in Evaluating Their Success* argue that Revenue authorities (RAs) have been adopted by some countries as an alternative delivery model for improved revenue administration. They are sometimes seen as a possible solution to problems such as low rates of tax compliance, ineffective tax administration staff, and corruption. The paper concludes that while there are subjective perceptions among countries with revenue authorities that their model has led to improved revenue administration and has spurred modernization, there is no objective analysis that countries with RAs have performed better in this regard than countries without RAs.

D'Archy (2011) in a paper titled *Coercion, capital and European states* analysed the theoretical model of comparative treatment on tax compliance in several African countries, using a survey method. The result of the study revealed a considerable support for comparative treatment in tax compliance. He established that to earn the right to collect the tax, the state must fulfil its adjudicatory role by providing a judicial system that the citizens trust and in addition the state must be responsive to address the needs of the citizens through the delivery of services. In line with his work, given the African context, voluntary compliance will be achieved if citizen sees the result of their tax payment in terms of visible developmental infrastructures that transform into growth. Also, Timmon (2011) in a paper

titled *Principles of Auditing and other Assurance Services* conducted his survey work and find a statistically significant and positive relationship between tax revenue i.e. compliance and government expenditure on social welfare in a cross-country analysis.

Lee and Gordon (2011) in a study titled *An Exploration in the Theory of Optimal Income Taxation* examined the effect of tax policies on the economic growth of a nation. Their study work was based on cross-country data for the period of 1970 – 1997. The outcome of their work shows that tax rate is significantly negatively correlated with economic growth rate while other standard variables and other determinants of economic growth are put under control. Their finding also shows that in fixed-effect regression increase in corporate tax rate lead to lower future growth rate within countries. Although according to their study, high tax rate as a policy negates economic growth as low income will be generated, this can be applicable to Nigerians context as well as other developing economy. It might be slightly different and may not fully apply to developed economies. The rich are taxed more and they are happy with whichever tax rate applicable and this is not really a factor for their investing. In a similar manner Ogbonna and Ebimobowei (2012) in a study called *Taxes on general consumption as percentage of total taxation,* examined the impact of tax reforms and economic growth of Nigeria using relevant descriptive statistics and econometric analysis. Their finding revealed that tax reforms is positively and significantly related to economic growth. The study also revealed that tax reforms improve on the revenue generating machinery of government to undertake socially desirable expenditures that will transform to economic growth in real output and per capita basis. In line with their study, if tax policies are stringent, it makes tax revenue to decline; therefore, there is a need for constant reforms in the system.

IMF (2015) a paper tilted *Current Challenges in Revenue Mobilization: Improving Tax Compliance* states that long a priority in developing countries, assuring strong compliance has acquired greater priority in countries facing intensified revenue needs, and is critical for fairness and state building. Measuring and analysing 'compliance gaps' is a powerful first step to addressing noncompliance and reducing them can raise significant amounts. Estimating and dissecting the difference between tax due and collected is becoming more common but remains the exception even in advanced economies. The aim is not to eliminate gaps but reducing them can raise significant amounts: reduced VAT gaps in Latin America in the early 2000s, for example, may have raised revenue by about 15 percent. Compliance worsened markedly in countries most affected by the crisis, which exposed structural

weaknesses in many tax administrations. There are tentative signs that the effect may be short-lived, perhaps reflecting policy responses, but the need to address wider vulnerabilities remains. Some basic instruments to deter evasion and facilitate compliance and supportive tax policies are critical for strong compliance. The value of withholding and third-party information is well-established: where both apply, compliance in advanced counties is around 99 percent; even with only the latter it is over 90 percent. Taxpayer segmentation primarily by size, but also regarding 'hard-to-tax' segments such as high wealth individuals is increasingly recognized as key for tailoring enforcement actions and the provision of taxpayer services. In addition, IMF (2015) states that policy design needs to be sensitive to compliance challenges, pointing to broad bases and potentially blunter tools in lower income countries. Much remains to be done in many countries to build effective tax administrations. High turnover of senior staff, weak HQs, inadequate/unstable financing are recurrent concerns, as especially in developing countries are weaknesses in auditing, taxpayer services and legal frameworks. IT developments offer considerable opportunities but also pose new compliance problems. Tax administrations also face increased pressure to take on non-revenue roles that can present considerable difficulty. New tools can help countries address compliance problems by analysing gaps, comparing indicators with peers, and assessing their own performance.

According to the World Bank (2023) in an article tilted *Taxes and Government Revenue* states that collecting taxes and fees is a fundamental way for countries to generate public revenues that make it possible to finance investments in human capital, infrastructure, and the provision of services for citizens and businesses. Preliminary analyses estimate the financing gap for achieving the Sustainable Development Goals for developing countries at about $2.5 trillion annually. Making it easier to pay taxes improves competitiveness. Overly complicated tax systems are associated with high levels of tax evasion, large informal sectors, more corruption, and less investment. Modern tax systems should seek to optimize tax collections while minimizing the burden on taxpayers to comply with tax laws. There is a need to ensure that the tax system is fair and equitable. Governments need to balance goals such as increased revenue mobilization, sustainable growth, and reduced compliance costs with ensuring that the tax system is fair and equitable.

According to OECD (2003) in a paper titled *Tax Administration* states that rational tax assignment may thus help to increase accountability. Independent legislation has however

potential disadvantages, especially if different jurisdictions design tax structures which are radically different: duplication of administration, higher compliance costs, tax exporting, which may produce inequities and inefficiencies. Another potential demerit of independent legislation is predatory tax competition, especially in the case when sub-national governments are free to set tax bases rather than tax rates and may erode the tax base competition among the US states and Canadian provinces to attract business and households has resulted in the erosion of some tax bases and to an increased complexity of tax system, hence raising transaction costs.

According to Smoke, (2007) in a paper titled *Tax policy challenges facing developing countries* argue that one of the reasons for failure of developing countries is to cope with increasing demands is to do with characteristics of their existing sources of revenue and inadequacy of the financial regulations and procedures employed. Many of these countries are lacking administrative capacity and therefore cannot fully benefit from the existing sources of revenue. This is quite often the case with regards to property taxes largely because of the absence of proper financial cadastres and the necessary periodic revaluation collection of charges for services rendered appear inefficient as many LAs are owed huge amounts of money by customers, including central government and Parastatals.

2.3.4 Revenue Collection and Smuggling

According to Cooper (1974) in a paper *titled Empirical issue in smuggling; A discussion of Methodology* states that there are three types of smuggling activities: 1) Falsely declaring the value, such as lower priced and under quantity; 2) Falsely declaring the nature of the goods (misclassification); and 3) Under assessing goods value at a level lower than legally applicable.

Chanda (2011) in a paper titled *Commission of Inquiry into the Operations of the Zambia Revenue Authority* established that smuggling was not only when goods are hidden to avoid the customs control, but also when goods are not hidden but are not properly declared. Smuggling covers all types of goods including the international mails. Zambia being signatory to World Customs Organisation, abides by its laws and regulations. According to section 149 of Customs and Excise Act (Cap 322 of the Laws of Zambia), Smuggling means any importation, introduction, exportation, or attempted importation, introduction, or exportation of goods with intent to defraud the Government or to evade any prohibition of restriction on or regulation as to the importation, introduction or exportation of any goods

required to be accounted for under this Act. Smuggling was a punishable offence that is justified to deter tax evasion practices and ensure government revenue collection. The main objective of smuggling is to avoid tariff and non-tariff barriers.

Buehn and Farzanegan (2012) in a study titled *Effects of Smuggling on Revenue Collection* surveyed on smuggling in 7 different countries from 1991-1999 these countries included Zambia, Cameron, Pakistan and Kenya, Switzerland, Finland and Sweden. According to this study, limited public revenue is due to low levels of tax revenue. Inadequacy of tax revenue is evidenced normally by the existence of national budget deficit. Every year the realised total tax revenue falls short of the budgeted total tax revenue. The budget deficit increases annually by a bigger percentage than the increment in realised total tax revenue. Despite the tax reforms launched by the government through the Zambia Revenue Authority, the budget deficit persistently increases. Smuggling had a lot of effects on economic, social and governance of a country and the world at large. According to Zambia Revenue Authority (ZRA), Smuggling distorts market prices which in turn affect the manufacturing industries. The result was unfair competition on trading grounds and also distortion of the economy. The government loses huge sums of Revenue which could be used for national development and services. According to Uganda Revenue Authority (Report 2008/09), the effects of Smuggling are loss of revenue by the government, distortion of market prices, collapse of local industries and unemployment. All these effects go back to the vital point that smuggling mainly robs government of the much-needed revenue.

Berg et al (1982) in a paper titled *Effects of Smuggling under African Conditions* adds that, the extent of smuggling under African conditions was very large and that the basic motivation for smuggling was survival rather than tax evasion. It is also said that tariff burden, unemployment, corruption and Rule of Law are some of the causes. However, differences in national trade policies are widely recognised as a significant factor. The efficiency of trade facilitation, particularly port and Customs operations and the extent of border enforcement are also relevant. Buehn and Fernazegan (2012) *Effects of Smuggling on Revenue Collection* reported that smuggling is directly linked to other types of crime, such as tax and import duties evasion, bribery, corruption of public officials and money laundering. The probability of being caught and punished by law enforcing authorities depends, to some extent, on a country's rule of law.

The paper by Buehn and Farzanegan (2011) titled *Smuggling around the World: Evidence from a Structural Equation Model* uses a Multiple Indicators Multiple Causes (MIMIC) model to analyse the determinants of smuggling. The analysis reveals that higher corruption, and a lower rule of law encourage smuggling. Tariffs and trade restrictions are important push factors, while a higher black-market premium (BMP) discourages smugglers. Based on the MIMIC estimates, we calculate an index of smuggling which provides a ranking for 54 countries. We find that smuggling is rampant in Cameroon, Pakistan, and Kenya while it is least prevalent in Switzerland, Finland, and Sweden.

2.3.5 Revenue Collection and Corruption

Ndung"u (2013) in a study titled *Kenya: Overview of Corruption and Anticorruption* focused on challenges facing collection of revenue and the effect of the same on service delivery in Naivasha municipal council, Kenya. Corruption was identified to be the main challenge that inhibits revenue collection. The employees were also alleged to lack requisite competences for collecting revenue. The scholar recommended that integrating e-government technology and payment would enhance revenue collection. The inculcation of information and communication technologies (ICTs) is thus paramount in ensuring optimal revenue collection. Indeed, the call for transparency by the local governments is exemplified by the legal suit filed by the residents of Karen and Lang"ata. The residents sought to be allowed to desist from remitting "exorbitant" property taxes to the City Council of Nairobi until when the council would improve its service delivery and fiscal transparency. The residents won the case even though the council failed to comply. The property taxes, however, were put in an account out of council's reach for more than 10 years.

Picur, Riahi, Belkaoui (2006) in a paper titled *Tax Evasion, Concealment and the Optimal Linear Income Tax* based on 30 developing and developed counties. The empirical study revealed that there is a positive relationship between attitudes of taxpayer towards tax and trust in government and that compliance is highest in countries characterized by high control of corruption and low bureaucracy. If corruption is adequately controlled taxpayers will be willing to pay taxes frequently and timely knowledge that the tax revenue is judiciously used for overall wellbeing of the economy.

Gauthier, et al (2001) in a study titled *Shifting Tax Burdens Through Exemptions and Evasion: An Empirical Investigation of Uganda established that* Bribe payments to tax officials are a means of gaining favours in the form of reduced tax obligations or payments.

Bribe payments to public officials lead to inequities and inefficiencies in tax administration, since they result in a transfer of a public resource to private agents - reducing government revenues. Bribes also constitute a major impediment to equitable and efficient tax administration, placing firms that do not engage in such practices at a competitive disadvantage. In a business survey conducted in Uganda in 1998, which covered 243 firms, as many as 43% said they were paying bribes to tax officers occasionally or always, while 38% reported paying bribes to customs officials. The frequency of bribe-paying increased with firm size. However, the actual burden of bribe extraction by public officials was the heaviest for medium sized firms (26-75 employees). These firms paid 3.5% of their sales in bribes, equivalent to 60% of what the average-sized firm actually paid in taxes. This was 29 times more per unit of sales than larger firms, and 9 times more than smaller firms.

