DETERMINANTS OF TAX REVENUE GENERATION IN TANZANIA.

By
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A Dissertation Submitted in Partial Fulfillment of the Requirements for Award of the Master of Science in Accounting and Finance (MSc A&F) of Mzumbe University

December 2020
CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the University of Mzumbe a dissertation entitled *Determinants of Tax Revenue generation in Tanzania* in partial fulfilment of the requirements for the award of degree of Master of Science in Accounting and Finance of Mzumbe University.

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DEDICATION

I dedicate this research to my family for their spiritual and moral support and encouragement that guided me towards this accomplishment.
**ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BOP</td>
<td>Balance of Payment</td>
</tr>
<tr>
<td>CPI</td>
<td>Corruption Perception Index</td>
</tr>
<tr>
<td>ERP</td>
<td>Economic Recovery program</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Domestic Investment</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>HICs</td>
<td>High Middle-Income Countries</td>
</tr>
<tr>
<td>HIPC</td>
<td>Highly Indebted Poor Country</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>KRA</td>
<td>Kenya Revenue Authority</td>
</tr>
<tr>
<td>MSc A&amp;F</td>
<td>Master of Science in Accounting and Finance</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
</tr>
<tr>
<td>TRA</td>
<td>Tanzania Revenue Authority</td>
</tr>
<tr>
<td>ZRB</td>
<td>Zanzibar Revenue Authority</td>
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ABSTRACT

Tax reforms in Tanzania begun in 1960, to rescue the country from budget deficit resulted from a failure of the tax system to raise enough revenue to cover the expenditure which was growing rapidly due to socio-economic and political development resulted from Arusha Declaration of 1967. A correlation research design was adopted. Secondary data was collected for a period of 20 years starting from 1998 to 2017. Data collection included data for independent variables, which were GDP, Corruption and reforms, and dependent variables, which were tax revenue. These data were collected from the available online source where Tax revenue data were collected from the Tanzania Revenue Authority website, GDP was collected from Tanzania Data Portal and Corruption indices were collected from the Transparency International website. A multiple regression analysis was computed to establish the relationship that existed between the variables under study using EViews. The trend analysis indicated that there is a positive trend of GDP and Corruption over the period under study as the GDP and Corruption Perception Index has been increasing over time. Multiple regressions were computed to predict revenue from GDP, Corruption and tax reforms. Independent variables explained 71% of the variances in the variable. GDP, Corruption and tax reforms have a significant positive effect on Tax revenue generation in Tanzania. From the findings, the study concludes that GDP, Corruption as measured in Corruption Perception Index and Tax reforms have a significant positive effect on collected tax revenue in Tanzania. The study recommends that, the government through its responsible organs should put in place measures to improve the collection of tax revenue, measures to stimulate more and more economic growth and put more strategies to combat corruption to increase revenue collection.
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CHAPTER ONE

BACKGROUND AND PROBLEM SETTING

1.1 Introduction
Tax reforms are the way of changing the manners in which tax is collected or managed to improve the tax system. The improvement could be increasing tax revenue, reducing the tax burden to taxpayers, providing the incentive to taxpayers and make a simple and friendly tax system to taxpayers and mostly improving tax administration. The main reason mainly is obtaining and improving economic and social benefits (Galbraith, 2019). If tax reforms are carried out in a manner that steers a positive response and accountability together with improvement in the institution ability, tax reforms may become a source for stimuli in increased good performance in the government. From this point of view, tax is not only the responsibility of the government and citizen but also about politics, power and how authority is utilized, through formal and informal institutions (Fjeldstad, 2014).

TRA prepared two corporate plans, the first for 1998/99-2002/03 period and the second one for the 2003/04-2007/08 period, which were known as the first Corporate plan and second Corporate plan respectively. The first corporate plan focused on the institution and capacity building for it excel and the second Corporate plan focused on the implementation of second-generation reforms which aimed at improving operational efficiency and making the system user friend to attract more revenue from investors and taxpayers. TRA aims at making the tax system and administration easy to understand and more openly which may trigger voluntary compliance and improvement in revenue collection (Malima, 2013; Unpan, 2019).

1.2 Background to the problem
Over-dependence on a narrow tax base for revenue generation is a problem facing many developing countries. The small taxed sources are more prone to external forces, which poses a big problem in their tax system. The taxed sources were imported duty and excise duty on mineral products whose prices are world market set
prices, which are not stable. Import duty and excise duty are the major sources of revenue in these countries. As a result of the above problem, there was a need for tax reforms in developing countries in the 1980s (Osoro, 1993).

Tax reforms in Tanzania began in the 1960s, of which major reforms took place in the year 1970s. The reason behind the reforms was the failure of the tax system to raise enough revenue to cover the expenditure which was growing rapidly due to socio-economic and political development resulted from the Arusha Declaration of 1967. Revenue and equity were the main objectives behind the 1960s and 1970s Tanzania tax reforms, also protection became a more important objective in the 1970s (Osoro, 1995). The 1969 sales tax act was the vessel for the revenue and equity objective implementation. Sales Tax Act 1969, as cited in Osoro (1995).

The objective of introducing the new Sales-tax Act was to offset the decline in import duty revenue because of import substitution industries growth and reduce rural taxation. The main reform that took place in the 1970s was the introduction of a progressive income tax in 1973. The Act was replaced by 1976 Act whereby import duty rates were raised and excise duty abolition in the late 1970s Osoro, 1993 as cited in Osoro (1995).

Starting From the mid-1970s to the 1980s decade, Tanzania faced a drought calamity, which resulted in the country's large deficit in the fiscal budget and Balance of Payment (BOP). To tackle this problem the country thought of external financing which did not arrive. Even an attempt at negation with the IMF failed. As a result, the Government had to rely on the available domestic resources. The government was able to finance the deficit through borrowing and operating a printing press. Measures used to control the BOP deficit were the introduction of trade restrictions and exchange control to discourage imports of foreign goods (Osoro, 1993).
Starting from 1984, the Government introduced Liberalization. The negotiation with IMF in 1986 resulted in an inflow of foreign resources for financing the deficit. Apart from the introduction of liberalization, the Economic Recovery program (ERP) introduction took place in the same period. Several types of research were conducted and it was recommended major tax should be made simple and rational by reducing tax rates and introducing rate categories aiming improvement in compliance and administration. To reduce and provide incentives to exporters, the Government abolished all export taxes in the year 1985. In the year 1985, 1988 and 1990, import duty and sales tax rate was declining. The Government reintroduced the excise duty abolished in the 1970s in the year 1989 to make sales tax structure and tax administration simple and rational. On the side of income tax, marginal tax rates were reduced from 95%-75% in the fiscal year 1986/87 to 40% in the year 1990. These reforms aimed at improving workers after-tax income as their income was diminishing throughout the year 1980s (Osoro, 1993).

The introduction of Liberalization in the year 1984, paved the way to private-sector competition in the market followed by the abolition of all export restrictions by 1999. Together with strong macroeconomic stabilization measures, the abolition of trade restrictions resulted in a fall in inflation. Recovery of the economic and rapid growth of business took place. Fiscal imbalances that emerged in 1993/1994 caused an increase in excise duty rates in the year 1993/1994 – 1the year 1994/1995 to compensate the revenue tax collection deficit. Domestic taxes from sales and income declined while imports and customs duties grew very quickly. "Both the erosion of the total tax ratio and the increased weight of trade taxes in total revenue led the Tanzanian authorities to delay further reductions in tariff rates until measures were put in place that improved tax and customs administration, reduced the scope of exemptions, and broadened the domestic tax base" (Kaanan, 2000).

Despite all the reforms, Tanzania is still struggling with a budget deficit year by year. The deficit indicates less tax revenue to finance government expenditure.
"Despite good progress in the late 2000s, the current level of tax revenues in Tanzania remains one of the lowest in the world. The Government collected US$6 billion worth of revenues or approximately 12% of GDP in 2014, enough to cover almost three-quarters of government expenditure, but insufficient to fund much-needed investments in infrastructure and social services" (World Bank, 2015).

**Tax Reforms in Tanzania**

**TRA and Reforms**

The Tanzania Revenue Authority, being a partial independent authority was established in 1995, under the TRA Act No.11 of 1995. Since July 1995 when TRA becomes operational, it is struggling to carry out its statutory functions established under the TRA act, tax assessment, revenue collection, accountability to the government and administration of the central government being its main activities (Temu, 2014).

TRA prepared two corporate plans, the first for the 1998/99-2002/03 period and the second for the 2003/04-2007/08 period, which was known as the first Corporate plan and second Corporate plan respectively. The first corporate plan focused on the institution and capacity building for it excel and the second Corporate plan focused on the implementation of second-generation reforms which aimed at improving operational efficiency and making the system user friendly to attract more revenue from investors and taxpayers. TRA aims at making the tax system and administration easy to understand and more openly which may trigger voluntary compliance and improvement in revenue collection (Unpan, 2019).

Various things have been implemented using reforms and modernization efforts in the struggle to implement the first and second corporate plans. Tax reforms in Tanzania aimed at increasing tax revenue while the tax rate remaining low as possible (Temu, 2014).
Motives of Tax Reforms in Tanzania.

Since 1992, the suffering of the fiscal problem in Tanzania has not ceased and this was because of the huge budget deficiencies caused by huge government expenditures while the revenue kept being low and with no growth. Similarly, tax revenue collection was not satisfactory despite the introduction of partial independent Revenue Authority (TRA) in the year 1996. Indeed, Tanzania revenue collected from taxes for the year 1997 to 1998 was only 12.4% of the gross domestic product (GDP) making it the worst among the member countries in revenue tax collection. Also, TRA weaknesses including outdated business strategies unsuitable infrastructure created a room for tax evasion and avoidance (Temu, 2014).

1.3 Statement of the problem

According to Fjeldstad (1995) reforms in tax are made to improve the tax revenue collection to make the government self-reliant through collecting sufficient amounts to finance its budget. Tax reform can reduce the level of tax and evasion thereby increasing tax collection for financing the public goods and services.