According to Mitullah, et al. (2005), in a paper tilted *Tax Revenue in sub-Saharan Africa: Effects of Economic Policies and Corruption* argues that designate revenue collection points for convenience and efficiency. In addition, losses through corruption and tax evasion need to be reduced by applying stiffer penalties to corrupt officials and tax evaders. This can be achieved by contracting collections to a private collection agency; thus, increasing revenues from existing sources and reducing cost. County governments should adapt this method to increase revenues and improve their efficiency in revenue collection. Traditional rulers should be appointed in collection of community tax; this will lead to reduction of costs for example limiting the number of surplus staff appointed to collect taxes. Most traditional rulers are well respected and can easily collect community tax since they understand the geographical location of communities. Measures are required to enhance taxpayers „compliance and to improve the accountability of tax collectors for example the local governments can device a means of allowing taxpayers to pay their taxes online. Here taxpayers are registered and connected using the internet with the revenue office/collector such that they can be reminded or compelled to pay their taxes online as at when due and automatically identify defaulters for further action, this would make the job of revenue collection a lot easier and cheaper.

According to Nawaz (2010) in a paper titled, *Exploring the Relationships between Corruption and Tax Revenue* indicates that a review of literature indicates that corruption has a significant negative impact on the levels of tax revenue collected in a country. The current understanding of the correlation between corruption and tax revenue however is incomplete since there is insufficient information available on the impact of taxation on corruption.

Corruption not only lowers the tax-GDP ratio but also causes long-term damage to the economy by detracting investment, increasing the size of the informal economy, distorting tax structures and corroding the tax morality of taxpayers. All of these in turn further reduce the long-term revenue generating potential of the economy. The impact of taxation on corruption is less explored in the existing research literature. The little information that was found indicates that higher tax rates can induce more corruption in an economy by incentivising tax evasion. Some scholars argue that corruption can mitigate the burdens of excessive taxation on the economy through enabling better allocation of resources and enabling investment. However, the underlying assumptions of these findings have been challenged by other researchers. It is recommended that more empirical research is carried out to better understand the impacts of taxation on corruption.

2.3.6 Revenue Collection and Political Interference

According to Cheelo and Hinfelaar (2020) in a paper titled Zambia Revenue Authority Professional Performance amidst Structural Constraints, 1994-2019 states that from an initial survey of public sector experts, the Zambia Revenue Authority (ZRA) was regarded as a relatively high performer among public sector institutions in Zambia. The paper establishes that ZRA's performance over the reference period was highly uneven. Broadly, 1994-2005 was a formative period for the authority, with relatively low performance. Then, between 2006 and 2015, due in part to strong political will and external support, ZRA achieved and maintained a favourable level of professionalism and specialisation, held a clear mandate, and established tax targets and internal organisational reforms. But, throughout, ZRA struggled to overcome structural constraints to revenue generation. Policy stability came out of an era of 'technocratic consensus' that emerged in the 2000s. Generally, ideas shared by political rules and leading bureaucrats centred on growth, fiscal prudency and domestic resource mobilisation aimed at gaining more autonomy, namely weaning Zambia off donor support and conditionalities. This push was augmented in 2011 by Patriotic Front's (PF) political commitment to resource nationalism. However, Cheelo and Hinfelaar (2020) argue that in contrast, 2015-2019 saw a new political settlement dynamic that affected the role of most economic institutions in Zambia, which exposed ZRA to undue political influence. Ultimately, with a high number of political turnovers amidst the increasingly fractious settlement during the reference period, ZRA experienced episodes of vulnerability to politically motivated institutional reforms and reorganisations at the political expediency of the ruling elite.

Soest (2007) in an article titled *How Does Neopatrimonialism Affect the African State's Revenues? The Case of Tax Collection in Zambia* argue that following the neopatrimonialism paradigm, it can be hypothesised that in African states informal politics of the rulers infringe on the collection of taxes and in turn reduce state revenue. Neo patrimonial continuity in the country is evidenced by the predictors: the concentration of political power, the award of personal favours, and the misuse of state resources. Despite this continuity, the revenue performance increased considerably with the creation of the semi-autonomous Zambia Revenue Authority. Donor pressure has been the most important intervening variable accounting for this improvement. Yet, strengthening the collection of central state revenue has been consistent with a neo patrimonial rationale, and may even have fed neopatrimonialism overall, by providing increased resources for particularistic expenditure.

According to Mills in a Helpdesk Report (2017), titled *Barriers to Increasing Tax Revenue in Developing Countries* states that brief review of the literature, informed by comments from a range of tax specialists, suggests four principal groups of reasons why tax systems do not yield higher revenues in many developing countries: Internal political factors; Administrative constraints; External political factors; multinational companies and other investors; and The structure of developing country economies. However, the issues involved are complex, and simple and direct answers do not exist. Professor (Emeritus) Richard Bird, chair of the Advisory Group of the International Centre for Tax and Development at the Institute for Development Studies, comments that "My more than 50 years of work on these matters in more than 50 countries continues to provide me more with questions than with answers."

Mascagni, Moore, Mccluskey, (2014) in a paper titled *Tax Revenue Mobilization in Developing Countries: Issues and Challenges* observe that in recent years, domestic revenue mobilisation in developing countries gained increasing prominence in the policy debate. Several factors explain this, including the potential benefits of taxation for state building; independence from foreign aid; the fiscal effects of trade liberalisation; the financial and debt crisis in the "West"; and the acute financial needs of developing countries. Governments in developing countries face great challenges in mobilising tax revenues, which result in a gap between what they could collect and what they collect. Tax gaps are hard to quantify for reasons that are discussed in the report. However, it is known that significant contributors to tax gaps include tax evasion and avoidance, tax exemptions, and inequitable rent-sharing in the extractive sector, amongst others.

Khan, et al (2017) in a study titled *Pilot Study on Effect of Political Influence on Tax Payment Compliance* states that Pakistan's economic growth largely depends on the provision of high-quality infrastructure and public goods that facilitate economic players in a highly competitive global economy. For this to happen, it is critical that the state's revenue-generation strategies are optimized. Constraints on these strategies have included high levels of protection, both centrally planned as well as ad hoc, instituted through Statutory Regulatory Orders (SROs) issued through the bureaucracy; and as unofficial conversations suggest through arbitrary tax cuts and benefits provided to citizens connected with the political and bureaucratic apparatus.

Khlif and Amara (2019) in an article titled *Political Connections, Corruption and Tax Evasion: A Cross-country Investigation* examined the association between political connections and tax evasion and test whether corruption level affects this relationship. Using a sample of 35 countries, the authors document that political connections are positively associated with tax evasion and this relationship becomes stronger for high corrupt environment. The findings have policy implications for countries aiming to combat tax evasion as political connection trends in one country reduce the level of tax compliance. In addition, political connections and corruption play a complimentary role in increasing tax evasion practices.

2.3.7 Revenue Collection and Information Technology

Global Delivery Initiative (2019) in a paper titled Creating an Electronic Tax Administration System in Zambia established that the Zambian Revenue Authority contracted a private firm to purchase an electronic tax administration system in 2012. In less than one and a half years, in October 2013, the Tax Online project team delivered an electronic tax administration system. Instead of processing registrations, returns, and payments manually and using paper forms, users could carry out their tax activities online. The usage of TaxOnline's electronic services steadily grew over time. In 2017, a total of 1,987,675 or 98 percent of the returns were filed electronically while only 49,977 or 2 percent of the returns were filed manually. By 2019, over 90 percent of registrations were processed electronically and around 70 percent of payments were submitted to ZRA electronically. The time it took for filing, payment, and processing of tax returns dropped from averaging between 10 to 16 days before

the system launched to within one day in 2014. The system strengthened taxpayer compliance and provided a wealth of data for the revenue authority.

Traore, Coulibaly and Arvanitis (2023) in a paper Titled *Cross-Border Exchange of Information and Tax Revenue Mobilization in Africa* argue that tax evasion and avoidance generate distortions in tax systems and cause significant revenue losses for African economies. International cooperation is one of the most effective methods of combating tax evasion and tax avoidance. As such, many countries are participating in global initiatives toward the exchange of information between national administrations for tax purposes. The findings indicate that the exchange of information for tax purposes between national tax jurisdictions has a positive and statistically significant impact on tax revenue. The estimation results show that exchange of information could increase tax revenue collection by a magnitude ranging from 5 to 19 percent. These findings reiterate the importance of international cooperation for combating tax evasion and stimulating tax collection in Africa.

Musengule (2013) in an article *titled "The impact of ICT on Taxation: the case of Large Taxpayer Department of Zambia Revenue Authority"* examines how the use of ICT has modernized Tax administration procedures and improved revenue collection at Large Taxpayer Department of Zambia Revenue Authority. ICT was introduced into the department in 2001 for facilitating maintenance and timely access of records and fast processing of return to remove postal delays; minimize operational costs; curb cheating and plug revenue loss. Large Taxpayers and Large Taxpayer Department staff (100%) agree that, since 2001 time for processing return and responding to queries have been reasonably shortened. ZRA reports reveal that, actual revenue collection increased from ZMK 204,397.5 million in 2001/02 to ZMK. 1,605,751.2 million in 2020/21 for Chirundu Border Post while revenue contribution share rose to 27% in in the same period from 19%. Although other factors in the economy like; increased internal trade, reduced importation and more reliance to home products may have caused the increase, if there is no good tax administration, revenue will not be reflected in collections. The fact that revenue had increased proves that ICT use enhances better tax administration.

Okoye and Ezejiofor (2014) in a paper titled *the Impact of E-Taxation on Revenue Generation in Enugu, Nigeria* set out to ascertain whether e-taxation can resolve the issue of tax evasion and to prevent corrupt practices of tax officials in Nigeria. Findings show that E-taxation can enhance internally generated revenue and reduce the issue of tax evasion in

Enugu state. Another finding is that E-taxation can prevent corrupt practices of tax officials. The implication of this is that the extent at which government has gone in inaugurating their e-tax administration is still low hence some tax administrators and taxpayers are still not aware of the online tax assessment/collection in Nigeria. Based on the findings, the researcher recommends that the Government should support the establishment of e-tax administration to start ripping the benefit of high rate of compliance among taxpayers and E-taxation should be implemented to reduce the diversion of government funds to private pockets.

2.4 Review of Literature and hypotheses development

Research has focused on numerus variables as factors that are linked to the success of revenue collection. The following predictors have been commonly encountered:

a)   Effects of political instability on revenue collection success
b)   Effects of information technology on revenue collection success
c)   Effects of support system on the revenue collection success
d)   Effects of human resources on revenue collection success

Below is an elaboration of each to affirm the hypotheses being tested.

2.4.1 Effect of Political Instability on Revenue Collection

Political instability may be categorized broadly into two dimensions: Instability because of socio-political unrest such as political shootings, disturbances and rebellions and mass violence. These forms of insecurity are associated with conflicts between ideologies or due to religious or ethnic differences. And the second dimension involves certain events, for example, termination of government, electoral hitches and inadequacies (Mutascu, Estrada and Tiwari, 2011). Both dimensions result in uncertainty about the future course of tax collection, provision/availability of goods and services, exchange rates policies, inflation policies, financial aid, among other defining economic laws and policies. The political environment describes the level of stability or instability of the political situation of a country; and any change in the political environment of a region has great implications on the socio-economic systems (Mutascu, Estrada and Tiwari, 2011).

Hendry (2001) observed that sudden modifications of the economic policy and extreme political disturbance resulted in shocks/breaks in the economy and unavailability of public resources and thus, inefficiency in provision of public amenities and difficulty in revenue collection. Stable political environments results in, among other things, improved confidence in government structures as a result of adequate security; enhanced local and international trade, this leads to higher levels of import tax revenue collection as well as improved investments; expansion of the economy through improved local and foreign investor confidence as well as adequate security for the country's workforce; lower levels of inflation due to the expanded economy and as a result, this improves functionality of government and the policies that it may put in place (Friedmann, 1977).

Azzi Monti (2010) pointed out that an increase in the level of political instability reduced the resources available, in terms of revenue and public goods. This leads to restrictions and inequality in how the policymakers distribute resources. Elgin (2010) found that countries with high political turnover had low levels of tax burden. This was because of frequent but peaceful change in political administration; thus policies were constantly challenged and revised. Mello (2011) also investigated the relationship between the tax level and political stability in Argentina. It was concluded that the level of political instability was a determinant to tax behaviors of the government. Rieth (2011) tested 13 member countries of the Organization for Economic Co-operation and Development (OECD) for the period 1964-1983 for a hypothesis that higher political instability resulted in an increase of the tax rates on capital income. The findings were that political instability did in-fact increase the rate of tax on capital income.

Ghura and Mercereau (2004) analyzed the relationship between trade and taxation, and political climate. They found that turbulence in the level of trade and low levels of taxation bring about political instability. This implies that political instability was caused by, among other things, shortages in revenue from taxation.

The hypotheses that could be tested is thus: $H0_1$. Political instability has no significant effect on revenue collection success

2.4.2 Support Systems on Revenue Collection

A support system is defined as a series of independent elements which work together interdependently to facilitate the seamless functioning of a whole system (Fjeldstad and Rakner, 2003). The revenue collecting agent in Zambia, ZRA had since 2015 been undergoing the Revenue Administration Reforms and Modernisation Programme (RARMP). This programme was introduced for the purpose of dealing with the challenges that inhibited the achievement of full integration, and a modern and seamless tax administration. Support systems include the people, that is, the human resources involved, as well as stakeholders who include the government, investors, the board of directors, creditors among others who have vested interests in the organization; the processes; the technology used the equipment as well that facilitate proper functioning of the entire business.

The hypotheses that could be tested is thus: *H0₂*.: Support system has no significant effects on revenue collection success

2.4.3 Information Technology

Information technology offers opportunities for any organization to substantially amplify its productivity and effectiveness while cutting costs of production and enhancing efficiency, effectiveness and accountability in the processes. However, this may be hindered by users' unwillingness to embrace change and to utilize the available systems, as well as insufficient training of the users, as well as shortage of funds available to conduct user training on new and current systems (Davis, 1989). With the world evolving into a global village and everything being 'Tech-enabled it is important to accept change and adapt to the technological changes taking place in-order to enhance efficiency in revenue collection (Miyahira, 2008). He also noted that new technologies have brought about new tools to help businesses work more efficiently, this in turn translates into higher taxes from the businesses. The revenue collecting agency therefore must keep up with the technological advancements in-order to exploit the new avenues created in enhancing revenue collection.

The hypothesis that could be tested is thus: *H0₃*: Information technology has significant effects on revenue collection success

2.4.4 Human Resources

Huselid (1995) was for the argument that the use of high performance work practices that include proper and comprehensive employee selection and recruitment procedures, feasible and incentive compensation, performance monitoring and management systems, and extensive employee involvement in decision making and training can improve the knowledge, skills and abilities of a firm's current and potential workforce, increase their motivation and reduce employee turnover while enhancing retention of quality workforce. The Taxpayer program was also developed so as to improve service options to deliver focused education outreach and alternate services as well as enhance information penetration and ensure strict adherence to the provision of the Taxpayer Charter and revamp the customer care desks and call center programs (Zambia Revenue Authority, 2000) having a productive and motivated workforce would play a significant role in enhancement of revenue collection (Waweru, 2005).

The hypotheses that could be tested is thus: $H0_{14:}$ Human resources has no significant effects on revenue collection success

2.5 Gaps in the Literature Review

The literature review shows that there are several studies written on Revenue Collection Performance with regards to tax administration, smuggling, corruption, political influence and information technology. Nonetheless, there is no specific study that focuses on Revenue Collection Performance with consideration of all these aspects from the Zambian perspective and on Chirundu Border. The only studies which are closer to this research are by Chanda (2011) who concentrates on smuggling, the Global Delivery Initiative (2019) which looks at the use of technology in revenue collection and Soest (2007) and Cheelo and Hinfelaar (2020) who interrogated political interference on Revenue Collection Performance. With these gaps identified, this study looks specifically at predictors affecting enhanced Revenue Collection Performance by ZRA at Chirundu boarder post.

Various studies on performance of revenue collection have been reviewed taking into consideration the various predictors used in the present study. For instance, studies by Ziria (2008), Mwakalobo (2009) and Owolabi (2011) showed the use of effective revenue collection system but did not identify the main predictors leading to revenue collection

performance, staff capacity, revenue collection systems, and revenue sources. The same applies to the study by Olowu and Wunsch (2003), which praised the need for county government to ensure sound revenue collection practices but fell short of giving prescriptions to impose huge constraints on the choice of revenue instruments for local governments. Moreover, the studies by Lutfunnahar (2007), Chaudhry and Munir (2010), Okech and Mburu (2011), and Muriithi (2013) showed that tax was an important element of revenue and total tax compliance favourably affect the total Revenue Collection Performance. The results suggest that boosting the openness, money supply and political stability has the potential to raise the level of taxation. However, these studies did not explore the effects of other predictors. Additionally, the study by Ngotho and Kerongo (2014) found that compliance was a major issue in Kenya. The study therefore recommended further studies to be conducted on the predictors that lead to tax noncompliance in Kenya. Furthermore, the studies by Balunywa et al. (2014) and Makokha et al. (2014) provided immense information on three of the four predictors, namely, staff capacity, revenue collection systems, and revenue source, which provide the basis to the study, but they did not assess the role of revenue collection systems in revenue collection performance.

The studies by Jepkemboi (2008) and Abiola and Asiweh (2012) mainly identified tax as the most essential revenue collection sources but fell short of explaining other predictors for county governments. The studies by Adedokun (2007) and Makokha et al. (2014) did not give elaborate staff capacity practices although these studies were dealing with this item. The studies by Tumushabe et al. (2010), Segal and Sen (2011), Agyapong (2012), and Otieno et al. (2013) on the other hand, identified the predictors responsible for designing revenue policies but did not expand beyond the boundaries to consider predictors such as staff capacity, and revenue sources within their studies' spectrum.

Further, Arye (2003) studied instructional practices as the main concerns in revenue collection performance but did not show how the financial practices influence the revenue collection performance in its entirety. The studies by Tumushabe et al. (2010), Segal and Sen (2011), Agyapong (2012), Otieno et al. (2013) and Ndyamuhaki (2013) identified the predictors responsible for designing revenue policies. The studies, however, failed to comprehensively the role of revenue sources, strategies of revenue collection administration, information communications technology, and staff capacity on performance of revenue collection. Therefore, there was need to do more research on performance of revenue

collection to have solutions to the challenges which may hinder achievement of devolved government objectives.

2.6 Summary of Literature Review

In summary, the literature shows that there are many studies conducted on revenue collection and administration. The literature indicates that administratively, most countries have revenue authorities. However, it shows that while there are subjective perceptions among countries with revenue authorities that their model has led to improved revenue administration and has spurred modernization, there is no objective analysis that countries with RAs have performed better in this regard than countries without RAs. The literature also indicates that there is evidence that countries with high tax revenue instability tend to have high total expenditure instability. In some countries, the literature reveals that tax revenue collection effectiveness is yet to be attained, and that the revenue authority faces challenges because of low levels of tax education amongst taxpayers, ineffective taxpayer identification methods, and poor monitoring and assessment procedures. In addition, the literature shows that the most important predictors affecting revenues collection were organizational, social and personal, legal, and economic respectively. The literature established that to earn the right to collect the tax, the state must fulfil its adjudicatory role by providing a judicial system that the citizens trust and in addition the state must be responsive to address the needs of the citizens through the delivery of services. Further, the literature shows that administrative capacity has a significant influence on revenue collection and that governments should enhance the revenue administrative capacity to enhance Revenue Collection Performance.

The literature also established that there are three types of smuggling activities: 1) Falsely declaring the value, such as lower priced and under quantity; 2) Falsely declaring the nature of the goods (misclassification); and 3) Under assessing goods value at a level lower than legally applicable. The literature review shows that smuggling distorts market prices which in turn affect the manufacturing industries. The result is unfair competition on trading grounds and also distortion of the economy. The government loses huge sums of revenue which could be used for national development and services. The literature further established that smuggling is directly linked to other types of crime, such as tax and import duties evasion, bribery, corruption of public officials and money laundering. The probability of being caught and punished by law enforcing authorities depends, to some extent, on a country's rule of law.

In addition, the literature revealed that corruption was identified to be the main challenge that inhibits Revenue Collection Performance. Bribe payments to public officials lead to inequities and inefficiencies in tax administration, since they result in a transfer of a public resource to private agents - reducing government revenues. The review also suggests that losses through corruption and tax evasion need to be reduced by applying stiffer penalties to corrupt officials and tax evaders. This can be achieved by contracting collections to a private collection agency; thus, increasing revenues from existing sources and reducing cost. The literature also established that integrating e-government technology and payment would enhance Revenue Collection Performance. If corruption is adequately controlled taxpayers will be willing to pay taxes frequently and timely knowledge that the tax revenue is judiciously used for overall wellbeing of the economy.

Further the literature indicates that four principal groups of reasons why tax systems do not yield higher revenues in many developing countries: Internal political factors; Administrative constraints; External political factors; multinational companies and other investors; and the structure of developing country economies. The literature also establishes that constraints on effective tax collection emanate from Statutory Regulatory Orders issued through the bureaucracy; and as unofficial conversations through arbitrary tax cuts and benefits provided to citizens connected with the political and bureaucratic apparatus. In addition, the review shows that political connection tends to reduce the level of tax compliance. Further, political connections and corruption play a complimentary role in increasing tax evasion practices.

The findings in the literature furthermore indicate that the exchange of information for tax purposes between national tax jurisdictions has a positive and statistically significant impact on tax revenue. The use of ICTs facilitates maintenance and timely access of records and fast processing of return to remove postal delays; minimize operational costs; curb cheating and plug revenue loss. In this regard, ICT use enhance better tax administration.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Overview

This chapter discusses the methods, the researcher used in data collection, it covers the research design, target population, sample size and research instruments and data collection procedures and data analysis techniques. The report incorporates both qualitative and quantitative approaches in order to establish the findings comprehensively.

3.2 Description of the study area

The study was conducted at Chirundu Border Post in Southern Province. Chirundu Border Post is located at the bridge that connects Zambia and Zimbabwe. The area was chosen because the report of the Controller and Auditor General for the financial Years 2017 to 2022 had revealed that Chirundu Border Post was not able to collect fees in the particular financial years, a feature that had affected its operation and capital expenditure. Based on the facts, the researcher utilized ample time and efforts to undertake this study was to examine the predictors affecting Revenue Collection Performance.

3.3 Research Design

This study adopts a mixed methods approach to propose a simplified paradigm for efficient data collection. A non-experimental concurrent mixed methods design has been adopted because it fuses in both qualitative and quantitative data. Both qualitative and quantitative methods were employed to assess the predictors affecting enhanced Revenue Collection Performance by ZRA at Chirundu border Post. The "concurrent mixed methods" that was adopted for this study refers to a research design where both qualitative and quantitative data are collected and analyzed at roughly the same time, allowing for a parallel comparison and integration of findings from both data types within a single study; this approach is particularly useful when researchers want to gain a more comprehensive understanding of a phenomenon by exploring different perspectives simultaneously (Creswell et al., 2003).

3.4 Target Population

According to Mugenda and Mugenda (2003) population is defined as the entire group of individuals or objects having common observable characteristics. The use of the word population in this study is to be understood as stated in epidemiological research whch does not correspond always with its demographic meaning of an entire group of people living within certain geographic or political boundaries. A population for a research study may comprise groups of people defined in many different ways and in this study it means persons being only Zambia Revenue Authority Officers and Zambia Police Officers working at Chirundu Border Post. There were 60 ZRA officers and 32 police officers at Chirundu Border Post at the time of the study.

Since the population of eligible respondents comprised of 92 officers. The researcher deemed it appropriate to conduct a census for the quantitative study as the sample was small and could be easily reached ached in the community. However, out these only 70 were willing to be part of the study. This gave a response rate of 77% and it was deemed to be high and appropriate.

As for the qualitative part, the researcher narrowed the sample to only supervisors and only 3 police officers and 13 Zambia Revenue Authority Officers met the inclusion criteria of a supervisor as that person who appraised others.

3.5 Data Collection

Since this was a mixed methods study, data was collected using survey questionnaires and focussed interviews with supervisors. The data was only collected on one occasion and represents a snapshot of the respondents' responses at that specific point in time (that is, during November to December 2024). The research was carried out under field conditions as it was conducted under actual environmental conditions (that is, the respondents were interviewed in their work places or at home and the researcher merely recorded the respondents' responses with no manipulation of variables taking place) (Cooper and Schindler, 2006). Interviews were often conducted during or after hours as the case would be to ensure that the selected respondents were available.

3.6 Data Analysis

The collected data were coded, cleaned (omitting outliers), processed and statistically analysed using the Statistical Product and Service Solutions software, SPSS version 20, an IBM product since 2009 (Hejase and Hejase, 2013). Also, for accuracy and completeness, data were presented using descriptive statistics where frequencies and percentages are presented in table and figure form to enable the researcher interpret the data and finally make necessary recommendations basing on the study findings. A total of 90 potential respondents were contacted. After five back-and-forth reminders, 70 responded and provided survey questionnaires. As for the interviews, sixteen were interviewed.

3.6.1 Data description

Descriptive data analysis was used to check for missing values. Data pre-processing was done accordingly. Outliers were checked, and the response rates of all items were also checked (Obaid et al., 2019). To evaluate the validity and reliability of the data, Cronbach's alpha coefficient, standardised lambda coefficient and squared multiple correlation coefficient (R^2) were employed following exploratory factor analysis (EFA) and confirmatory factor analysis (CFA).