The introduction of Tax reforms in Tanzania aimed to provide a solution to the major fiscal crisis. Due to the crisis, tax reform intentions were to improve the revenue collected through taxation. The main goal was making the government self-reliant through the collection of a sufficient amount of revenue to cover the budget and leave them with a surplus over and above the past period deficit (Fjeldstad, 1995).

Unexpectedly this has not to turn out to be true as many governments are struggling in financing their budgets as they face a problem of the budget deficit. This is witnessed by the budget deficits recorded from the year 1998 to 2017 found in country economy.com and the current budget of Tanzania presented in the speech by the minister for finance and planning on the budget for the financial year 2018/19. The budget has a deficit of 3.2 percentage of the GDP. Despite several reforms that have been made before this period, still, the way forward is to increase
the tax base in order to capture more revenue from the taxpayers (Budget speech, 2018/19).

Because of the above-stated problem, there is a need for carrying out a study to identify if the tax reforms have any significant contribution to tax revenue collection or economic factors are the reasons for poor tax revenue collection (Gachanja, 2012).

There are several studies carried out on tax reforms in other countries but only a few about Tanzania. Some examples include; Muriithi and Moyi (2003) on Tax reforms and revenue mobilization in Kenya concluded that tax reforms had a positive impact on the overall tax structure and the individual tax handles, even though the impact of the reforms was not always uniform. Kanyi and Kalui (2014), on the effects of tax policy reforms on tax revenue in Kenya, concluded that there was a large increase in total tax revenue in Kenya which was a result of tax reforms. Zeng et al. (2013), on the Impact of Economic Growth and Tax Reform on Tax Revenue and Structure: Evidence from China Experience concluded that tax reforms are important in steering the economic growth as well as the increase in tax revenue. For that reason, economic growth as measured by GDP, tax reforms, and revenue growth are highly related. The study shows that China's tax reforms have contributed to economic growth though the growth was not constant in all periods.

Asaolu et al. (2015), on the Impact of Tax Reforms on Revenue Generation in Lagos State, concluded that tax reforms had positively affected revenue generation in Lagos state. Munene and Nduru (2016), on the effect of Tax Reforms on Revenue Collection at the Customs and Border Control Department of Kenya Revenue Authority. In their findings, reforms were weakly positively related to tax revenues. Except for Gachanja (2012) who concluded that tax reforms and tax revenue have a significant negative relationship on his study on the effect of tax reforms and economic factors on tax revenues in Kenya. Earlier studies identified several factors affecting tax revenue among others, including corruption, GDP and Administration of tax reforms. The researcher aims at conducting an intensive study on the relationship between tax reforms and economic factors on collected tax revenue in
Tanzania. The researcher adopted the study carried out in Kenya on the “Effect of tax reforms and economic factors in Kenya” by Gachanja (2012) in the context of Tanzania.

1.3 General Research objective
To establish the determinants of tax revenues generation in Tanzania.

1.3.1 Specific Objectives
i. To examine the influence of tax reforms on tax revenues collection in Tanzania
ii. To determine the role of gross domestic product (GDP) on tax revenues collection in Tanzania
iii. To examine the influence of corruption on tax revenue generation in Tanzania

1.4 Research questions
i. What is the influence of tax reforms on tax revenues collection in Tanzania?
ii. What is the role of GDP in tax revenues collection in Tanzania?
iii. What is the effect of corruption on tax revenues generation in Tanzania?

1.5 Significance of the Study
The study enabled to obtain the following significances;
The study draws decision and recommendation for remedial action to improve the existing situations in TRA tax reforms. Based on the findings and recommendation, the government has a ground on which to base its improvement on formulating and implementation of tax reforms.

The study enabled the expansion of the body of knowledge to professionals, academicians, and the public in large. Through this research, Tanzania citizen attained knowledge concerning tax reforms and revenue collection and how revenue depends on tax reforms for its collection improvements. Also, the researcher provided to the citizen the knowledge concerning their responsibility of paying Taxes to the government for the development of our country.
The study is very significant to the researcher since it is a partial fulfilment for the award of the degree of Master of Science in Finance and Accounting at Mzumbe University.

1.6 Organization of the study
This study is organized into six chapters. After the first chapter which is the introductory part, we have Chapter 2. This chapter presents different literatures related to Tax reforms and revenue. Literature section is comprised of two parts namely theoretical literature review and empirical literature review after which comes the research gap and the conceptual frame wake.

Chapter 3 is covered by the research mythology. This part presented the research design, data collection methods and data analysis.

Chapter 4 presents the research findings. Research finding section is comprised Trend analysis, time series data test and regression analysis.

Chapter 5. This chapter presents the discussion of the findings of this study from trend analysis and regression analysis.

Chapter 6. This is the last party of this study and its covers the following parts; Summary of the findings, conclusion, recommendations, limitations of the study and recommendation for further studies.

References. This section provides the different sources of materials used in this study arranged in ascending order.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction
This chapter presents a review of past literature of other scholars on tax reforms and economic factors. The first part contains a presentation of theoretical literature review which is comprised of Classical Tax theory, optimal tax theory and Ability to Pay. The second part of this chapter gives a presentation of empirical literature reviews on Tax reforms, Impact of Tax Reforms on Tax Revenue and Impact of economic factors on Tax revenue. The third part of this chapter presents a research gap.

2.2 Theoretical Literature Review
2.2.1 Definition of key concepts

*Tax reform*
Tax reforms refers to how the government revises and impose its country tax laws and policy. They are the changes and introduction of new tax laws for the aim of improving the existing tax system and the aim being an increase in Tax Revenue(Kanyi & Kalui, 2014).

*Tax revenues*
Tax revenues are the income the government receives from the citizens as government charges imposed on individuals and organizations on goods and services, income, profits, and other kinds of taxes levied to different tax sources (OECD, 2019).

*Economic factors*
Economic Factors are the factors that have influences on the economy. For the sake of this study, the economic factors are Gross Domestic Product(GDP) and Corruption. GDP is the sum of market value of all goods and services which are
completely produced within the boundary of the country. It includes goods and services produced by the country citizens and foreigners. It is mostly calculated in annual basis though it may be calculated in quarterly basis too. GDP gives a picture of the country economy. The estimation of country’s economy and its growth rate is done through the use of GDP (The Economic Times, 2019).

Corruption is the abuse of power by the corrupt government officials for their personal gain. Corruption affects adversely the economy as some rules and laws are violated due to corruption. Because of corruption, people don’t pay their taxes or pay lesser than they were supposed to pay and thus less Tax Revenue, Transparency International (Grundler&Potrafkem 2019).

2.1.2 Theoretical underpinnings

The Classical Taxation Theory

The Classical Taxation Theory was predominant for ancient times. Adam Smith is the core founder of this scientific taxation theory. Adam Smith defined the taxation system as while making clear some important conditions regarding taxation system formation. Adam Smith suggested four taxation principles (maxims) which are Equity, Certainty (determination), convenience and economical (thrift) taxation administration (Smith, 2005).

By equity, the maxim meant that taxpayer’s need to contribute to the state regarding their respective abilities in proportion to the revenue they earn. Certainty (determination) means a known amount of tax, manner of payment and period of payments to taxpayers. Uncertainty of tax can influence bad behaviours to taxpayers regarding tax compliance and it may stimulate corruption even if the taxpayers are not corrupt. Convenience maxim is about convenient levying of a tax in terms of the manner of payments and time of payment for the taxpayers to pay it. Economical taxation administration means that in the act of collecting tax, only a few people should be involved and only a few amounts of revenue collected should be used to pay tax collectors while bringing the remaining huge collected tax revenue to the
government. The tax officers may tax more from taxpayers and bring less to the government, which may lead to low revenue-increasing tax rates (Smith, 2005).

Reforming the tax system by putting the four maxims into consideration in the formulation of tax systems, it will make possible for the tax collection authorities to collect more tax revenue from taxpayers. The four maxims of the classical theory are relevant for this study as tax reforms are aimed at tax revenue increase and by forming tax policies by taking into consideration these maxims, it will make it easy for the taxpayers to voluntarily comply with tax and the economical tax administration will foster collected tax revenue savings.

*Optimal tax theory*

As presented in Munene, (2016), "The optimal tax theory was introduced by Mirrlees in the year 1971. In recent years, some Scholars reviewed the theory including Creedy (2009), O’Brien (2009) and Sorensen (2010)” (p.63). Karingi and Wanjara (2005) argues that optimal tax theory gives directions on the selection and designing of the tax instruments in a required tax system. According to Mayshar (1990) as cited in Ndirangu (2014). Optimal tax theory deals with how to design and implement a tax system for social welfare maximization taking into account the economic setbacks. Social welfare depends on individual consumption as such; the tax system selected has to maximize the summation of individual consumption. Revenue collected from tax uses is funding for government expenditures, public goods and wealth redistribution from rich to poor taxpayers. The optimal tax theory deals with minimizing the discouragement at the same time attain the desired goal of wealth redistribution and public services supply except for the taxes not affected with any change in individual behaviour (Ndirangu, 2014).

Adam Smith put forward criteria as for a good tax system which is i) tax must match the individual income ii) Certainty iii) User friend to taxpayers in terms of time for payment and ways/manners of payments (Convenience) iv) Cost-efficient in administration and collections (Smith, 2005).
As pinned out by Munene (2016), the optimal tax theory tells that income taxation is a very important policy instrument in any economic system where equality is a priority. Again, it states that progressive tax redistribution matches peoples' income. The founder of theory observed that the use of the economic performance of the people as the criteria for their importance in the economy decreases the desire of the tax system for the absolute equity of the maximum social satisfaction of income consumption, resulting in discouraging non-pleasant work.