3.6.2 Exploratory Factor Analysis (EFA)

EFA was adopted to investigate latent variables. Basic steps were tried, including evaluating suitability and probing the sample size and correlations using measures like Kaiser Meyer Olkin (KMO) adequacy and Bartlett's correlation test. Additionally, steps including factor extraction, determining retained factors, and eventually applying rotation methods were agreed upon as part of EFA (Taherdoost et al., 2014). KMO value falls within a range of [0, 1]; it will be deemed adequate if the value is > 0.5 (Hair et al., 2014), (Tabachnick et al., 2013) or even better if it is > 0.6 (Lioret et al., 2017; Burton and Mazerolle, 2011). Bartlett's test of sphericity was also used to measure the overall significance of correlations among variables. It tells whether the matrix is an identity matrix: a significant p-value <0.05 indicates that the data is appropriate for factor analysis (Hair et al., 2014; 2021; Burton and Mazerolle, 2011).

In EFA, various methods can be employed to retain factors, such as principal axis factoring (PAF), image factoring (IF), maximum likelihood (ML), and principal component analysis (PCA), among others (Tabachnick et al., 2013). Notably, PCA is a default option in many analytical software. Arguably, PCA is the most utilised in EFA studies (Tabachnick et al., 2013). The choice between PCA and PAF is debated among analysts despite often having negligible practical differences (Burton and Mazerolle, 2011; Hair et al., 2021). Considering these, this study the researcher adopted PCA. Additionally, the number of retainable variables is obtained using the variable loading. A variable loading >0.3 is acceptable (Tabachnick et al., 2013), while Burton and Stephanie (Burton and Mazerolle, 2011) emphasised a threshold≥0.50 as a practical guideline. In this paper, we decided to set a variable loading threshold of≥0.5 as this is one of the commonest acceptable thresholds among no studies (Xu et al., 2019; Liu et al., 2020; Mardani et al., 2020; Yang et al., 2022; Mohammed et al., 2021).

3.7 Reliability and validity tests

The reliability and validity were tested after assessing the model's overall fit. Reliability relates to the internal consistency of observed variables, while validity relates to the underlying cause of the variable's covariation. The reliability herein was estimated via Cronbach's alpha coefficient. Cronbach's alpha coefficient ranges between 0 and 1, with

higher values indicating better reliability. The Cronbach alpha >0.7 is considered acceptable (Nunnaly, 1994 Obaid et al., 2019). The validity of each path in the CFA model was evaluated using a standardised lambda coefficient. In contrast, reliability was assessed using a squared multiple correlation coefficient (R^2)—both the validity coefficient and R^2 value range from 0 to 1. As the validity coefficient approaches 1, the indicator reveals a higher level in representing the construct of interest. Similarly, as the R^2 value approaches 1, the greater the variability in each indicator accounted for by the unobserved variable.

3.8 Exploratory factor analysis

To ensure that the survey tool was suitable for EFA, statistical tests such as KMO, Bartlett's test of sphericity, and communalities were applied. Sampling adequacy tested by KMO was reported at 0.739, indicating that items were sampled adequately. Bartlett's test of sphericity was reported at a p-value of 0.001, which is less than the significance level of 0.05 and indicates a robust concomitant probability among samples. These tests confirm that the collected data is wholly fit for analysis using the EFA method. Principal component analysis with varimax rotation was conducted on 16 variables influencing tax Revenue Collection Performance.

3.9 Confirmatory factor analysis

Results from EFA disclosed four predictors contributing to Revenue Collection Performance. The researcher employed CFA to check the factorial validity of the different predictors influencing deconstructability and to generate evidence regarding the fitness of the proposed model. The result of the CFA shows all four variables were significant with $p < 0.05$. At the same time, the overall model fitness was acceptable and satisfactory. Table 3.1 offers the overall model fitness.

Table 3.1 Results of the overall fit test for the confirmatory factor analysis (CFA)

Indices	Model	Standard
$\chi 2/df$	1.288	<3.0
Political instability,	0.986	>0.9
Information technology,	0.981	>0.9
Support system,	0.707	>0.5
Human resource	0.975	>0.5

3.10 Reliability and validity tests

After assessing the model's overall fit, its reliability and validity were investigated. Reliability refers to the consistency of a set of observed indicators, while validity relates to the underlying cause of the indicators' covariation. The validity of each path in the CFA model was evaluated using a standardised lambda coefficient. In contrast, reliability was assessed using a squared multiple correlation coefficient (R^2) - both the validity coefficient and R^2 value range from 0 to 1. As the validity coefficient approaches 1, the indicator reveals a higher level in representing the construct of interest.

Similarly, as the R^2 value approaches 1, the greater the variability in each indicator accounted for by the unobserved variable. The lower acceptable limit for the validity coefficient is 0.5. However, there has yet to be a consensus on the lower limit for accepting R^2 (Xu et al., 2019). All the standardised loadings (standardised lambda coefficients) range from 0.076 to 0.927 for the observed variables. This exceeds the minimum threshold. The p-value associated with each latent variable is significant at the 0.05 level, and all the standardised loadings are higher than 0.5, except F5 and F6 loading, which stands at 0.346 and 0.379. While this loading is low, the latent variable of F5 and F6 was retained as it has been argued in previous studies to be a significant dimension determining deconstruction feasibility.

Furthermore, in assessing the reliability, the composite reliability (CR) was calculated. It has been suggested in earlier studies that CR > 0.6 is a satisfactory threshold.

Similarly, the average variance extracted (AVE) > 0.4 is an acceptable threshold. Applying these tests to the data, we discovered that CR and the AVE scores, respectively, for each construct were Political instability, (0.86, 0.45), Information technology, (0.81, 0.42), Support system, and Human resource. Findings suggested that all four criteria satisfied the required level. These comprehensive checks proved the proposed model satisfactory, providing the best fit for the collected data.

Qualitative content analysis was employed to analyse qualitative date from the interviews. Content analysis was done following the procedure below;

a) Familiarization: The researcher began by immersing themselves in the qualitative data, reading through interview transcripts and notes to gain a comprehensive understanding of the content. This initial step helped in recognizing recurring ideas and sentiments expressed by participants.

b) Coding: Relevant sections of the data were then coded, where specific phrases or sentences were tagged with labels that captured the essence of the content.

c) Grouping Codes: Once coding was complete, similar codes were grouped into broader themes.

d) Theme Development: Finally, the researcher analyzed these themes to draw insights about participants' experiences. This involved interpreting how the identified themes reflected the overall picture

3.11 Ethical Considerations

As in other aspects of business, all parties in research need to exhibit ethical behaviour. Ethics can be described as: "…norms or standards of behaviour that guide moral choices about our behaviour and our relationship with others" (Cooper and Schindler, 2003:120). The main aim of ethics in research is to ensure that no one is harmed or suffers adverse consequences from research activities (Cooper and Schindler, 2003:120).

Stack (2005:18), in a summary based on Leedy and Ormrod (2005:101), points out that the essential ethical attributes of any researcher are academic honesty, integrity and modesty. Stack (2005:18) additionally asserts that where living beings are the focus of investigation, there are other important ethical implications that deserve consideration. These include:

a) protection from harm;

b) informed consent – the use of deception is only permissible under very limited circumstances and only when the study cannot be conducted meaningfully without it;

c) the right of privacy and confidentiality, including giving information about how the raw data will be dealt with;

d) the right of a participant to withdraw at any stage;

e) the use of internal review boards for research proposals; and

f) professional codes of ethics.

Informed consent

The researcher developed an informed consent (See Appendix III). According to Maxwell and Satake (1997:216) and Stein and Cutler (1997:211), an informed consent document must contain the following information:

- A heading, which must include the name and address of the department and institution, name of the researcher(s) and contact details - This letter was drafted on a letterhead. The first paragraph stated the name of the researcher.

- Title of the study - The title of the study was included on the cover letter to the questionnaire.

- Purpose of the study - The purpose of the study was stated in the initial paragraph on the informed consent letter.

- Procedures (for example, explanation of the procedures to be followed and their purposes, the nature of activities such as filling in questionnaires, time required, schedule of participation and duration of survey) - The letter of consent stated that the survey should take a maximum of 30 minutes to complete.

- Risks and discomforts (if applicable) - This aspect was not applicable to this study as the respondents were interviewed in their own homes.

- Benefits (this includes any personal or societal gains, as well as financial gain or lack thereof) - As noted above in the third bullet, the letter of consent stated that the study would assist the government in its efforts to market itself and its services more effectively to the general public.

- Participants' rights (that is, participation is voluntary and individuals may withdraw from participation in the study at any time and without adverse consequences) - It was stressed that the respondents' participation in the research project was voluntary

- Confidentiality (that is, the assurance that all information is treated as confidential, that anonymity is assured, that the data would be destroyed should the subject withdraw and that all persons having access to the research data must be identified) - It was stated that the survey is anonymous and confidential and that the identity of the respondents would not be revealed. In addition, the researcher Mark Kafwanka provided only a questionnaire which was numbered in advance, without a respondent's name or other details. The research data would be stored in a locked facility to which only the researcher has access. This addressed the need to ensure the right of privacy and confidentiality, and the right of participants to withdraw at any stage.

- The use of internal review boards for research proposals: The research proposal was reviewed by the HSSREC an Institutional Review Board of the University of Zambia.

CHAPTER 4

FINDINGS

4.1 Overview

This chapter provides the findings. The findings are arranged inn sections. The first section covers the demographic profiles of respondents. The remainder of the sections are linked to the research questions.

4.2 Demographic Profile of Respondents

The sample was composed of employees by gender demonstrating males accounting for two thirds n = 42 versus n = 28 females. This was a relatively sample of young or youthful employees whose mean age was 36.73 (± 10.9 SD) whose dominant age group was 28 to 37. The distribution for the number of years having worked at Chirundu Border Post was such that up to three quarters n = 50 have just been there for less than five years (due to internal rotations and new entrants into the job). Diploma and bachelor's degree holders form the backbone of employee categories as they both account for n = 61 (87.2%) (see Table 4.1).

Table 4.1 Demographic profile of the sample n = 70

Demographic variable	Frequency	
	n	%
Age group		
18 to 27	19	27.1
28 to 37	22	31.4
38 to 47	18	25.7
48 to 57	8	11.4
Over 57	3	4.3
Gender		
Male	42	60.0
Female	28	40.0
Highest level of education		
Certificate	7	10.0
Diploma	24	34.3
Bachelor's Degree	37	52.9
Master's degree	2	2.9
How many years have you been working here?		
Less than 5 years	50	71.4
6 to 10 years	11	15.7
11 to 15 years	6	8.6
Over 15 years	3	4.3

4.3 Tax Revenue Collection Performance

This section addresses research question number 1 which is "What are the patterns of Revenue Collection Performance at Chirundu Border Post?" respondents were asked a question "How do you rate the level of tax revenue collection here at Chirundu?" Just over half of the employee's n = 38 (54.3%) rated Revenue Collection Performance and Chirundu Border Post to be high whereas n = 17 (24.3% and n = 15 (21.4%) rated Revenue Collection Performance as very high to somewhat low respectively (See Figure 4.1) below.
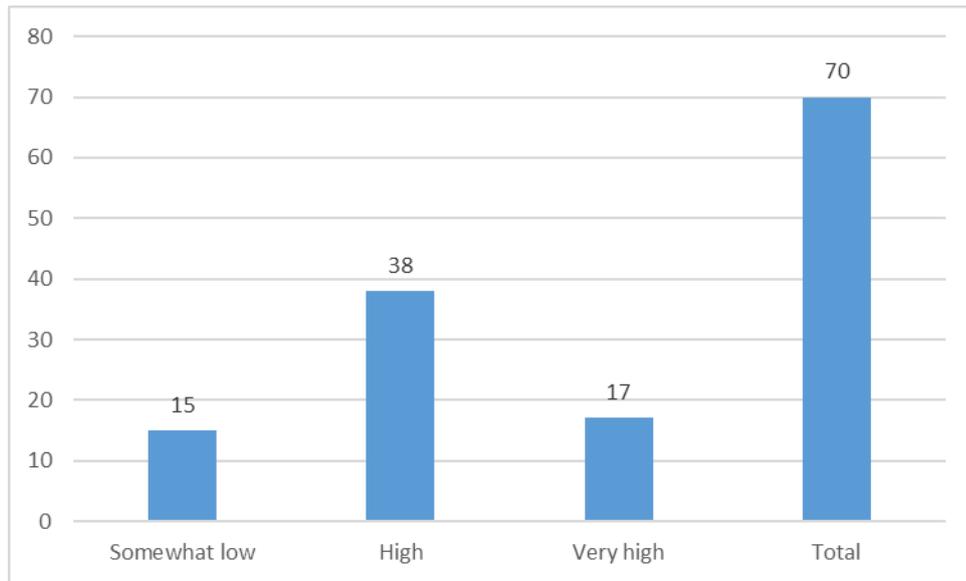
Figure 4.1: Rating of Revenue Collection Performance at Chirundu Border Post n = 70

The distribution of persons in relation to Revenue Collection Performance is such that males were seen more to commit tax offences than females and a relationship was associated with the gender and being more of an individual than a corporate body. As shown in Tables 4.2, since the p-value is less than the chosen significance level (α = 0.05), we do reject the null hypothesis. Rather, we conclude that there is enough evidence to suggest an association between gender and type of customer category. Based on the results, we can state the following:

An association was found between gender and customer category and offence commission ($\chi^2(1)$ =11.872; p < 0.001

Table 4.2a: Gendered offences by person type Tax offences

		Customer category and offence commission		Total
		Individuals	Corporations	
Tax offences are mostly committed by gender type	Males	36	7	43
	Females	12	15	27
Total		48	22	70

Table 4.2 b: Chi-Square Tests Contingency Table

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	11.872[a]	1	.001		
Continuity Correction[b]	10.120	1	.001		
Likelihood Ratio	11.845	1	.001		
Fisher's Exact Test				.001	.001
N of Valid Cases	70				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.49.

b. Computed only for a 2x2 table

Police officers and tax assessors had numerous experiences of offender categories and had the following to say.