"The preceding observation leads to some queries regarding the kind of principles that are supposed to govern optimum income tax, the nature of the tax schedule, and the degree of inequality upon the establishment of the tax schedule" (p.63). Recent improvements in optimal tax theory made it possible for the theory to be close to the real world of policy setting internationally (Sorenson, 2010). According to O’Brien (2009) as cited in Munene (2016), "the classical political economists came up with normative analysis of tax policy which tended to follow a principles-oriented approach where it was stated that a good tax system ought to satisfy certain desirable criteria. According to this theory, the tax system should be productive, computable, popular, equal, frugal, divisible, and incorruptible" (p.63). It is a typical example in the circumstances where the social wellbeing matters suggested by the present tax system decrease is not related to the declining level of taxpayers’ income, it would probably be troublesome to stand for that kind of a system a result, reforming the system would be necessary. The optimal tax theory can be used in reforming customs systems to maximize tax revenue (Munene, 2010).

This theory of optimal taxation theory is relevant to this study on the relationship between current reforms and collected tax revenue in Tanzania. As the theory requires that, a tax system to be formulated must maximize social welfare taking into account the economic setbacks. The social welfare depends on individuals' consumption. The theory underpins this study because of the role of tax reforms in improving the collection of tax revenue through formulating the tax policy and
systems that eliminate the loopholes for tax evasion, avoidance and corruption and thus maximization of society’s’ social welfare.

**Ability to pay theory**

Mutie (2016) stated that, “This theory was advanced in the sixteenth century by the Swiss philosopher Jean Jacques Rousseau (1712-1778), the French political economist Jean-Baptiste Say (1767-1832) and the English economist John Stuart Mill (1806-1873)” (p.11).

The ability to pay theory is a taxation theory, which insists on considering the taxpayers, ability to pay before assigning to them the tax they should pay. This is a progressive tax system, which imposes higher taxes to higher-income earners and less tax to low-income earners. The theory postulates that higher-income earners can pay higher taxes. Taxpayer’s income is a determinant of the control the person has over his consumption or investments, it is important to bear in mind that ability to pay does not increase as the personal income increase.

According to (Zolt and Bird, 2003; Rai, 2004; Chodorow, 2008; Batt, 2012; Guj, Bacoum and Limerick, 2013) as cited in Chauke et al (2017), the very famous and generally recognized theory of equality in taxation is the theory which allows citizens to pay taxes to their governments depending on their ability to pay. It is therefore fair and reasonable that the imposition of taxes has to depend on an individuals' taxable capacity. If tax imposition on people base on the principle of ability to pay, fairness objective of the tax system is of success and equal spread of tax burden among the taxpayers' taking into account their ability to pay the taxes.

According to Rai (2004:58), as cited in Chaukeet al. (2017), a suitable tax system needs to be equal and just which means tax burden should match ones' ability to pay. According to (Fjeldstad& Moore, 2009; Fjeldstad&Heggstad, 2012) as cited in Chauke et al. (2017), in the real world, the ability to pay theory requires to find those who do not pay tax make them pay especially those who can pay. Through that, there is an increase in the recovery of lost revenue amount and the revenue performance is
improved. According to (SARS, 2010:50; Cattarelli, 2011:64; SARS, 2011:3; SARS, 2012:4; SARS, 2014:26-29) as cited in Chauke et al. (2017), the most important part in tax collection is to ascertain the taxpayers willing to pay and their ability to pay. The ability to pay theory is of relevance to this study as regards its core principle grounded on the taxpayer’s ability to pay. If tax reforms are for enhancing tax revenue, then the reforms should consider including the element of the ability to pay in its tax policies and systems to stimulate voluntary compliance of taxpayers, which will result in an increased tax revenue collection.

According to Kinyua (2018), all theoretical considerations of the classical taxation theory and scientific discussions of the scientific taxation theory (an inquiry into the nature and causes of the wealth of the nations) give much attention to one singular aspect; performance of taxation function and the achievement of the supply of state revenue are based on the principle of equity and justice. Because of nature as many decades and centuries passed by, the theoretical approach concerning the nature and role of taxation changed due to complex economic relations and the increasing need for the states regulatory function. Because of that new taxation theories were formed: "among them, there were two directions of economic thought, which had the most significant influence on the taxation policy of the countries with a developed market; economy: the Keynesian and the neo-classical ones” (p.7).

2.1.3 Factors influencing tax revenues generation

**Tax reforms**

According to Fjeldstad (2014), Taxpayers ways of behaving can be changed through the use of tax reforms and expenditure system and this will result in voluntary tax payments and compliance. It is necessary to create a good balance between broadening the tax base, compliance, and implementation. Before widening the tax system, and making it legally accepted by most of the citizens, there is a need for much effort that is continuous. Fjeldstad (2014) insisted that, regardless of the importance of tax reforms, the sustainability of the reforms cannot be understood without an understanding of the validity of the reform itself. Due to the effects of
taxation on distribution and incentives, there is a need for the social understanding that taxation is for the interest of the whole. He recommended that; an effective tax system should be built through tax reforms, tax administration training, and enhanced accountability.

Economic factors
Gross domestic product (GDP)
Laffer Curve is an economic theory that underpins the relationship between tax rates and economic growth (GDP). It suggests that lower tax rates influence economic growth. Arthur Laffer continues to suggest that tax rates that are fairly lower leaves more money in the hands of the taxpayers who will in return spend the it and be taxed. The lower tax rate stimulates more economic growth (GDP) because more of the earning is saved after paying low taxes. More people are employed and the employees spend their extra earnings. The economic growth (GDP) broaden the tax bases and as a result more tax revenues are collected. (www.thebalance.com)

Corruption
“The rent-seeking theory of regulation is compatible with the view that regulation is established by well-intentioned governments intending to solve problems of market-failure.” Regardless of that, In the tollbooth view, the corrupt government officials and Politian’s creates unnecessary regulations so that they can take advantage of the created opportunities for their personal gain (Fitzsimons & Vincent, 2011). As the consequence of this, public services become full of less needed administrative processes in which the officials benefit through collecting charges for the services. The rent- seeking theory provide a better clarification of the systematic corruption that adversely affects the whole economy and revenue consequently (Fitzsimons & Vincent, 2011).

2.2 Empirical Literature Review
Several kinds of research have been carried out to identify tax revenue determinants. “Most studies focus on analysing the tax revenue share variation to differences in the development level, the structure of the economy, size of the foreign sector, and other
2.2.1 The influence of Tax Reforms on Tax Revenue

Empirical studies have established the role of tax reforms on tax revenues. For instance, Asolu et al. (2012) in their study concluded that the tax reforms had a positive effect on revenue generation in Lagos State Nigeria. The researcher informs that through reforms more people were included in the taxpayers’ net as there is an enormous increase of taxpayers. Their study found that the large proportions of collected revenue were from domestic sources. Since the main objective of tax systems is revenue enhancement, as such the reforms should firstly aim at making sure the reforms are properly carried out. Also, for the revenue performance to enhancement, there is a need for enhancement of tax administration, employment increase, and reduction in corruption and tax exemptions. There should be much focus on tax collection enhancement, corruption reduction, and welfare enhancement.

Similarly, Kanyi and Kalui (2014) in their study found a significant increase in tax revenue related to tax reforms. Review and restructuring of the administrative tax system are a prerequisite for sustained development. Citizens need to have voluntary tax compliance as a response to the government cry about the budget deficit and tax gap.

The researchers recommended that the stakeholder’s concert is very important in the entire process of tax policy formulation. Engaging stakeholders in the policy formulation make them have a feeling of owning it and as a result, they voluntarily comply with the tax. Minimizing a gap between the government and taxpayers will make everything smoothly running.
The impact of tax reforms is clearly seen on tax structure thought; its impact on the overall taxes keeps decreasing as time goes on. Tax reforms are very important in facilitating the good performance of the system as well as facilitating the revenue growth rate. Tax reforms are necessary for facilitating economic growth and economic growth is very important in increasing tax revenue. As thus, economic growth, tax reforms, and tax revenue have a greater relationship. From the research findings, it is evident that tax reforms in China lead to economic growth, vivid changes in the tax structure elements in the short run through are the effect is to stay in the long run (Zeng et al., 2013).

On the other hand, Munene and Nduru (2016), concluded that “The relationship between customs enforcement reforms and tax revenue collection is weakly positively correlated but not statistically significant” (p.66). The researchers recommended more examination of the customs reform’s enforcement aiming at high tax collection form an individual taxpayer to be carried out because of its massive standard deviation.

Muriithi and Moyi (2003) on their study which applied buoyance and elasticity to examine if the objectives were attained by the Tax reforms in Kenya. The findings suggest that tax reforms have a positive relationship on the tax structure as a whole and individual tax, but the effect of the reform isn't evenly equal. The effect of the reform on direct taxes is bigger as compared to that of indirect taxes.

This is because of the commitment to direct tax reform that resulted in a simple tax system and removal of tax avoidance and corruption rooms. Gachanja, (2012) on his study on “the effect of tax reforms and economic factors on tax revenues in Kenya", found that tax reforms have an important effect on tax revenue with a negative correlation. Gachanja (2012) portrays that, for some time tax reforms lead to a decrease in tax revenue and the expected function of reforms, which was improving tax revenue, did not come true.
From his findings, he recommended that; there is a need for the Revenue Authority to make a review on reform matters and the modernization programs and whether some of the reforms undertaken contribute to revenue creation. This can be done through a performance review using a strategic plan as a criterion and make some necessary corrections.

Joss (2018) analysed the effect on revenue growth in Liberia of the tax reforms introduced by the government. The results of the study show that there are still substantial gaps and contradictions in tax policy. An interactive forum between government and the private sector should be held to ensure positive fiscal reform, particularly for companies, as a way of seeking mutual consensus on matters of prime concern.

Jelilov and Isik (2015) explored the effect of tax reforms on Nigeria's economic development between 1986 and 2012. The findings demonstrate that tax reforms have a positive and significant link with economic growth, and that tax reforms actually lead to economic growth. It was assumed that, beneficial tax reforms strengthen the capacity of public authorities to pursue socially beneficial practices that lead to real and per capita economic development.