Whether acquired legitimately, through crime and deception, or other activities such as gambling, some participants seemed to get a 'buzz' or adrenalin rush from making money and from the extravagant lifestyle it enabled. One who was caught was not ashamed to narrate

'We sell a lot of stocks and shares, so I'm used to a fast pace of life… Life was fabulous… and I lived it fabulously.'

The potential consequences of offending were not taken particularly seriously by cross birder traders. For example, one participant who was in the cells at the time of the study and had a pre-conviction for tax evasion and another, on being asked why he and his co-defendant continued to evade tax, replied incredulously.

'You can't say 'Let's stop'! [Laughs] Like it's so easy… Anyone who tells you 'No, let's just stop...' Listen, the truth is I could have told [co-defendant] 'Stop' you know, but I just - I wouldn't say turned a blind eye, but I just let it run… I didn't care… [Getting caught] crosses your mind, yeah, but I wasn't bothered.'

While not a reason for tax evasion as such, a negative view of tax appeared to facilitate some participants' offending behaviour. A recurrent theme among those interviewed was that the tax system in Zambia was inherently unfair, with large companies and politicians. It allowed to avoid tax with no repercussions –

the more money you have, the more influence you have

While people on lower incomes are targeted and punished for lesser offences. To this end it was felt that to succeed in a 'crooked' system, people need to be similarly crooked and break the rules

A similar organisation] works on the same premise as us. But obviously they are a large organisation with… millions of turnover, so ZRA does not touch them.'

4.4 Predictors of Revenue Collection at Chirundu Border Post

This section covers the third research question number 2 "What the predictors of revenue collection at Chirundu Border Post?". It is a descriptive analysis of the four main variables. Respondents were asked to rate how each of the variables as shown in the Table were observed to influence Revenue Collection Performance. A five-point scale was used for the rating as follows: 1 for Influence is very low, 2 for Influence is low, 3 for Influence is rather low, 4 for Influence is high   and 5 for Influence is very high. The four predictors have an influence on tax revenue as shown by the summation of instances to the left of the median

category "influence is rather low" than to the right. Political instability ranks as the first one ZRA support system is the least in influencing tax collection (see Table 4.3 below).

Table 4.3: Descriptives of predictors

Factor	Influence is very low	Influence is low	Influence is rather low	Influence is high	Influence is very high	Ranking
The ZRA Support System	3	3	33	26	5	4
Information Technology	2	3	16	33	16	2
Political instability	0	7	8	28	27	1
The Human Resource	9	5	16	24	16	3

A computation was done to determine the extent to which the four predictors influenced Revenue Collection Performance. To make this determination, the ideal influence was set to be less than 12. If values exceeded this threshold, it implied that the four predictors contributed cumulatively to the current state of Revenue Collection Performance. The computation shows the men to be 14.6 ($\pm$ 1.8 SD). The lowest value was 10 and the highest was 18 (see Table 4.4).

Table 4.4 Cumulative effect of predictors to Revenue Collection Performance

Valid	70
Mean	14.6714
Median	15.0000
Mode	16.00
Std. Deviation	1.85505
Minimum	10.00
Maximum	18.00

Interviews revealed that there was a lack of experienced and skilled officers in some areas, and this resulted into under performance.

> *We do have staff that have the paper qualification but not to perform tax related duties. A number are misplaced…*

Lack of Effective Procedures in Revenue Collection appeared to affect tax revenue. A considerable number of ZRA staff had several views worth noting.

> *The procedures we have put in place are highly influencing what we are doing. I do not see our procedures to be effective you know…. Collection procedures involve collecting money from customers. We need to do better in this area by strengthening the whole support system.*

One area that was spoken about much was the complexity of procedures in revenue collection.

> *Fundamental to the system of self-assessment is that taxpayers seem not to have sufficient knowledge in the tax laws and procedures and confidence from taxpayers on tax administration. We have been waiting that these regulations will be simple and clear that will act fairly and treat taxpayers according to their individual circumstances.*

Staff were quick to mention specify barriers to revenue and noted a number of areas relating to import taxes.

A number spoke about no declaration.

> *Most of the traders are not making declarations except for some imports.*

Currency devaluation has often distorted taxation rates. Currency appreciation and higher inflation show some linkage to lower tax revenues or its components. These results show some partial consistency with trade liberalization. These have been accompanied by macroeconomic policies to affect tax revenue. This was expressed in the following way.

> *We have been affected when devaluations take place, and we find that leakages pre warn our clients and they eventually pay less.*

Complex tax laws, high discretion of public officials and low cost of punishment have created ideal conditions for corrupt behaviour to take place. Citizens and companies may bribe officials to evade taxes and duties. In turn, public officials in these institutions may seek to extract illicit rents from taxpayers, either by collusion or extortion.

> *There is a lot of fraud and corruption around importation. People under value commodities like cars....and will do all there is.... use any rule in the black book.*

Inadequate and untrained staff are also a factor.

> *We have been facing manpower shortages, and we are not retraining our staff as we plan to.*

Predictors of revenue collection at Chirundu Border Post

This section is examining research question 3 "What are the predictors of revenue collection at Chirundu Border Post?" This question was designed to establish a causal relationship between regressants and the regressor, a multiple regression analysis was conducted. This was in essence answering the research question "What are the predictors of revenue collection at Chirundu Border Post?". The regression model was as follows

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where: Y= Revenue Collection Performance at CBP

β_0= Constant β_1 to β_4 =Coefficient of independent variables

X_1 = Political Instability

X_2 = Information Technology

X_3 = Support System

X_4 = Human Resource

e =Error term of the model

The success of revenue collection is employed as a dependent variable in this study. The performance of revenue collection was assessed by an 11-point Likert scale to see the revenue collection success. stood for very poor collection of tax revenue whereas 11 stood for very high collection of tax revenue.

The revenue collection performance was expected to be above 5 the median point. The mean score was 5.8 (± 2.4 SD). A fundamental task in the statistical analyses was to characterize the location and variability of a data on revenue collection performance. The characterization of the data includes skewness and kurtosis. As for skewness, the distribution was asymmetric and showed a positive skewed curve towards the right. This means that the distribution of data has a longer tail on the right side of its peak than on the left indicating that most of the data points are clustered towards the lower end of the spectrum, with a smaller number 2 and 3 of outliers near the higher end. Thirty respondents scored lower than the mean and 28 scored above the mean (Figure 4.2)
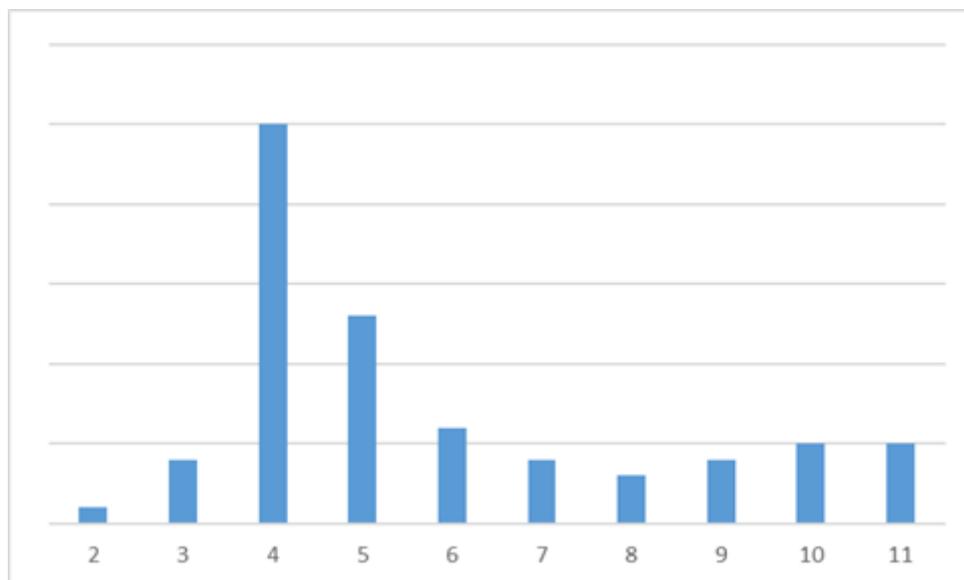

Figure 4.2: Sample distribution of revenue collection performance based on 11-point

Scale

The distribution above doers do not render causation. A regression was then done. The four Independent Variables, they were measured on a five-point ordinal scale as follows: 1 for Influence is very low, 2 for Influence is low, 3 for Influence is rather low, 4 for Influence is high and 5 for Influence is very high. Regression analysis was done to produce correlations, the coefficient of determination and analysis of variance (ANOVA). Correlation sought to show the nature of the relationship between dependent and independent variables and coefficient of determination showed the strength of the relationship. Analysis of variance was done to show whether there is a significant mean difference between dependent and

independent variables. The ANOVA was conducted at 95% confidence level. Regression analysis was used to establish the relationship between tax revenue collection at CBP and the predictors that affect variables.

The findings as shown in table 4.5 of the model summary indicated that there was a very weak positive relationship (R= 0.252) between the variables. The data also revealed that 6.3% of revenue collection at Chirundu Border Post could be explained by predictors under study. Besides, given the R Square value of 0.063 and adjusted R square value of 0.06 it is realized that 6.3% of the variation in (success of revenue collection) can be explained by the independent variables. R^2 was used to find out how well the independent variables can predict the dependent variables. The remaining 93.7 % of the variance is explained by other variables not included in this study. Further, it is widely accepted in the statistical applications that an R^2 adjusted of above 75 per cent is very good; between 50–75 per cent is good; between 25–50 per cent is fair and below 25 per cent is poor (Sakaran, 2000). Based on the result the model is not very good (6.3%).

Table 4.6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.252[a]	.063	.006	2.460

a. Predictors: (Constant), The Human Resource, Political instability, Information Technology , The ZRA Support System

The next table is the ANOVA table, which reports how well the regression equation fits the data (i.e., predicts the dependent variable) and is shown below:

Table 4.7 Analysis of Variance (ANOVA)

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.564	4	6.641	1.097	.365ᵇ
	Residual	393.379	65	6.052		
	Total	419.943	69			

a. Dependent Variable: Generally, your basement of Revenue Collection Performance scores out of a maximum of 11 would be

b. Predictors: (Constant), The Human Resource, Political instability, Information Technology, The ZRA Support System

Table 4.7 indicates that the regression model does not predict the dependent variable "Revenue Collection Performance" significantly well. How do we know this? When an examination of the "**Regression**" row and we look at the "**Sig.**" column, this roll indicates the statistical significance of the regression model that was run. Here, $p > 0.365$, which is more than the ideal $\alpha = 0.05$, and indicates that, overall, the regression model that it does not statistically significantly predict the outcome variable (i.e., it is not a good fit for the data). The Coefficients table (Table 4.8) provides us with the necessary information to predict revenue collection performance from the four predictors as well as determine whether income contributes statistically significantly to the model (by looking at the "Sig." column). Furthermore, we can use the values in the "B" column under the "Unstandardized Coefficients" column, as shown below are in the negative. The model indicates that the four repressors do not influence revenue collection performance at Chirundu Border Post as the p vales in all cases are < 0.05 of the ideal α values of 0.05.