Agbeyegbeet al(2006) analysed the relation between trade liberalisations, exchange rate, and tax revenue for the period 1980-1996, which relates to the pooling of 22 sub-Saharan Africans. Two substitutes for trade liberalisation are used in this analysis. They also analyse the effect on tax receipts and their main components of other socio-economic variables in their study. The relationship between trade liberalization and the fiscal income is responsive to the proxy used to calculate trade liberalization by the generalized moment regression methods. They also noted that an appreciation of the exchange rate and increased inflation have some connection with lower tax revenues and important tax modules. They concluded that the market liberalization associated with suitable macro-economic policies could be enforced in
a manner that would protect the return on tax revenue on the basis of their empirical findings.

Mwakalobo (2009) analysed the tax revenues and the efficiency of the tax system in Kenya responded to changing tax policies. The that trends in the buoyancy coefficients of the total tax system and individual taxes confirmed this finding. The study found that, tax buoyancy improved as a result of the economic reforms in 1987-91. The growth rate of sales and excise taxes increased to 1.10 in the reform period from an average of 1.05 during the pre-reform period (1987-91). In 1992-96 it then marginally declined to 1.02 and in 1997-2005 it rose to 1.09. The increase in tax collections coincides with the time when, in the mid-1980s and the 1990s, the government implemented tax reforms.

Bhattarai et al (2017) proposed a model policy measures for the US corporate income tax reduction. Results indicated that, the reduction in the corporate income tax rate has major positive effects on productivity, expenditure, capital training, jobs and household well-being (for nearly all deciles). All the proposed reforms also lead to an improved public sector. Findings were possible in the sense that derived model was complemented by plausible assumptions of elasticity and involves price, production, employment and investment adjustments resulting from tax policy reforms.

Balatsky and Ekimova (2019) assessed various scenarios for the reforming of federal income tax in Russia, aimed at replacing the flat tax with a phased magnitude. The government project was found to be the best project, based on the three parameters used in the analysis, to maintain the flat income scale and raise the rate from 13 to 15%. The other projects demonstrated a drastic over-estimation of tax revenue growth, owing to incorrect estimates of population income distribution in the tenth decile region.
Ouma (2019) examined the impact on total tax, direct and indirect tax incomes of the 1964-2016 tax reforms, economic growth and policy environment. Findings revealed that: all taxes reacted positively to each of the tax changes; the reforms affected all tax changes, due to GDP increasing as well; economic growth had a substantial positive impact on all tax categories; government efficiency had a positive effect on indirect tax; and that, despite statistical emphasis on state regulation of corruption in tax income.

Zhang et al. (2018) assessed the effect of business tax loans on company fixed investment using China's pilot on the 2004 reform in value added tax reform, which creates a permanent 17% tax loan on fixed investment in six North-eastern industry sectors. It was found that, in 2004-2007 the tax credit significantly increases the fixed investments of eligible companies by 28% on average, compared with 2001-2003, corresponding to the elasticity of user costs of 1.84. The tax benefit has greater impacts on less financially challenged firms such as smaller businesses and companies with higher cash flows. The outcome is generated primarily by responses by domestic private companies and is resilient to requirements that tackle the question of uncertainty.

Barro and Furman (2018) used a cost-of-capital framework to evaluate GDP's long-term, stable and transition direction. With the legislation as it is written, it was predicted that, a long-term rise in corporate productivity of 2.5%, which means a GDP increase of 0.4 percent after ten years, or an improvement in the rate of growth of 0.04 percentage point annually. If the 2019 law is made permanent, the estimates are 4.8 per cent of long-term corporate output, 1.2 per cent of GDP after 10 years, and 0.13 of growth rate growth. sensitivity analysis was carried out and disclosed that, as interest rates rose because of fiscal uncertainty, GDP rises for the 10th year would be 0.2% and 1.0% for each of the two scenarios.
Iglesias (2016) explored two hypotheses regarding the reforms in course taken by tax authorities in Brazil. The first concerned the lack of attention with regard to the pre-2011 pricing actions in the tobacco industry (instead of reducing prices after tax cuts, the legal firms' net price rises above inflation and the overall costs). The second hypothesis relates to contradictory industrial estimates of the scale of the black market, which eventually eroded industry’s reputation with tax authorities. The report believes that, the 2011 reform aimed at reversing the weaknesses of previous policies and was successful.

Castiglione et al. (2018) examined the environmental taxation income determinants for European countries. In addition to researching the most studied variables, such as growth, consumption and environmental quality, other non-trivial variables are also taken into account. The findings suggest that in Western EU and Eastern EU countries the above-mentioned drivers have a heterogeneous impact on environmental tax revenue owing to the hardly inadequate policy contexts of latter economic systems and their perplexing development patterns.

Hines (2017) provided a further metric of corporate tax obligations based on data in budget tax expenditure. The measure suggests that, without any deductions, exclusions or tax loans, the burden of U.S. corporation taxes in 2017 is approximately equal to that of the corporate tax rates of 31.7% to 34.8%. Efficient business taxation system architecture supports enterprises with competitive economic spill overs and places lower pressures on the sectors and activities that are most tax sensitive.

Prichard et al. (2019) offered a conceptual basis for designing more effective tax reform and enforcement strategies. The framework provides for parallel investment in regulation, facilitation and trust to be combined. Their framework proposes to rely more on an on-site analysis of binding limitations, combined with close attention to understanding politics and trust drivers in particular contexts, to guide analysis on how various investment can be integrated, evaluated or synthesized.
Livoi (2017) carried out a study to examine the impact of corporate tax compliance reforms on strategy, administration and technology. There was a survey of domestic taxes workers at the KRA headquarters. Evidence showed that tax changes had an inverse impact on corporate tax enforcement. Results suggest that the intended goal was not accomplished by tax reforms.

Morales and Medina (2017) assessed the impacts on formal employment and average wages of firms of the Colombian tax reform for 2012. They built a panel of companies based on the administrative records of their employees. They predicted that, the adoption of the legislation resulted in an optimistic and substantial increase in formal employment of approximately 213,000 employees at established pre-reform firms. The effect of the reforms on the average wages paid by companies was also positive for certain sizes of enterprises, although in the short term the overall impact was quite modest.

Muzurura and Sikwila (2018) explored the intersection of taxation policies, private fixed domestic expenditure, and economic development in Zimbabwe from 1998 to 2015 through the use of the Ordinary Least Square regression. Their findings indicate that tax revenue channeled to efficient public expenditure including highways, bridges, railways, electricity, transport and other communications systems would certainly raise private fixed domestic investment productivity. Policymakers face the key obstacle of developing tax laws that minimize tax evasion, reduce corruption, raise domestic revenue and adequately protect the tax base while reducing the increasingly global world excess burden on businesses.

Liu et al. (2017) built two-stage dynamical models to determine how the tax reform impacts the coal and coal-fired power sectors. Market situations of deficit and oversupply are examined separately. The developed model suggested that, tax reform would reduce the price of both coal and the profitability of the coal industry if the tax collected on every ton of coal is held at the same standard as before, regardless of whether the market is in a shortage or over-supply situation. The strengthened purchasing power would, however, intensify the impact of the tax reform.
Jibao and Prichard (2016) explored the reasons behind the relative progress of the Sierra Leone property tax reform plan. This acknowledges the political value of influencing policy results and stresses policy approaches that have helped to address both political and technical obstacles to reform. This outlines three related points. First, long-term, realistic local partnerships are required which support the local capacity, contribute to challenge the political opposition and build up an electoral district for reform. Second, a broader emphasis should be given to politically divisive attempts to increase transparency, public engagement and compliance within the leaders, as they are vital to the success and survival of the programme. Third, focusing on the same politically divisive reform elements will enable external actors properly evaluate the magnitude of local policy commitments to change early on and thus prioritize funding and initiatives for reform more efficiently.

2.2.2 The influence of Economic Factors on Tax revenue.

*Gross Domestic Product (GDP) and tax revenue generation*

According to Gachanja (2012), the effect of tax reforms and economic factors on tax revenues in Kenya through trend analysis and regression analysis. The trend analysis found that, Kenyan GDP and tax revenues were rising over time from the year 2000. From his graphical representation, the relationship between GDP and tax revenue is linear. This meant GDP has an influence on the growth rate of tax revenue in Kenya. Gachanja also carried out a regression analysis and revealed that GDP had a significant positive effect on the tax revenue.

Zeng *et al.* (2013) conducted a study to analyse the effect of growth of economic and taxation reform on revenue and structure of taxation. Their results through regression analysis indicated that, all independent variables had similar coefficients except for GDP, which had the highest coefficient, and thus GDP had the most contribution on Tax Revenue in China. Meanwhile, Tanzi and Devoid, (2000) conducted a study on corruption, growth and Public Finances. In their findings they found that; there a decrease of the revenue – GDP ratio by 1.5%, tax –GDP ratio by 2.7% and an
increase of non-tax revenue-GDP ratio by 1.3% with the increase of corruption index by only one point.

Apart from that, it has been established that, GDP (economic growth) had a positive and significant effect on all categories of tax revenue (Ouma, 2019). We find a positive and significant effect of per capita GDP and of the share of the value added of agriculture on tax revenues.

Boukbech, et al. (2018) investigated the determinants for tax revenues in developed countries. It was found that, GDP per capita and agriculture's added value are associated significantly and positively with tax revenue. The level of transparency had a favourable yet marginal effect on income from taxes. Also, there was a negative but not major effect on the growth of the population. The implications of inflation and government expenditure are important and optimistic for the determinants of tax effort. Their results further suggested that, there are considerably negative relationships between the tax initiative and the variables of "public aid provided" and "foreign debt."

Makame (2015) assessed the effect of VAT and collection of revenue on GDP in Zanzibar. The study showed that value added tax is advantageous for the economy of Zanzibar. It was also found that, VAT in Zanzibar is statistically significant to ZRB revenues. The findings indicate that Zanzibar needs to be able to generate sufficient revenue to meet the challenges of their spending in terms of social facilities supply and the operating costs of the government in order to achieve their long-term economic growth.

Adegbie and Fakile (2011) assessed income tax and economic growth in Nigeria. GDP was used to calculate corporate income tax in Nigeria and its oil profits tax, its business sales tax and its customs and taxes. Findings showed that, a significant obstacle to revenue output exists between corporate income tax and Nigerian productivity expansion, and tax avoidance and fraud.
Owolabi and Okwu (2011) assessed VAT contribution to the production of the state economy of Lagos. Aspects of progress included growth, environmental sustainability, progress of the education sector, youth and social development, development of the agrarian sector, development of the health sector and development of the transport sector. The findings show that VAT revenue has made a significant contribution to the growth of the respective sectors. The positive contribution, however, was statistically important only in the growth of the agricultural sector.

Unegbu and Irefin (2011) evaluated VAT impacts in relation to economic and human developments of developing nations between 2001 and 2009. Regression, discriminant analysis and ANOVA have revealed the very significant effect of VAT allocations on the state's expenditure trend during this era. It was also noted that citizenship perceptions across state administrative regions indicate that VAT has a minimal effect on the economic and human developments in the Adamawa State between 2001 and 2009.

Lee and Gordon (2005) examined how tax policies impact the rate of growth of a nation by using cross-country data from 1970–97. Their results showed the substantial negative association between statutory corporate tax rates and cross-sectional disparities in overall economic growth.

Ade et al. (2018) explored the tax revenue output characteristics of all 15 countries in the Southern African Development Community from 1990 to 2010 through panel data. The findings clearly underlined the strong position of taxation (tax rate and tax policy variable harmonization) in raising the region's tax revenues (along with other significant determinants) and provide empirical support for anecdotal evidence that has existed. The empirical results also confide that the FDI affects the amount of income from tax received in the SADC and the presence of the reverse causal mechanism (that is, the causality of FDI and taxation or conversely).
Ahmed and Muhammad (2010) examined the factors for buoyancy of tax in a number of developing countries (total reaction of tax revenue to national income adjustments and discretionary tax policies). For 11 years (1998-2008), the researchers utilized panel data for 25 states, including seven African countries (Zimbabwe was the only SADC country included), and used the least pooled method for the analysis of the results. Findings revealed that, manufacturing, production, utilities, monetisation and budget deficit resource affects tax buoyancy positively, while the increase in subsidies negatively impacts buoyancy of tax.

Palil and Mustapha (2011) analyse tax enforcement determinants in Malaysia, aimed at increasing the collection of tax revenue. The findings showed that fiscal awareness has a major impact on tax enforcement and ultimately, on income collection, while tax awareness rates the signing between the respondents differs fictitiously. The findings also showed the tax compliance is affected by audit expectations, perceptions of government expenditure, fines, personal/financial constraints and the impact of reference groups.

Gupta (2007) discussed the key indicators of the performance of tax revenue in developed countries, including SSA, with the application of a large data set for 120 countries. The consequence is that variables such as per capita GDP, market flexibility and external assistance have a huge effect on the economic results. Corruption, political stability and direct and indirect tax share (in particular VAT) are also considerations. Results indicated that, further increases in tax rates (especially on mobile factor production) are neither feasible nor desirable given the present tax level, and increased tax competition in Africa. The rise in tax rates leads to tax avoidance and evasion, tax inversion, rising administrative tax costs and wealth control and corporations' enforcement costs. Alternatively, the expansion of the tax base (and the incorporation of the informal sector into the tax net) is an effective way to generate domestic revenue and boost tax system understanding.
Garikai (2009) explores the buoyancy of tax determinants in the SADC. The study found that, on the basis of panel data for 14 10 SADC countries from 1994 to 2005, that monetization, external aid growth and growth in fiscal deficit (i.e. increased government spending on collected tax revenue) have adverse repercussions on annual fiscal booster and the tax execution in the SADC. The growth in fiscal deficit can be decreased by reducing government spending or tax income. Variables as growth and government spending in the agricultural and industrial (mining and manufacturing) sectors contribute positively to fiscal stimulus whereas openness to trade and economic development (ECON) tends to be insignificantly fictitious.

Between 2000-2009, Bonga (2017) used panel data collection for nineteen countries for the empirical study of tax buoyancy determinants. Monetization is one of the variables identified as influencing annual tax growth. Empirical findings affirm its meaning. The findings have shown that the manner in which monetization is managed in developed countries has a negative impact on annual tax increase. Several variable influencing tax buoyancies were the growth of national income contribution in the agricultural and manufacturing, foreign aid growth, fiscal deficit development and the development of overall expenditure. The determinants of tax growth were suggested according to the theory of tax handling. The study provided such findings as the quality aspect of tax output was taken into account, which many of the previous authors have overlooked.

Wawire (2017) suggests that, VAT growth elasticities are all higher than one. The calculations show that the overall GDP elasticity of VAT revenues is smaller than that of monetary GDP elasticity. Proposing the presence of an underground economy in Kenya during the study period, the results found that, VAT revenues adapt to changes in their determinants with substantial delays and that VAT revenues are prone to strange circumstances. The study shows that VAT revenues in Kenya are highly responsive to changes, particularly in international trade. The challenge is therefore to create a stable VAT system that allows tax revenues to grow as the economy grows rapidly.
Karingi and Wanjarra (2005) revealed that, the 1980 's tax modernisation plan tried to reform the tax system in order to raise more revenue, redistribute wealth and create a sustainable tax system. The major reforms in the field of income tax included rising tax cuts, reducing the highest marginal rates and rising tax relief, to shield low-income earners from inflation-led creeps. There has been a systematic shift in policy to indirect taxes, as investment and growth are more beneficial than direct taxes. The analysis revealed that industrial taxes had declined due to enforcement by the World Trade Organization (WTO) and national integration blocks with the trade rules.

Menichini (2020) used the company's dynamic model to investigate the Laffer tax rate determinants (i.e. the tax rate for corporate income which maximizes tax revenues). Depending on a typical parameterisation of the model, one of the key determinants was the complexity of the production process, market costs of the investment and operating costs. Results showed that, the Laffer tax rate for a representative company is about 68 percent and, in the US, industry varies from 64 to 74 percent. Also, it was found that, over the business cycle the sales maximization rate procyclical comports in an organisation.

Mbatia (2018) examined the effects of international loans and grants on tax revenues for the period 1990-2014 for 42 sub-Saharan African countries. The findings show that, in conjunction with all nations, concessional loans and grants have a negative effect on tax revenues. Likewise, in lower-middle and lower-income countries. Since most of these countries have provided loan reduction under the Highly Indebted Poor Country (HIPC) initiative, it was contended that receiving Governments expect debt to be always forgiven and therefore view all loans and grants as a “free” source of funds. It discouraged taxpayers who seek responsibility for their taxation. The High Middle-Income Countries (HICs), however, responded differently. Across these nations, loans and subsidies have a positive effect on tax revenue. The consequence of loans was that high-income countries were inadmissible for debt relief and obligated to refund their loans.
Also, there was positive association between grants and tax revenue explained by the fact that, HICs attained a considerable level of growth, implying that productivity and transparency of additional resource added to the taxation systems in income systems.

### 2.2.3 The influence of Corruption on tax revenue generation

Except for non-tax revenue, low revenue of all types relates to high levels of corruption. Corruption and individual income taxes are highly correlated due to the room for negotiation between the taxpayers and the tax officers. Corruption and individual income taxes collected as a percentage of GDP are inversely proportion. With a one-point increase in corruption, there is a decrease in individual income tax as a percentage of GDP by 0.63%. On the other hand, the graphical representation of the relationship between tax revenue and corruption Gachanja (2012) shows that lower tax revenues were associated with a higher corruption index and higher tax revenue was associated with a lower corruption index. Gachanja (2012) carried out a regression analysis and he found out that Corruption had a significant positive effect on the tax revenue.

Again, Epaphra and Massawe (2017) found that, Corruption had a significant negative effect on the total amount of tax generated. This effect is big in indirect taxes more than direct taxes. Corruption affects tax administration, tax audits and the image of the institutions. High corruption influences tax payers in entering informal economy leading to a loss of Tax revenue.

Furthermore, good governance and lower corruption rates was found to have a positive effect on Tax revenue. Good governance and lower level of corruption signify the competency and efficiency of the government (Arif & Rawat, 2018).

Imam and Jacobs (2014) assessed the effects of corruption on Middle East revenue generation in various tax categories. Researchers found that the low-income collection as a share of GDP there is partly due to inequality compared with other middle-income regions and other taxes are more harmful. Taxation involving regular
contact between tax authorities and people, such as foreign trade taxes, tend to be more corrupt than most other forms of taxes.

Arif and Rawat (2018) reported that, in the process of raising income, developing countries face a range of institutional challenges. Corruption in tax authorities is one of the major issues. The second big issue of low-income generation is poor governance efficiency. One of the main characteristics of political uncertainty is unstable and changing government behaviour, which hampers the process of long-term system reform. Within this context, the standard of governance as a whole is also important. It is widespread agreed that, tax evasion and public-sector corruption are social phenomenon that can substantially reduce tax revenue and severely injured economic growth and development.

In order to define goals of further tax adjustment, Ombati (2018) analysed the output of tax revenue as well as tax planning and administrative reforms for the period 1996-2005. The influence of inflation on tax revenue is seen in the empirical study. This is less optimistic and even inelastic, while indirect and not direct taxes are capable of improving the tax system's versatility. Tax development challenges include farm and informal taxation, the elimination of fiscal vacancies, a high level of effectiveness, high dissent in tariff rates, comprehensive and rigid custom laws, low VAT response to changes, limited capability to manage large volumes of returns and zero-rated transaction refund. Moreover. In terms of the time taken to prepare and file tax returns, Kenya's tax system is burdensome.