Table 4.8: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	4.326	2.612		1.656	.103
	The ZRA Support System	-.220	.347	-.083	-.635	.527
1	Information Technology	.545	.372	.189	1.465	.148
	Political instability	.204	.341	.072	.600	.551
	The Human Resource	-.218	.237	-.113	-.921	.361

a. Dependent Variable: Generally, your assessment of Revenue Collection Performance scores out of a maximum of 11

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Overview

Chapter Four examined the various oversight institutions and their current State functions together with measures of enhancing ongoing monitoring of budget expenditure. Chapter Five interprets and explains the results within the thesis. It explains the significance of the results and links everything to the research questions.

It will also show the meaning, importance and relevance of the results. It will further focus on explaining and evaluating what has been found and how this relates to the reviewed literature to support the overall conclusion.

5.2 Main Findings

This study sought to answer three research questions before committing to answering the main research question. The main findings are that Just over half of the employees n = 38 (54.3%) rated Revenue Collection Performance and Chirundu Border Post to be high whereas n = 17 (24.3% and n = 15 (21.4%) rated Revenue Collection Performance as very high to somewhat low. An association was found between gender and customer category and offence commission ($\chi^2(1) = 11.872$; $p < 0.001$. The four predictors tend to have a surface influence on tax revenue collection performance as the p values were more than the α value of 0.05.

5.3 Interpretation of findings

This study helps to determine the predictors that affect revenue collection at ZRA border posts in this case the Chirundu border post. This study has not exposed the all the weaknesses in the Tax administration by the Zambia Revenue Authority using the four predictors. The study findings call for detailed examination of both export and import taxes. Export taxes ought to focus more on agricultural and mineral products in for Zambia the primary producing countries.

The researcher is of the view that there is more concentration on products for export at Chirundu. Export taxes ought to be employed to compensate for the devaluation of our country's currency and as a means of stabilizing the economy during a period of fluctuating prices (Goode & Ojha, 1966). Although Zambia's economy is small, concentrating on export taxes may play a significant role on especially all primary agricultural resources like maize. For sustainability purposes export taxes would be much better to collect than import taxes for a future Zambian government.

Regarding import taxes, almost all imports of commodities for Zambia which come through Chirundu Boarder Post are not declared except for some imports. The common challenges faced by the ARA include increasing global trade and movement of people and conveyances across the borders; revenue leakages through devaluation; fraud and corruption; weaknesses in the Tarif & Excise policies; manpower shortages; lack of institutional capacity and capability, training of officers and productivity; border protection capability; and best practice international standards. These are not peculiar to Chirundu but are ubiquitous.

The study found an association between gender and category of customer. Gender is a psychological factor that can influence a person to commit tax evasion (Kastlunger et al., 2010). In language gender can be interpreted as the visible difference between men and women in terms of values and behaviour. According to the gender socialization theory, men and women have different roles and values, thus forming differences in interests, decisions and practices between men and women. Gender socialization theory states that men are twice as likely to engage in unethical behaviour than women (Tjondoro et al., 2019). The literature also shows that women are considered more risk-adverse than men (Kastlunger et al., 2010). Women will be more careful and try to avoid long-term risks that are burdensome for themselves when making decisions (Derwanta et al., 2019). Several studies found that women are more ethical than men (Betz et al., 2013) and female taxpayers are proven to have high tax morale (Tjonndolo et al., 2019). Therefore, women are considered to have a lower tendency to commit tax evasion.

Men and women also have different attitudes and behaviours in taxation. In terms of tax compliance, women are found to be more compliant than men (Chau and Leung, 2009; Puspitaningrum, 2018). These studies have shown that women are significantly more

obedient than men. Women were also found to be more resistant to tax evasion than men. Women also tend to judge tax evasion behaviour as unethical behaviour. Based on the description, this study expects that men tend to commit tax evasion than women because men are found to be more concerned with money, tend to engage in unethical behaviour while women are found to be more obedient and opposed to tax evasion behaviour (Huang and Kisgen, 2013). In addition, the researcher hypothesises that male CEOs than female CEOs are less likely to engage in corrupt practices; hence, their firms' tax behaviour is less likely to be affected by anti-corruption or tax evasion campaigns.

Tax offences like evasion and corruption are not unique to Chirundu. A World Bank report estimates that well-connected firms in Tunisia evaded $1.2 billion in tariffs between 2002 and 2009 by undervaluing imports (Rijkers et al., 2015). Such tariff evasion could significantly erode revenue mobilization efforts, particularly in low-income countries. Even in more advanced economies, such evasion is costly. Cross-border trade fraud to evade customs duties, VAT, and excises have important public revenue implications both for developed and developing economies. For example, Missing Trader Intra Community (MTIC) fraud (also known as carousel fraud) exploits the zero-rating of export and deferral of tax on intra-European Union (EU) imports that allows trading across Member State borders to be VAT free (Keen and Smith, 2007).

The researcher notes that individual as well as corporate tax avoidance is now a fascinating and dynamic topic of great interest to accounting and management scholars not only at Chirundu Border Post but has been noted elsewhere (see Cen et al., 2017; Lei et al., 2022; Zolotoy et al., 2021). Given the wealth distribution and social equality consequences of Zambia's tax policies, the researcher is motivated to complement the tax avoidance tax related corruption literature by analysing tax behaviour from an institutional theory perspective.

This study makes several meaningful contributions to the fast-growing literature on corporate tax avoidance and the economic consequences of corruption. First, this research introduces an important, but largely ignored, institutional factor into the discussion of corporate tax strategies: levels of public sector corruption. Previous research has demonstrated the impact of the corruption crackdown on a bundle of corporate activities, such as innovation

expenditure (Huang & Yuan, 2021), M & As (Huang et al., 2023), and financial reporting quality (Hope et al., 2020). Our study contributes to this strand of literature by showing its impact on firms' tax behaviour.

From an empirical perspective, corruption in a region is a slowly forming and stable social norm that evolves along with other institutional factors. Hence, endogeneity issues may block a clean identification of corruption effects. China, a combination of the largest emerging market and severe corruption, provides irreplaceable research setting for examining the impact of political corruption. Relying on the unanticipated exogenous event of anti-corruption campaigns in China, we can effectively address endogeneity and thus robustly establish a causal link between levels of corruption and corporate tax avoidance. More importantly, even though shirking tax liability is a global phenomenon, most existing studies examine corporate tax behaviour in the context of developed countries (e.g., Al-Hadi et al., 2022; Cen et al., 2017; DeBacker et al., 2015; Dyreng et al., 2010), with a scarcity of attention to the heterogeneity in institutions around the world. This study empirically complements the literature by examining both individual and corporate tax avoidance, corruption and evasion in an emerging developing market and documenting that political corruption is a salient institutional factor in explaining a firm's tax policies.

The fact that the model predicts only 6.3% of revenue performance requires examining other formal and informal institutional factors, such as culture, tradition, and legal enforcement. These may greatly influence both individual and corporate tax choices.

5.4 Limitations and Significance of this Study

This pioneering study is a significant step toward an in-depth understanding of predictors of revenue collection performance. However, it is also having some limitations that suggest promising avenues for future studies.

First, the methodology focuses on the design of a case. As a result, the real financial country picture cannot be ascertained and as such, these findings are generalizable.

Second, the conceptual variables that were selected in this study appear to be contextual, so a certain level of unification of with other concepts was required. In theory it would be possible to include other models, by expanding the research assumptions.

Third, evasive, fraudulent and corrupt practices covertly and fundamentally influence almost all aspects of social activities. Future research can enrich our knowledge of the economic and social consequences of corruption by examining the effect of anti-corruption campaigns on a range of firm, industry types.

Last, this study is based on an emerging market with weak institutions, and the generalizability of these findings to other countries in the sub region may have to be examined.

However, this study is significant in that it:

a)   Is likely to contribute to the literature on tax revenue performance in a local setting such as Zambia.

b)   From a practical perspective, this study generates important implications for practitioners and policymakers. For evaluators, such as directors, analysts, and investors, this study provides suggestive evidence that individuals and firms operating in a higher corrupt and tax evasive environment are more aggressive in tax sheltering. When appraising a firm's tax behaviour, auditors, tax assessors ought to broaden their analytical framework by incorporating institutional and individual factors into account. The evidence which police officers and the anti-corruption commission have would be handy during analysis. Our study

suggests that political corruption reduces government tax revenue by facilitating corporate tax avoidance.

5.5 Conclusion

In this study, leveraging tax revenue performance, the study sought to assess the predictors of tax collection for the Zambian government at Chirundu Border Post. Existing literature sheds light on the drivers of tax collection from multiple aspects. To date, little research has addressed predictors. The study contributes qualitatively and quantitatively to tax collection. Based on the study's findings, it has been demonstrated that there exists no significant relationship between the four predictor variables and revenue collection preference. However, qualitative data points to the occurrence of corruption, fraud, and tax evasion. The findings point to the fact that the revenue authority at Chirundu Border Post may benefit from information technology, support services and an improved number and quality of human resources.

5.6 Recommendations

Though the regression model has not provided room to make recommendations, the qualitative data has provided an opportunity to do so. The following are worth considering by the Ministry of finance and ZRA.

1. The first are that there be reforms to tax administration involve measures to better identify taxpayers and expand the tax base, improve transparency in assessing tax liabilities, implement effective systems for billing and collection, and facilitate compliance. These reforms can be as important as tax policy to raise revenues and in most cases do not require changes to national legislation. One major success story in this area is the Kampala Capital City Authority (KCCA): by focusing on revenue administration reforms, it managed to increase its own source revenue by more than 100% between 2011 and 2015.

   Reforms to improve revenue administration can increase finances for public investment as well as specifically enhance own source revenues for cities. Providing public services with locally generated revenues enhances the local government's social contract with its citizens. This in turn helps

build a culture of tax compliance as the price paid for a well-functioning local government.

Reforms to revenue administration can be as important as tax policy in improving municipal revenues. Key areas for reform are investments in staff and appropriate technologies, careful cost benefit analysis of outsourced revenue collection as well as treating the taxpayer as a client. Effective reforms to revenue administration require significant, but recoupable, initial investments, strong political will at national and city levels, as well as realistic reforms focused on main revenue sources.

2. The government could reduce the prevalence of fraud, corruption and tax evasion by accentuating use of digital technologies. This offers an opportunity to reduce fraud and increase revenue. Digitalization—the integration in everyday life of digital technologies that facilitate the availability and processing of more reliable, timely, and accurate information—presents an important opportunity for fiscal policy since both expenditure and tax policies depend crucially on information about economic actors. Digitalization can improve tax compliance by enhancing operational efficiency and the quality of information in trade transactions. Digital information facilitates the collection of authentic, accurate and complete information about traded goods, enhancing the ability of border agents to collect the appropriate level of trade taxes.

3. To resume economic growth, reduce poverty, and support climate action, ZRA ought to consider increasing tax collection and make tax systems more equitable and efficient. ZRA needs to balance goals such as increased revenue mobilization, sustainable growth, and reduced compliance costs with ensuring that the tax system is fair and equitable. Fairness considerations include the relative taxation of the poor and the rich (politicians and celebrities) corporate and individual taxpayers.

4. Given the importance of taxation for public services and social welfare, the local management at Chirundu Border Post should take strong measures to curtail corrupt practices to remedy tax evasion.

Second, on the research front,

1. Research could be done to cover all categories of taxpayers to understand their lived experiences. This was a part missing in this study.

2. There is need to test assumptions of other models and theories to account for the remaining 93.7 % of the variance that was not explained by other variables which were not included in this study.

REFERENCES

Ababneh, J. and Rawabdeh, M. (2018). Factors Affecting The Collection of Revenues as Perceived By The Employees Of Local Administration In Jordan, Research Centre in Public Administration and Public Services, Bucharest, Romania, vol. 10(4) , pages 46-61, December.

Action Aid. (2022). A Report on an Analysis of the Zambian Taxation System. Addison, T. and Levin, J. (2010). The Determinants of Tax Revenue in Sub-Saharan Africa,

Adenya PK, Muturi W (2017). Factors affecting revenue collection efficiency by County Governments in Kenya: A case of Kiambu County. International Journal of Social Sciences and Information Technology 3(8):2371-2384.

Ahmed, E. and Stern N. (1989). Taxation for developing countries, the London school of Economics.

Aizen man, J., & Jin Jarak, Y. (2005). The Collection Efficiency of Value Added Tax: Theory and Internation Evidence. Department of Economics, 3.

Aki Toby et al (2020). Tax Revenues in   Fragile and Conflict-Affected States —Why Are They Low and How Can We Raise Them? IMF Working Paper Fiscal Affairs Department.

Al-Hadi, A., Taylor, G., & Richardson, G. (2022). Are corruption and corporate tax avoidance in the United States related? Review of Accounting Studies, 27(1), 344–389.

Allen R, Highfield R (2013). The international handbook of public financial management. London: Palgrave Macmillan.