Rosoiu (2015) conducted a study to examine, for the period 1998-2014, the effect of government expenditure and government revenues on Romanian economic development. Results indicated that, as the government's aim was to establish a sustainable economic development, all decisions concerning fiscal policy had this effect. It was revealed that, GDP rose in both situations which influenced positive expenditure shock from the government and positive tax revenue shock.
Castro and Camarillo (2014) employed dynamic and static panel data analysis to examine the effect of institutional, structural, and social determinants on taxation of revenues among 34 Organization for Economic Cooperation and Development (OECD) countries. The study focused for the period from 2001 to 2011. The findings reflect a positive effect on the dependent variable induced by gross domestic product per capita, business and civic freedoms, and a negative effect on the agriculture and foreign investment in financial development.

2.3 Research Gap

The researcher aims to conduct a study similar to Gachanja 2012 study on “the effect of tax reforms and economic factors on tax revenues in Kenya” in Tanzania context to obtain valid and reliable findings through widening the research period and the use of time line series design instead of longitudinal design that was used by Gachanja and see if the same or similar results obtained in Kenya will hold in Tanzania.

2.4 Conceptual Framework

According to Magenta and Magenta (2003) and Smith (2004) as cited in Kinyua (2018), the conceptual framework is a hypothesized pictorial model defining the model under study. The conceptual framework shows the relationship that exists between the variables involved in the study. The variables under the study must include dependent and independent variables. The conceptual framework role is to give an understanding of the variables under the study.

The level of collected tax revenue depends on tax reforms, GDP and corruption. Figure 1 presents the conceptual relation between variables, independent variables include Tax reforms measured by dummy variables, GDP measured by economic growth and corruption measured by corruption perception index and the dependent variable is Collected Tax revenue which is measured by the total amount of revenue collected from taxes and other related fines.
Figure 2. 1: Conceptualized relation between variables

Source: Author 2019

**Tax reforms** is a way in which governments make changes in the existing tax laws or introducing new tax laws in order to improve the tax system. It is an independent variable measured by dummy variable. It is expected that, Tax Revenue will increase as tax reforms are introduced to the tax system.

**DGP** is the Gross Domestic Product. This is a total market value of all finished goods and services produced in a country. This includes goods and services produced by both citizens and non-citizen. Provided that a good or service was produced in Tanzania with citizens of Tanzania or foreigners, it will be included in GDP. GDP is the independent variable which measures economic growth. Since GDP measures the economic growth, it’s expected that, Tax Revenue will increase as GDP increases.

**Corruption** is the abuse of power by government officials for their personal gain. This may involve higher level leader, low level leader and even politicians. Corruption was measured using Corruption perception index. It is expected for corruption to have a negative effect on Tax Revenue.

**Tax Revenue** is the government income obtained from levying and collecting taxes from taxpayers. Tax revenue depends on the economic activities and on how good the tax system is. Tax Revenue is the dependent variable measured in TZS Revenue figure.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction
This chapter gives an overview of the methodologies that the researcher used in this study. The chapter provides methodology approaches which were employed to collect, prepare, and analyse data regarding to tax reforms and revenues collection. Specifically, it comprises the study area, research design, population and sampling technique, data collection methods, data collection procedure, and data analysis procedures.

3.2 Research Design
Research design is a research technique used in the research process in data collection and data analysis in dealing with the research problem. This study adopted time series as research design. Time series research design is a design which examines the relationship between variables over equal time intervals and the time is an important factor in this case. Time series research design make a use of available secondary data and due to the availability of secondary data; the researcher adopted a time series design. The merits of using time series design include understanding of the past and predicting of the future. Time series study use secondary data which was readily available.

3.3 Data Collection
Data collection is the whole procedure for gathering information regarding the research area, problem or question (Makey&Gass, 2005). There are two data collection techniques, which are primary data (data that is collected at the first time), and secondary data (data which is the information that is already available and needs only to be extracted). This study used quantitative secondary data. Secondary data are readily available from the other sources and as such, there are no specific collection methods (Business Jurgons, 2020).
Data were collected annually for a period of 20 years starting from 1998 to 2017. Data collection included data for GDP, corruption, reforms, and tax revenue; Tax revenue data were collected from the Tanzania Revenue Authority website; GDP was collected from Tanzania Data Portal; and corruption indices were collected from the Transparency International website. All data were collected for the period of 20 years where the first 10 years, 1998 to 2007 represented pre-reform period and the next 10 years, 2008 to 2017 represented post-reform period. Dummy variables were used to measure the reforms. 1 and 0 values were coded for the reform period and pre-reform period respectively.

3.4 Data Analysis
The study employs a multiple regression analysis because it is an economic model used in predicting the value of a variable based on the value of other two or more variables. Following that most time series variables are not stationary, using non stationary variables in the model might lead to spurious regression which cannot be used for precise prediction (Gujarati, 2003). Data tests were carried out to see if the desirable properties of time series data are met.

The data analysis process was carried out with EViews. A regression analysis was carried out for multiple regression analysis performances. Then the results found were interpreted based on the Pearson correlation coefficient; the r-squared and the adjusted r-square. Again, for the interpretation of the significance value, F-statistics were observed. The coefficient of variables involved in the model was observed and interpreted for their influence based on their direction, whether positive or negative effects and their significances in the mode using P-values.

\[
\text{TAX REV} = a + \beta_1 \text{TAX_REF} + \beta_2 \text{GDP} + \beta_3 \text{CORR} + \mu
\]

Where \(\beta_1, \beta_2, \beta_3\), and are coefficients
\(a\) is a constant
\(\mu\) is an error term
**TAX REV** is the tax revenue (dependent variable) measured by the revenue figures in TZS from the financial year 1998 to 2017.

**TAX REF** is the tax reforms (independent variable), it was measured by dummy variables. A value of 1 was assigned to the after reforms period, 0 value was assigned to the pre reforms period.

**GDP** is the Gross Domestic Product (independent variable). It is the measure of economic growth. The values of GDP were collected from 1998-2017.

**CORR** is corruption (independent variable). Corruption was measured using corruption perception indices from 1998-2017 using the figures that are available on Transparency International website.
CHAPTER FOUR

PRESENTATION OF THE FINDINGS

4.1 Introduction
This chapter represents the results in two sections, section one being a trend analysis of Corruption index, Tax revenue and GDP and section two being a Regression analysis which shows the results of regressions analysis

4.2 Findings
4.2.1 Trend Analysis Results
Figure 4.1: Trend for GDP

Source: Data Analysis (2019)
Figure 4.1 presents the trend for GDP for the country under the entire study period of 1998 to 2007. Findings revealed that country GDP has been on the rising trend from 15.5 billion United States Dollar (USD) in 1998 to 49.74 billion USD in 2017 (Tanzania Data Portal, 2019). This provides an implication that the country economy has been experiencing growth under the entire study period, meaning there is improvement in the standard of living and quality of life among the citizens.

**Figure 4.2: Tanzanian Corruption Perception Index trend for 1998 to 2017**

Findings from Figure 4.2 present the trend for the corruption perception index for Tanzania from 1998 to 2017. Findings reveal that corruption has been increasing over years from 1998 to 2017. However, the findings further show that there were years with significant decline in the corruption. For instance, it is observed that corruption perception index rose from 1.9 in 1998 to 2.5 in year 2000, and then fell to 2.1 in year 2001. Corruption perception index then rose from 2.5 in year 2003 to
3.2 in year 2007, and then it declined again to 2.6 in year 2009 and rose back until 3.5 in year 2012. The period with high corruption index is manifested as periods with high corruption in the country in comparison to the other periods. Because of high corruption a large amount of tax revenue many taxpayers did not pay the actual amount they were required to pay hence loss of revenue.

**Correlation between corruption trend and tax revenue**

Relationship between corruption and generation of tax revenue was examined by Pearson correlation test. Results indicate that, corruption has significant strong correlation with tax revenue, $r(20) = .74, p < .000$, for the past twenty years. The linear relationship was positive indicating that, the increase in tax revenue encouraged the strong increase of corruption Perception Index (decrease in corruption) for the period 1998-2017, as shown on Table 4.1.

**Table 4.1: Correlation test showing the link between corruption and tax revenue**

<table>
<thead>
<tr>
<th></th>
<th>Tax Revenue</th>
<th>Corruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Revenue</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>.738**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>20</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).**
Figure 4.3 presents the trend for the revenue for Tanzania for the period covering from 1998 to 2017. Findings show that revenues have an upward trend rising from 0.62 billion Tanzanian shillings (TZS) in 1998 to 15.19 billion TZS in 2017. This entails that the government revenue have been significantly increasing over time.
Findings from 4.4 present the trend on the reforms. It is evidenced that, Tanzania under the entire study period experienced reforms from 2008 to 2017, while the period from 1998 to 2007 has no reforms.

**Correlation between tax reforms and tax revenue collection**

Pearson correlation was also employed to determine the link between tax reforms and revenue collection. It was revealed that, tax reforms significantly correlate with tax revenue, $r (20) = .802, p<.000$. The relationship was strong and positive implying that, tax reforms has significant influence on tax revenue generations for the period 1998-2017, as depicted on Table 4.2.
Table 4.2: Correlation test showing the link between tax reform and tax revenue

<table>
<thead>
<tr>
<th></th>
<th>Tax Revenue</th>
<th>Tax Reforms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td><strong>Pearson Correlation</strong></td>
<td>.802**</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Existence of cycles

The study employs period gram approach to identify the existence of cycles among the study variables. However, it firstly displays scatter plots of the GDP trend in the period of 20 years. Figure 4.5 presents the scatter plot which depict significant increase of GDP from 1998-2017.

Figure 4.5: Scatter plot showing GDP trend for the period 1998-2017
The period gram peaks at a frequency of slightly above 0.30 cycles per year. The period gram indicates that there is a cycle with duration of about 33 years as shown on Figure 4.6.

**Figure 4.6: Cyclical presence plot for GDP**

[Sample spectral density function graph]

Scatter plot was also constructed to portray the trend of collection of tax revenues for the period 1998-2017. Figure 4.7 demonstrate the intensive increase of GDP which is linear in nature.
The periodogram peaks at a frequency of slightly less than 0.40 cycles per year, indicating a 38- to 40-year cycle in revenue as shown on Figure 4.8.
Correlation between GDP and tax revenue collection

Pearson correlation was calculated to examine significance of the linear relationship between GDP and tax revenue for the period of 20 years. It shows that, GDP has statistically significant relationship with collection of tax revenue, $r(20) = .98$, $p < .000$. This means that, rise in tax revenue has influenced increase in GDP in the period 1998-2017.
Table 4.3: Correlation test showing the relationship between GDP and tax revenue

<table>
<thead>
<tr>
<th></th>
<th>Tax Revenue</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Revenue</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>N</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>.981**</td>
</tr>
<tr>
<td>GDP</td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>20</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

4.2.2. Regression Analysis Results

A regression analysis was carried out for multiple regression performances for tax revenue. The independent variable and dependent variables, which are GDP, Corruption and tax reforms. Before presentation and interpretation of the findings from the regression, various tests were conducted to check whether the results were robust or not. These tests include stationarity of data, and randomness of the variables.

Test for stationarity using phillips perron

Stationarity of unit root problem is said to exist when the variables are not stationary over time. Presence of unit root problem is said to result into biased estimated. Thus, variables need to be checked if are stationary and when they are not stationary need to be differenced to make them stationary. This study employed Phillips Perron unit root test to check for the stationary. Table 4.4 presents the unit root test results at level.

Table 4.4: Unit root test at level (0)

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value</th>
<th>5% test CV</th>
<th>Decision</th>
<th>Order of integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>0.0962</td>
<td>-12.500</td>
<td>Non stationary</td>
<td>I (0)</td>
</tr>
<tr>
<td>GDP</td>
<td>0.8248</td>
<td>-12.500</td>
<td>Non stationary</td>
<td>I (0)</td>
</tr>
<tr>
<td>Corruption index</td>
<td>0.4600</td>
<td>-12.500</td>
<td>Non stationary</td>
<td>I (0)</td>
</tr>
<tr>
<td>Reforms</td>
<td>0.4105</td>
<td>-12.500</td>
<td>Non stationary</td>
<td>I (0)</td>
</tr>
</tbody>
</table>

Source: Data Analysis (2019)
The study employed Phillips Perron unit root test to check whether the variables are stationary. The decision criterion is that the variables are stationary when the obtained test statistic is greater than the 5 percent critical value in absolute terms. Therefore, all variables are revealed to be non-stationary at level since the obtained test statistics are small then the 5 percent critical values in absolute terms. Hence, all the variables in this study needs to be differenced.

Table 4.5: Unit root test after first differencing

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value</th>
<th>5% test CV</th>
<th>Decision</th>
<th>Order of integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>0.0003</td>
<td>-12.500</td>
<td>Stationary</td>
<td>I (2)</td>
</tr>
<tr>
<td>GDP</td>
<td>0.0041</td>
<td>-12.500</td>
<td>Stationary</td>
<td>I (2)</td>
</tr>
<tr>
<td>Corruption index</td>
<td>0.0037</td>
<td>-12.500</td>
<td>Stationary</td>
<td>I (1)</td>
</tr>
<tr>
<td>Reforms</td>
<td>0.0086</td>
<td>-12.500</td>
<td>Stationary</td>
<td>I (1)</td>
</tr>
</tbody>
</table>

Source: Data Analysis (2019)

Table 4.5 presents the Phillips Perron unit root test results after differencing. Findings from Table 4.5 reveal that corruption index and reforms variables are stationary after the first differencing while revenue and GDP are revealed to be stationary after second differencing. Therefore, corruption index and reforms variables are integrated on order one while GDP and revenues and integrated of order two.

Test of randomness

This is a non-parametric test which is used to check autocorrelation in the data (Sulak et al., 2010). The test was used to measure correlation between four variables data and their lagged value as far as random distribution of data is concerned. These variables were revenue, GDP, corruption, and tax reforms. All tests were subjected to significance level (probability) of 0.05. Each test involved number of specific hypotheses to guide its results.
**Randomness test for Revenue**

As indicated on Table 4.6, number of observed items were 20 producing 1000 frequency after 20 test runs. Null and alternative hypothesis were set up as follows;  
Ho: There is no random distribution in tax revenue data  
Ha: There is random distribution in tax revenue data

The test indicates that, the null hypothesis was rejected and the alternative hypothesis was accepted considering probability value was not significant (p >.05.). This implies that, randomness of data was observed in tax revenue. According to Bancal et al. (2014), when there is greater value of the expected value of the probability value in the randomness test run, the null hypothesis should be considered.

**Table 4. 6: Randomness test for Revenue**

<table>
<thead>
<tr>
<th>Number of runs</th>
<th>Frequency</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>10000</td>
<td>1</td>
</tr>
</tbody>
</table>

**Randomness test for GDP**

Null and alternative hypothesis were set up prior to the randomness test.  
Ho: There is no random distribution of data in GDP  
Ha: There is random distribution of data in GDP

Based on Table 4.7, 20 test runs were conducted resulting to 1000 frequency with a probability value of 1. This attest that, null hypothesis was rejected by considering that the probability value was greater than significance level (p> .05). Thus, there was randomness in GDP variable.

**Table 4. 7: Randomness test for GDP**

<table>
<thead>
<tr>
<th>Number of runs</th>
<th>Frequency</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>10000</td>
<td>1</td>
</tr>
</tbody>
</table>
Randomness test for Corruption

Assumption of randomness test was considered by constructing two hypotheses as observed in previous tests;

Ho: There is no randomness in corruption variable
Ha: There is randomness in corruption variable.

Table 4.8 indicate that, number of tests which were ran ranged between 15 and 20 yielding frequencies (3 to 4284) and probability values (0.0003 to 0.4284). In regards to the approximated mean frequency (1511) and its probability value (p>.05), null hypothesis was rejected and alternative hypothesis was accepted. Results affirm that, there was random distribution of data in GDP.

<table>
<thead>
<tr>
<th>Number of runs</th>
<th>Frequency</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>3</td>
<td>.0003</td>
</tr>
<tr>
<td>16</td>
<td>31</td>
<td>.0031</td>
</tr>
<tr>
<td>17</td>
<td>326</td>
<td>.0326</td>
</tr>
<tr>
<td>18</td>
<td>1511</td>
<td>.1511</td>
</tr>
<tr>
<td>19</td>
<td>3845</td>
<td>.3845</td>
</tr>
<tr>
<td>20</td>
<td>4284</td>
<td>.4284</td>
</tr>
</tbody>
</table>

Randomness test for Tax Reforms

The two hypotheses for this test were;

Ho: There is no randomness of values in tax reforms
Ha: There is randomness of values in tax reforms.

As portrayed on Table 4.9, the number of test runs ranged between 4 and 19. Frequency was observed to incline from 9 to 1755 with highest probability value of .1755. In regards to mean frequency (1721), the test was not significant (p>.05). This implies that, null hypothesis was rejected and alternative hypothesis was accepted. In other words, there was randomness in tax reforms values.
Table 4.9: Randomness test for Reforms

<table>
<thead>
<tr>
<th>Number of runs</th>
<th>Frequency</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>9</td>
<td>.0009</td>
</tr>
<tr>
<td>5</td>
<td>34</td>
<td>.0034</td>
</tr>
<tr>
<td>6</td>
<td>169</td>
<td>.0169</td>
</tr>
<tr>
<td>7</td>
<td>337</td>
<td>.0337</td>
</tr>
<tr>
<td>8</td>
<td>709</td>
<td>.0709</td>
</tr>
<tr>
<td>9</td>
<td>1136</td>
<td>.1136</td>
</tr>
<tr>
<td>10</td>
<td>1672</td>
<td>.1672</td>
</tr>
<tr>
<td>11</td>
<td>1755</td>
<td>.1755</td>
</tr>
<tr>
<td>12</td>
<td>1721</td>
<td>.1721</td>
</tr>
<tr>
<td>13</td>
<td>1171</td>
<td>.1171</td>
</tr>
<tr>
<td>14</td>
<td>751</td>
<td>.0751</td>
</tr>
<tr>
<td>15</td>
<td>360</td>
<td>.036</td>
</tr>
<tr>
<td>16</td>
<td>132</td>
<td>.0132</td>
</tr>
<tr>
<td>17</td>
<td>34</td>
<td>.0034</td>
</tr>
<tr>
<td>18</td>
<td>7</td>
<td>.0007</td>
</tr>
<tr>
<td>19</td>
<td>3</td>
<td>.0003</td>
</tr>
</tbody>
</table>

Table 4.10: Regression result of the relationship between current tax reforms and economic factors on collected tax revenue

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficients</th>
<th>Std. Error</th>
<th>t-statistic</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-12.12250</td>
<td>1.297102</td>
<td>-9.345838</td>
<td>0.0000</td>
</tr>
<tr>
<td>LNTR</td>
<td>1.122414</td>
<td>0.087422</td>
<td>12.83897</td>
<td>0.0000</td>
</tr>
<tr>
<td>LNGDP</td>
<td>0.498276</td>
<td>0.241513</td>
<td>2.063143</td>
<td>0.0557</td>
</tr>
<tr>
<td>LNCPI</td>
<td>0.416657</td>
<td>0.081039</td>
<td>5.141463</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

R-squared 0.756000 Mean dependent var 8.084130
Adjusted R-squared 0.710000 S.D. dependent var 1.067243
S.E. of regression 0.091231 Akaike info criterion -1.7737991
S.E. of regression 0.133169 Schwarz criterion -1.574845
Sum squared resid 21.73991 Hannan-Quinn criter. -1.735115
Log likelihood 861.3800 Durbin-Watson stat 1.160137
F-statistic 0.000000
Prob(F-statistic)
Table 4.10 presents the model regression results which indicate that the independent variables are statistically significant and predicts the dependent variable. The $R^2$ adjusted coefficient of determinant of the model estimates reveal that almost 75.6% of Tax Revenue collection variability is explained by Tax reforms, Gross Domestic Product (GDP), and Corruption. The model shows that the independent variables influenced Tax revenue collection by 75.6% and the remaining 24.4% is explained by other variables not included in the model for the period covered from 1998 to 2017.