Askari H, (2006) Middle East Oil Exporters, what happened to economic development? Edward Elgar Publishing Limited, U.K.

Bahl, R and Bird R (2008), Sub national Taxes in Developing Countries, The Way Forward, Financial Publications Inc

Bayu Tadele (2015) Analysis of Tax Buoyancy and Its Determinants in Ethiopia (Co-integration Approach). Journal of Economics and Sustainable Development. ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online) Vol.6, No.3, 2015

Beck J, Knutson B, Cha T, Kim S (2012) Developing Revenue Managers for the Lodging Industry. Journal of Human Resources in Hospitality and Tourism 10(2):182-194.

Beekes & Brown (2008) Do better governed Australian firms make more informative disclosures? Journal of Business Finance & Accounting, Vol. 33 No.3-4, pp.422-50.

Berg et al (1982). Effects of Smuggling under African Conditions, available from https://www.jstor.org/stable/40439769

Betz, M., O'Connell, L., & M. Shepard, J. (2013). Gender Differences in Proclivity for Unethical Behaviour. Springer Science Business Media, 427-432

Bird R, Slack E (2002a). Land and Property Taxation: A Review' Mimeo, University of Toronto.

Bird RM, Slack E (2002b). Land and property taxation: A review. In Workshop on Land Issues in Latin American and the Caribbean. Available at: https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.203.2450 &rep=rep1&type=pdf.

Bräutigam, Deborah, Fjeldstad, Odd-Helge, Moore, Mick, 2008. Taxation and State building in Developing Countries: Capacity and Consent. Cambridge University Press, Cambridge.

Buehn, A. and Farzanegan, M. (2011). Smuggling around the World: Evidence from a Structural Equation Model, Editorial Office, Dept. of Economics, Warwick   University.

Burton, L.J., Mazerolle, S.M., 2011. Survey instrument validity Part I: principles of survey instrument development and validation in athletic training education

by county governments in Kenya. Journal of finance. Vol 44

Cen, L., Maydew, E. L., Zhang, L., & Zuo, L. (2017). Customer–supplier relationships and corporate tax avoidance. Journal of Financial Economics, 123(2), 377–394.

Chanda K et al, (2011) Commission of Inquiry into the Operations of the Zambia Revenue Authority, Report prepared for the president of Zambia, Lusaka.

Chatama, M. (2013). The impact of ICT on Taxation: The Case of Large Taxpayer Department of Tanzania Revenue Authority, University Dar es Salaam   Campus College.

Chau, G. and Leung, P. (2009) A Critical Review of Fischer Tax Compliance Model: A Research Synthesis. Journal of Accounting and Taxation, 1, 34-40.

Chau, G., & Leung, P. (2009). A critical review of Fisher tax compliance model: A research synthesis. Journal of Accounting and Taxation, 034-040.

Cheelo, C. and Hinfelaar, M. (2020). Zambia Revenue Authority Professional Performance amidst Structural Constraints, 1994-2019, ESID Working Paper No. 158.

CHG, Apparao N (2014). Liquidity and profitability analysis of housing financial companies (HFCS) in India. Asian Journal of Research in Business Economics and Management 4(6):111-121.

Chizonde, B. (2019). Implications of public debt on expenditure towards children: Nexus between debt and progress made towards vision 2030 and SDG's. Centre for Trade Policy and Development, Policy Brief.

Cooper, D. R., & Schindler, P. S. (2006). Business Research Methods (9th edition). USA: McGraw-Hill. Cooper, D. R., & Schindler, P. S. (2003). Business Research Methods (8th edition). USA:

Copper K. (1974). The Empirical Issue of Smuggling: A Discussion of Methodology, available from
https://openprairie.sdstate.edu/cgi/viewcontent.cgi?article=1085&context=econ_staffpaper.

Creswell JW, Plano Clark VL, Gutmann ML, Hanson WE. (2003). Advances in mixed methods research designs. In: Tashakkori A, Teddlie C, editors. Handbook of mixed methods in social and behavioural research. SAGE; Thousand Oaks, CA: 209–240.

D'Archy, H. (2011). Coercion, Capital and European states: AD 990-1992, Malden, Massachusetts:

D'Attoma, J., Volintiru, C., & Steinmo, S. (2017). Willing to share? Tax compliance and gender in Europe and America. Research and Politics, 1-10

Davidson P (1978). Why Money Matters: Lessons from a Half-Century of Monetary Theory. Journal of Post Keynesian Economics 1(1):46- 70.

DeBacker, J., Heim, B. T., & Tran, A. (2015). Importing corruption culture from overseas: Evidence from corporate tax evasion in the United States. Journal of Financial Economics, 117(1), 122–138.

Dewanta, M. A., & Machmuddah, Z. (2019). Gender, Religiosity, Love of Money and Ethical Perception of Tax Evasion. Journal Dinamika Akuntansi dan Bisnis, 71-84.

Dyreng, S. D., Hanlon, M., & Maydew, E. L. (2010). The effects of executives on corporate tax avoidance. Accounting Review, 85(4), 1163–1189.

Ebeke L. and Ehrhart, T. (2010), Governmental Policies to Reduce Tax Evasion: Coerced Behaviour Versus Services and Values Development, Policy Sciences, 23, 57-72.

Edem DB (2017) Liquidity Management and Performance of Deposit Money Banks in Nigeria (1986-2011): An investigation. International Journal of Economics, Finance and Management Sciences 5(3):146- 161.

Edward, P. (2009). Revenue collection in developing nations. Journal of finance. Vol 33

Fati, T, (2014). Investigating The Challenges In Revenue Collection Process: The case study of Ghana AMA property rate collection. International Journal of Innovation and Scientific Research. ISSN 2351-8014 Vol. 11 No. 2 Nov. 2014, pp. 566-576 2014 Innovative Space of Scientific Research Journals http://www.ijisr.issr-journals.org/

Fjeldstad, O. and Heggstad, K. (2012). Local Government Revenue Mobilisation in Anglophone Africa, CM Institute.

Fjelstad.-H., Katera, L., Msami, J. & Ngalewa, E. (2010) Local Government Finances and Financial Management in Tanzania: Empirical evidence of trends 2000-2007. REPOA Special Paper No. 10-2010. Dar es Salaam.

Gauthier, P. (2001). Shifting Tax Burdens Through Exemptions and Evasion: An Empirical Investigation of Uganda, Policy Research Working Paper No. 2735, Washington DC: World Bank.

Geda, A., & Shimeles, A. (2005). Tax and tax reform in Ethiopia 1990 – 2003, UNU-WIDER, Research paper No 2005/65.

Githua, F. and Ngahu, S. (2018). Effect of Administrative Capacity on Revenue   Collection in Nyeri County, Kenya, International Journal of Social   Science and Humanities Research ISSN 2348-3164 Vol. 6, Issue 4, pp: (1337-1348).

Global Delivery Initiative (2019). Creating an Electronic Tax Administration System in Zambia, Global Delivery Initiative.

Gradstein, H. (1999). Tax Evasion and Mechanisms of Social Control: A Comparison with   grand and petty theft, Journal of Economic Psychology, Volume 2, 213-230.

Grown, C., and Valodia, I. (2010). Taxation and gender equity: a comparative analysis of direct and indirect taxes in developing and developed countries. London: Routledge.

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., 2014. Multivariate Data Analysis: Pearson New International Edition. Pearson Education Limited, Essex vol. 1, no. 2.

Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Danks, N.P., Ray, S., 2021. An introduction to structural equation modeling. In: Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook, J.F. Hair Jr., G.T.M. Hult, C.M. Ringle, M. Sarstedt, N. P. Danks, and S. Ray, Eds. Springer International Publishing, Cham, pp. 1–29. https://doi.org/10.1007/978-3-030-80519-7_1.

Hamudi, S. (2022). An Assessment of the Effectiveness of Tax Revenue Collection: A Case   Study of Zimbabwe, Journal of Tax Administration Vol 7:1.

Harrison K (2007). Corruption and tax compliance: challenges to tax policy and Administration. Sofia, Bulgaria: Centre for the Study of Democracy. Hejase AJ,

Hejase HJ (2013). Research Methods: A Practical Approach for Business Students. 2nd Ed, Philadelphia, PA, USA: Massadir Inc.

Hope, O., Yue, H., & Zhong, Q. (2020). China's anti-corruption campaign and financial reporting quality. Contemporary Accounting Research, 37(2), 1015–1043.

Huang, B., Wang, X., Kua, H., Geng, Y., Bleischwitz, R., Ren, J., 2018. Tabachnick, B.G., Fidell, L.S., Ullman, J.B., 2013. Using Multivariate Statistics, vol. 6. pearson Boston, MA.

Huang, C., Jin, Z., Tian, S., & Wu, E. (2023). The real effects of corruption on M&A flows: Evidence from China's anti-corruption campaign. Journal of Banking and Finance, 150, Article 106815.

Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives? Journal of Financial Economics, 108(3), 822–839.

Huang, Q., & Yuan, T. (2021). Does political corruption impede firm innovation? Evidence from the United States. Journal of Financial and Quantitative Analysis, 56(1), 213–248.

IMF (2011). Revenue Mobilization in Developing Countries. Fiscal Affairs Department

IMF (2015). Current Challenges in Revenue Mobilization: Improving Tax Compliance, IMF.

JCTR (2011). The Taxation System in Zambia, Lusaka, JCTR.

Joulfaian D (2000). A quarter century of estate tax reforms. National Tax Journal 53(3):343-360.

Kastlunger, B., Dressler, S., Kirchler, E., Mittone, L., & Voracek, M. (2010). Sex Differences in tax compliance: Differentiating between Demographic Sex, Gender-Role Orientation and Prenatal Masculinization (2D:4D). Journal of Economic Psychology, 542-552.

Keen, M. and Mansour, M. (2009). Revenue Mobilization in Sub-Saharan Africa Challenges from Globalization, IMF Working Paper 09/XX. Washington.

Keen, M., and Smith, S. (2007). VAT Fraud and Evasion: What Do We Know, and What Can be Done? IMF Working Paper 07/31 (Washington: International Monetary Fund).

Ken, L. and Mansour, P. (2010). Checks and Balances-Tips to Establish Effective Internal Controls, N f perspective Journal 15 (1) Spring.

Kesenmwa A, Oima DO, Ogida M (2013). Effects of strategic decision making on firm's performance: A case study of Safaricom Limited, Nairobi, Kenya. Available at: http://edocs.maseno.ac.ke/handle/123456789/2903.

Khan et al (2017). Pilot Study on Effect of Political Influence on Tax Payment Compliance Report, International Growth Centre (IGC).

Khan, M. H. (2001). Agricultural Taxation in Developing Countries: a Survey of Issues and Policy. Agricultural Economics, 24, 315-328.

Khlif, H. and Amara, I. (2019). Political Connections, Corruption and Tax Evasion: A Cross-Country Investigation, Journal of Financial Crime, Vol. 26 No. 2, pp. 401- 411.

Kidd, M. and Crandall, W. (2006). Revenue Authorities: Issues and Problems in Evaluating Their Success, MF Working Paper Fiscal Affairs Department.

Knack, S., Brautigam, D., (2004). Foreign aid, institutions and governance in sub-Saharan Africa. Econ. Dev. Cult. Change 52, 255–285.

Kothari CR (2004). Research Methodology; Methods and Techniques (second revised edition) (Second Rev). New Delhi, India: New Age International (P) Limited, Publishers.

Kubo K. and Lwin, N. N, (2010) Smuggling and Import Duties in Myanmar. DE Discussion Paper No. 258.

Lee, M. and Gordon, K. (2011). An Exploration in the Theory of Optimal Income Taxation, Review of Economic Studies 38, 175-208.

Leedy, P.D. (1997) Practical Research: Planning and Design. 6th ed. New Jersey: Prentice-Hall, Inc.

Leuthold, J. H. (1991). Tax shares in Developing Economies: A Panel Study, Journal of Development Economics, 35, 173-185.

Lieberman, E.S., 2002. Race and Regionalism in the Politics of Taxation in Brazil and South Africa. Cambridge University Press, Cambridge.

Liu, J., Yi, Y., Wang, X., (2020). Exploring factors influencing construction waste reduction: a structural equation modelling approach. J. Clean. Prod. 276, 123185. https://doi.org/10.1016/j.jclepro.2020.123185.

Mardani, A., Kannan, D., Hooker, R.E., Ozkul, S., Alrasheedi, M., Tirkolaee, E.B., (2020). Evaluation of green and sustainable supply chain management using structural equation modelling: a systematic review of the state-of-the-art literature and recommendations for future research. J. Clean. Prod. 249, 119383.

Maxwell A (2012). The Development Practitioners Handbook. London, Pluto Publishing Press.