The $F$-statistic, $F=861.38$, $p<.000$, indicates that the overall regression is significant at 5% level. This indicates that the model is a good fit for the variables under the study and therefore, all three independent variables predict the percentage change of the collected tax revenue. This signifies that, Tax reforms and economic factors (GDP and Corruption) are very important in stimulation of the Tax revenue collection in Tanzania.

The coefficients of the explanatory (independent) variables TR, GDP and CPI shows a positive relationship with dependent variables (Revenue) and they are all statistically significant. This signify that holding the independent variables constant, a unit increase in Tax reforms, Gross Domestic Product and Corruption will rise in an increase in dependent variable (Revenue) by 1.122414, 0.498276 and 0.416657 respectively.
CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.1 Introduction
In this chapter, the researcher presents a discussion of the findings of this study. This includes the discussion of the findings from time series data test analysis and Regression analysis.

5.2 Discussion of Findings

Trend Analysis
The trend analysis in Figure 4.1 shows a steady increase in GDP in Tanzania over years. The cause of this increase could be political stability which attracts investors and external trade, infrastructure development, and an increase in economic productivity.

Again Figure 4.2 shows a downward and upward trend in Corruption. Tanzania is among the highly corrupt Country in the world as its Corruption Perception index score is below 5. The trend shows that corruption increased in the year 2009 much than it was in 2008 and it had a sharp increase up to 2012 where it was 3.5. From the year 2013 to 2015, the corruption index decreased (Corruption rate increased) until 2016 where it starts to increase (Decrease in Corruption rate). Government steps against corrupt officials and improvement in consistent application of anti-corruption laws might be the reason for the steep decrease in Corruption from the year 2015 to 2017.

Furthermore, the results in Figure 4.3 show a steady increase in revenue and this suggests that Tax revenue collection in Tanzania is being increasing over time. This tremendous increase in revenue could have been caused with the increase in GDP and reduction in corruption as illustrated in in Figure 4.1 and 4.2 respectively.
Regression Analysis

The findings of the study signify that Tax Revenue, Tax Reform, Corruption and Gross Domestic Product are highly positively related.

The regression results in Table 4.10 show that the regression adjusted R-square of the model is 75.6%. This manifests that Tax revenue collection in Tanzania depends on the situation of Tax reforms and economic situations (GDP and Corruption). The result informs us that Tax reforms and economic factors (GDP and Corruption) influences Tax revenue collection in a greater extent in Tanzania. For Tanzania to attain its budgetary needs through Collected Tax Revenue, the Tanzania government needs to priorities much in proper tax reforms and economic development (economic growth) through imposing tax systems which influences tax payers to pay Taxes voluntarily and also provide proper and safe environment for economic activities which results in economic development. These results are similar to (Asolu et al., 2012; Kanyi&Kalui, 2014; Zeng et al., 2013; Muriithi&Moyi, 2003).

It is manifested in the findings in chapter five that, Tax reforms successful implementation would influence an increase in Collected Tax revenue. It is suggested that Tax reforms could be used to increase collected Tax Revenue in Tanzania. This is pinned under the classical theory which illustrates four maxims which if taken into consideration during Tax Reforms, the Reform aim of increasing Tax revenue is obtained. These results are consistent with (Asolu et al., 2012; Kanyi&Kalui, 2014; Zeng et al., 2013; Muriithi&Moyi, 2003). In order for Tanzania to increase its Collected Tax Revenue, the Tax policy makers are advised to introduce Reforms which will attract tax payers to pay taxes and more sources of income to tax should be sought of rather than depending on only few taxable group of income.

As can be seen in Table 4.10, the variable coefficients for Tax Reforms is positive Gross Domestic Product and Corruption are a positive and statistically significant. This implies that an improvement in Tax reforms, GDP and decrease in Corruption would increase the collected Tax revenue in Tanzania. So, it is suggested that the
government take all measures possible for improving Tax reforms, GDP and decrease corruption in order to win over the problem of budget deficit.

According to the findings, Tanzania Collected Tax revenue depends on the direction of the Tax reform after implementation. If tax reform implementation is not of success it is obvious that Collected Tax revenue will be negatively affected i.e collected Tax Revenue will decrease and if the implementation of Tax Reforms succeeds, then there is an expected increase in Collected Tax revenue. Our findings reveal that, Tax Reform could be used as a strategy for increasing Tax Revenue Collection in Tanzania and its inconformity with the expectations that tax reforms increases Tax Revenue. These results are similar to (Asolu et al., (2012; Kanyi&Kalui, 2014; Zeng et al., 2013; Muriithi&Moyi, 2003).

Also, the positive and statistically significant coefficient of GDP and Corruption manifest that, the level of collected Tax Revenue depends highly on the economic development of a specific country. GDP coefficient is positive and strong significant indicating that, as the level of economic development improves the taxable capacity of taxpayers and tax bases increases and thus the capacity for imposing and collecting tax revenue increases. This is in conformity with the expectations of Tax Revenue increase as GDP increases. The results are in line with Zeng et al. (2013) and Gachanja (2012).

Again, corruption coefficient is positive and statistically significant. This is contrary to the expectation of decreasing Tax revenue. This can be explained by an observed increase in Corruption Perception Index (Decrease in corruption over the period under study. The findings show openly that if the government puts more and effective purposeful efforts in combating corruption, it would be possible for Tanzania to Collect even more Tax Revenue in the near Coming future. The results are in line with Tanzi and Devoood,2000).
CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATION

6.1 Introduction
This is the last chapter of this study and it covers the following parts; summary of the findings, conclusion, recommendations, limitations of the study and recommendation for further studies.

6.2 Summary of the findings
Trend analysis indicates that there is a positive trend of GDP over the period under study as the GDP has been increasing over time. Though Tanzania is among the highly corrupt countries, the trend analysis revealed that Tanzania corruption perception index has been improving as compared to how it was in the early days under the study period. Revenue, as witnessed in the trend analysis, has also been increasing over the period under study. The trend analysis reveals there were no reforms from 1998 to 2007.

Multiple regressions were run to predict revenue from GDP, Corruption and tax reforms. The variables were statistically significant, $F = 861.38$, $p < 0.000$. The regression analysis results indicate that the independent variables Corruption, Tax reforms and GDP are positively related to the dependent variable (Revenue). The adjusted R square shows that independent variables influence the dependent variable by 71%. The model is a good fit for the variables as it passed the F-test 861.38 and significance (0.0000). The variable coefficients show there is an existence of a linear relationship between dependent variables and independent variables where Tax reforms, GDP and CPI has a positive coefficient of 1.122414, 0.498276 and 0.416657 respectively. Tax reforms, GDP and CPI positively influences the Tax revenue collected and the relationship is significant ($p=0.000$), ($p=0.0557$) and ($p<0.000$) respectively. This indicates that for every one-unit increase in Tax reforms,
GDP and CPI there is an expected increase of Revenue by 1.122414, 0.498276 and 0.416657 respectively.

6.3 Conclusion
The study indicates that Tax reforms, GDP and Corruption as measured in Corruption perception index has a positive and significant influence on Tax revenue collection in Tanzania. This indicates that a rise in Tax reforms, GDP and Corruption Perception Index (decrease in Corruption) largely influenced a rise of collected Tax Revenue in Tanzania from the year 1998-2017. As such the study concludes that, Tax reforms, GDP and Corruption has a significant positive influence on collected Tax Revenue in Tanzania.

The study adopted a study conducted in Kenya in the context of Tanzania to see whether the results would be alike or similar taking into account the widened research period, the use of different research design and different population and geographical area. The study findings were alike in GDP and different in Tax reforms and Corruption was found to influence Tax revenue in a negative direction.

6.4 Recommendations.
The government through its responsible organs should put in place measures to improve the collection of tax revenue by gaining public trust through quality public service, simple and easy taxation procedures in administration and payments, provision of education to both taxpayers and tax officials and through improving the tax administration by staffing and hiring of professionals.

The government of Tanzania through the responsible board should put in place measures to stimulate more and more economic growth that in return will result in a rise in collected tax revenue.
In spite of the existing war of corruption, Tanzania needs to put more strategies to combat corruption so that the collected tax revenue will increase to a large extent that the tax revenue collected will cover the government expenditure.
6.5 Limitation of the Study

Difficulties in data the accessibility. The researcher used secondary data in his study and mainly online data. It was a tough job to go around several websites searching for the actual data needed which consumed most of the researchers' time because the data was not timely obtained. The researcher prioritized the research work to make sure this does not alter the quality of the obtained findings.

The failure to use probability sampling. Because the study did not use probability sampling techniques, this poses a limitation in generalizing the obtained results to other countries as well.

6.6 Recommendation for further Studies.

Other researchers should take research on Tax systems in Tanzania to identify what could be the possible reason for insufficient revenue to cover the government budget since the performed study found out that reform has a positive effect on collected tax revenue in Tanzania.

The upcoming researcher could consider carrying out the same research but with a different design, that allows for generalization of the results of the research findings.
REFERENCES


Tanzania Budget Speech (2018/19), *The estimates of government revenue and expenditure for 2018/19*. pg 27


APPENDIXES

Table 1.1: Budget Deficits from 1998 to 2017 as percentage of GDP

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>0.13</td>
</tr>
<tr>
<td>1999</td>
<td>1.14</td>
</tr>
<tr>
<td>2000</td>
<td>0.73</td>
</tr>
<tr>
<td>2001</td>
<td>0.41</td>
</tr>
<tr>
<td>2002</td>
<td>0.73</td>
</tr>
<tr>
<td>2003</td>
<td>1.78</td>
</tr>
<tr>
<td>2004</td>
<td>2.43</td>
</tr>
<tr>
<td>2005</td>
<td>3.28</td>
</tr>
<tr>
<td>2006</td>
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Source: Country economy.com

1998 to 2007 represents before reform period
2008 to 2017 represents after reform period