Maxwell, D. L., & Satake, E. (1997). Research and Statistical Methods in communicative disorders. Baltimore: Williams and Wilkins.

Maxwell, D.L. and Satake, E. (1997) Research and Statistical Methods in Communication Disorders. Maryland: Williams & Wilkins

McGraw-Hill. Leedy, P.D. and Ormrod, J.E. (2005) Practical Research: Planning and Design. Prentice Hall, Upper Saddle River, NJ.

Mercy (2013) Factors affecting revenue collection in local authorities in Kenya Nairobi, Kenya

Mills, L. (2017). Barriers to Increasing Tax Revenue in Developing Countries, Helpdesk.

Miyahira, H. (2008). Using Information Technology to improve Tax and Revenue Collection. 4-10.

Mohammed DN, Muturi W (2018). Factors Affecting Revenue Collection Efficiency in County Governments: A Case of Kisii County, Kenya. International Journal of Social Sciences and Information Technology 4(9):196-205.

Mohammed, M., et al., 2021. Modeling of 3R (reduce, reuse and recycle) for sustainable construction waste reduction: a partial least squares structural equation modelling (PLS-SEM). Sustainability 13 (19), 10660.

Morrissey, O. and Clist, P. (2010). Aid and Tax Revenue: Signs of a Positive Effect Since the 1980s, Journal of International Development, forthcoming, DOI: 10.1002/jid.1656.

Mutascu, M., Estrada, F., & Tiwari, A. K. (2011). Taxation and Political Stability. Journal of Economic Literature.

Mutua, J. M. (2011). A Citizen's Handbook on Taxation in Kenya. Institute of Economic Affairs, 6-20.

Naji, K.K., Gunduz, M., Hamaidi, M.F., 2022. Major factors affecting construction waste management in infrastructure projects using structural equation model. J. Construct. Eng. Manag. 148 (10), 04022101.

Nalishebo, S and Halwampa, A. (2014). Uncovering the Unknown: An Analysis of Tax Evasion in Zambia.

Nasution A (2016). Government decentralization program in Indonesia, ADBI Working Paper Series, No. 601, Asian Development Bank Institute, Tokyo. Available at: https://www.adb.org/sites/default/files/publication/201116/adbiwp601.pdf

National tax journal, 53(2), 299-322.

Nawaz, F. (2010). Exploring the Relationships between Corruption and Tax Revenue, Helpdesk, Transparency International.

NdyamuhakiG. (2013) Factors affecting revenue collections in local government, Case Study – Isingiro district local government Makerere University, Uganda. Nigerian and its Implications for Socio - Economic Development. Journal of the Historical Society of Nigeria, 64.

Nunnally, J., 1994. Psychometric Theory (No Title).

Ogbonna, K. and Ebimobowei, T. (2012) Taxes on General Consumption as Percentage of Total taxation, in Consumption Tax Trends: VAT/GST and Excise Rates, Trends and Administrative Issues, Paris, France: OECD Publishing.

Okoye, P. V. C. and Ezejiofor, R. (2014). The Impact of E-Taxation on Revenue Generation in Enugu, Nigeria, International Journal of Advanced Research, 2, 449-458.

Parameswaran, R. (2005), Public Finance and Taxation, Ababa University, 14-11-2005.

Prichard, W., 2015. Taxation, Responsiveness and Accountability in Sub-Saharan Africa. The Dynamics of Tax Bargaining. Cambridge University Press, Cambridge.

Przeworski, A., 1991. Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America. Cambridge University Press, Cambridge.

Puspitaningrum, R. R. (2018). Pengaruh Gender, Level Pendidikan, TIngkat Pendapatan dan Keragaman Etnis terhadap Perilaku Kepatuhan Wajib Pajak Orang Pribadi (Penerapan

Theory of Planned Behavior). DSpace Reposotory Universitas Islam Indonesia. research. Athl. Train. Educ. J. 6 (1), 27–35. https://doi.org/10.4085/1947-380X6.1.27.

Puspitaningrum. (2018). Pengaruh Gender, Level Pendidikan, Tingkat Pendapatan, dan Keragaman Etnis Terhadap Perilaku Kepatuhan Wajib Pajak Orang Pribadi (Penerapan Theory of Planned Behavior).

Rai, P. K.,(2004) The Challenges of Tax Collection in Developing Economies (with Special

Reference to India) LLM Theses and Essays. Paper 41.http://digitalcommons.law.uga.edu/stu_llm/41

Rijkers, B,. Leila B., Gaël R. (2015). Political Connections and Tariff Evasion: Evidence from Tunisia. World Bank Policy Research Working Paper No. 7336 Washington: The World Bank Group

Ross, M.L., (2001). Does oil hinder democracy? World Polit. 53 (3), 325–361.

Ross, M.L., (2004). Does taxation lead to representation? Br. J. Polit. Sci. 34 (2), 229249.

Rui S., and Cosata, (2017). Factor Analysis. Comparative Approaches to Using R and Python for Statistical Data Analysis. Available online at https://www.researchgate.net/publication/344898204_Factor_Analysis

Sempagala-Mpagi A. R. (2011) Taxation Handbook: A Guide to Taxation in Uganda – Kampala: Fountain Publishers Dasalegn. (2014). tax reforms and tax revenues performance in Ethiopia

Shrestha, N. (2021). Factor Analysis as a Tool for Survey Analysis. American Journal of Applied Mathematics and Statistics 9(1):4-11. DOI: 10.12691/ajams-9-1-2

Smoke, D. (2007). Tax Policy challenges facing developing countries, UK, Oxford University Press.

Soest, C. (2007). How Does Neopatrimonialism Affect the African State's Revenues? The Case of Tax Collection in Zambia, The Journal of Modern African Studies Vol. 45, No. 4, pp. 621-645

Song'e HK (2015). The effect of liquidity management on the financial performance of deposit taking Saccos in Nairobi county. Doctoral dissertation, University of Nairobi.

Stack, S. (2005). Suicide in the Media: A Quantitative Review of Studies Based on Nonfictional Stories. Suicide and Life-Threatening Behaviour, 35(2)

Stein F, Cutler SK (1998). Psychosocial Occupational Therapy: A Holistic Approach. San Diego: Singular.

Stein, F. and Cutler, S.K. (1996) Clinical Research in Allied Health and Special Education. 3rd ed. London: Singular Publishing Group, Inc.

Susanto A (2019). Revenue Cycle in Accounting Information Systems. International Journal of Scientific and Technology Research 8(6):335- 339.

Taddele, G. (2010). Tax reforms and their implications on revenue productivity of Ethiopian tax system: Unpublished thesis. Mekelle University

Tadele, B., (2013). Analysis of tax buoyancy and its determinants in Ethiopia. Journal of Economics and Sustainable Development, 6(3): 2015.

Taherdoost, H., Sahibuddin, S., Jalaliyoon, N., 2014. Exploratory factor analysis: concepts and theory. 2nd International Conference on Mathematical, Computational and Statistical Sciences.

Tanzi, V., & ZeeHowell, H. (2000). Tax policy for emerging markets: Developing countries.

Taxation System in Zambia (JCTR 2001 report) by Patrick Chileshe.

Tilly, C., 2009. Grudging consent. Am. Interest 3 (1), 17–23.

Times of Zambia, (25.03.2014) Press, vol. 11, No. 968.

Timmons, J.F., 2005. The fiscal contract: sates, taxes and public services. World Polit. 57 (4), 530–553.

Tiwari, P. (2017). Assessing Factors Affecting Revenue Management in Public Sector: The Case of Halaba Special Woreda Town Administration Ethiopia (SNNPR). IRA-International Journal of Management & Social Sciences (ISSN 2455-2267), 6(2), 188-234.

Tjondoro, E., Widuri, R., & Manoy, S. B. (2019). Different Cities, Different Genders, Different Perception of Tax Evasion. 3rd International Conference on Economics, Education, Business and Accounting Volume (pp. 133-150). Bali: KnE Social Sciences.

Traore, M. et al (2023). Cross-Border Exchange of Information and Tax Revenue Mobilization in Africa, Policy Research Working Paper 10299, International Monetary Fund.

Vadde, &. (2012). Factors that influence rental tax payers' compliance with tax system' an empirical study of Mekelle city, Ethiopia. Journal of Arts, Science & Commerce, Vol.- -III, Issue-4(2)

Von Doepp, P., (2005). Party cohesion and fractionalization in new African democracies: lessons from struggles over third-term amendments. Stud. Comp. Int. Dev. 40 (3), 65–87.

Von Soest, C., Bechle, K., Korte, N., (2011). How Neopatrimonialism Affects Tax Administration: a comparative study of three world regions. Third World Q. 32 (7), 1307–1329.

Waweru, M. G. (2005). Workshop of Challenges of Administering Small and Medium Taxpayers. Nairobi: Kenya Revenue Authority.

Wold Bank (2023). Taxes and Government Revenue. available from https://www.worldbank.org/en/topic/taxes-and-government-revenue

Workineh A. (2016). Determinants of Tax Revenue in Ethiopia (Johansen Co-Integration Approach), International Journal of Business, Economics and Management, 3(6): 69-84.

World Bank, (2016).Tax Compliance Cost Burden and Tax Perceptions Survey in Ethiopia.

World Bank, 2004, Global Monitoring Report 2004, Policies and Actions for achieving the MDGs and Related Outcomes (Washington: World Bank).

Xu, K., Shen, G.Q., Liu, G., Martek, I., 2019. Demolition of existing buildings in urban renewal projects: a decision support system in the China context. Sustainability 11. (2). https://doi.org/10.3390/su11020491.

Yang, J., Jiang, P., Zheng, M., Zhou, J., Liu, X., (2022). Investigating the influencing factors of incentive-based household waste recycling using structural equation modelling. Waste Manag. 142, 120–131.

Zambia Daily Mail, (July/Nov.2015) Press, vol.2, No.152.

Zambia Daily Nation, (07.03.2016)

Zhou G. (2013). Systems, Processes and Challenges of Public Revenue Collection in Zimbabwe.

ZIPAR Working Paper No.18OECD (2003). Consumption Taxation of Cross Border Services and Intangible Property in the context of E-commerce, Guidelines on the Definition of Place of Consumption, OECD, Paris .

APPENDICES

APPENDIX I: Interview Guide for Police and Custom Officers at Chirundu Border Post

Dear Respondent,

I hereby write to request you to participate in the interview. I am a post- graduate student at the University of Zambia conducting research on the above topic. You are, with honour, therefore requested to assist in providing certain information in this research. The information so collected will be used to write a dissertation as part of the requirement leading to the award of a Master's degree in finance and accounting. Please, be assured that the information thus collected is solely for academic purposes, shall remain within the confines of the university and will be treated with strict confidentiality.

Date of interview _____

Start Time: _____

End Time: _____

1) Please tell me about yourself.
2) For how long have you been working here?
3) Generally, what can you say about how Chirundu Border Post fairs in collecting tax.
4) How do you go about collecting tax here?
5) What do you do better to collect?
6) What do you not do better?
7) Please explain what you do not do better in.
8) What factors affect tax collection at Chirundu border Post?
9) What are the effects of these factors on revenue collection at Chirundu border?
10) Why are the current controls being used at Chirundu Border post not sufficient enough to enhance tax collection?
11) How can enhanced controls at Chirundu border post improve revenue collection?

12) What solutions do you recommend to arrest the situation at the border post?

Appendix II – Survey Questionnaire

1) Indicate your actual age…………………….

2) Tick your age group
   (a) 18 to 27
   (b) 28 to 37
   (c) 38 to 57
   (d) Over 58

3) Indicate your Gender
   (a) Male
   (b) Female

4) What is your highest level of education?
   (a) Certificate
   (b) Diploma
   (c) Bachelor's degree
   (d) Master's degree
   (e) Doctorate degree

5) How many years have you been working here?

6) Tax offences are mostly committed by which gender?
   (a) Males
   (b) Females

7) Tax offences are mostly committed by
   (a) Individuals
   (b) Corporations

8) How do you rate the level of tax revenue collection here at Chirundu?
   (a) Very High
   (b) High

(c) Moderate

(d) Low

(e) Very low

9) Indicate using a five-point scale the extent the following influence tax revenue performance of Chirundu Border Post as follows: 1 for influence is very low, 2 for influence is low, 3 for influence is somewhat low, 4 for influence is high and 5 for influence is very high.

    a) The ZRA Support System

    b) Information Technology

    c) Political instability

    d) The Human Resource

10) Generally, your assessment of Revenue Collection Performance. Score out of a maximum of 11. I may mean very low Revenue Collection Performance, 5 for moderate Revenue Collection Performance and 11 means very high Revenue Collection Performance.

Appendix III: Ethical Forms