

**A MIXED METHODS ANALYSIS OF TAX CAPACITY AND TAX EFFORT IN THE
SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC)**

By

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DECLARATION

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I declare that A MIXED METHOD ANALYSIS OF TAX CAPACITY AND TAX EFFORT IN THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC) is my own work and that all the sources that I have used or quoted from have been indicated and acknowledged by means of complete references.



SIGNATURE

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ABSTRACT

The design of a country's tax system is important because of the critical role played by taxation in financing public spending towards economic and social development. In this regard, there is need to enhance the understanding of whether current tax systems in the SADC provide sufficient tax revenue to meet public spending needs. This study provides empirical evidence on the outcomes of existing tax systems in the SADC with the aim of offering a basis for normative evaluation of the regions' tax policies. Literature posits that there are numerous economic and institutional factors that limit the amount of taxes that a country can actually raise. Against this background, the substantive aim of this study was to assess the determinants of tax capacity and tax effort in the SADC in view of providing a pragmatic approach to tax policy design. The methodology of this study involved the use of both quantitative and qualitative analysis (mixed methods approach) where the latter was used to augment the findings of the former. The first phase involved the use of a multi-step procedure to estimate determinants of tax capacity and tax effort using stochastic tax function and unbalanced panel data for 13 SADC countries. The study disentangled the error term to estimate the random-effects separately from tax effort in order to capture the time- invariant country-specific effects. Further, tax effort was classified persistent (long-run) and transient (short-run). The study was able to estimate the determinants of tax effort and to rank each member state according to its tax effort. The second phase involves a narrative analysis of tax legislation in the SADC over the period 2002-2016. The study used budget statements and Acts of parliament as the major sources of information to identify significant changes in tax legislation over this period. The findings of the quantitative analysis indicate that financial deepening, economic development and trade openness influence tax capacity, while corruption and inflation influence tax effort. In addition, the findings show that the region has low persistent tax effort than transient tax effort, implying that improving tax administration has superseded tax policy reforms. This result is augmented by the narrative record which seemingly shows that tax legislation efforts were largely successful in tax administration but rather limited in view of tax policy. In this regard, the study recommends that tax policy design should be informed by the conditions of a country and policy considerations relating to peculiar circumstances to obtain robust tax policies.

Keywords: mixed method analysis, tax capacity, tax effort, SADC

DEDICATION

To my dear husband, Matthews Chuma and our beloved children Dalitso, Tiyamike, Isabel,
Isaac and Mayamiko.

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ACRONYMS AND ABBREVIATIONS

ACCA	Association of Chartered Certified Accountants
AfDB	African Development Bank
AFD	Agence Française de Développement
AFRODAD	African Forum and Network on Debt and Development
AICPA	American Institute of Certified Public Accountants
LRA	Lesotho Revenue Authority
MTA	Mozambique Tax Authority
SRC	Seychelles Revenue Commission
AU	African Union
BURS	Business Unified Revenue Services
CCBG	Committee of Central Bank Governors
CFA	Communauté financière d'Afrique
CPI	Consumer Price Index
TRA	Tanzania Revenue Authority
SRA	Swaziland Revenue Authority
TPHM	Tax Policy Harmonization Measure
SFMs	Stochastic Frontier Models
MRA	Malawi Revenue Authority
ZRA	Zambia Revenue Authority
SARS	South Africa Revenue Services
EMCP	ECOWAS monetary Cooperation Programme
CIT	Corporate Income Tax
COMESA	Common Market for Eastern and Southern Africa
COMFI	Committee of Ministers of Finance and Investment
DRC	Democratic Republic of Congo
DTA	Double Taxation Agreements
ECOWAS	Economic Community of West African States
EISA	Electoral Institute of Sustainable Democracy in Africa
EU	European Union

FDI	Foreign Direct Investment
FTA	Free Trade Area
GNI	Gross National Income
GDP	Gross Domestic Product
ICT	Information and Communication Technology
IDZs	Industrial Development Zones
IFIs	International Financial Institutions
IFS	Institute of Fiscal Studies
IMF	International Monetary Fund
ITC	International Tax Compact
ITEP	Institute on Taxation and Economic Policy
ICAEW	The Institute of Chartered Accountants in England and Wales
LAC	Latin America and the Caribbean
LDCs	Least-Developed Countries
MEC	Macroeconomic Convergence Criteria
MOU	Memorandum of Understanding
NGOs	Non-Governmental Organizations
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OTE	Overall Tax effort
PIT	Personal Income Tax
PTE	Persistent Tax effort
RISDP	Regional Indicative Strategic Development Plan
SADC	Southern African Development Community
SADCC	Southern African Development Co-ordination Conference
SACU	Southern African Customs Union
SDGs	Sustainable Development Goals
SEZs	Special Economic Zones
SFA	Stochastic Frontier Approach
TPUs	Tax Policy Units

UN	United Nations
UNDP	United Nations Development Agency
USA	United States of America
USAID	The United States Agency for International Development
VAT	Value-Added Tax
WHT	Withholding taxes
WTO	World Trade Organization
ZAR	South African Rand
ZIMRA	Zimbabwe Revenue Authority

CHAPTER 1

INTRODUCTION TO THE STUDY

1.1 Introduction

In order to promote economic development and to improve the welfare of the populace, governments need to acquire adequate revenue to finance the provision of public goods and services (Calitz, Steenekamp and Black, 1999). It is important to note that taxation remains a major source of government's total revenue in developing countries. This reality is consistent with the assertion arising from a large body of literature that establishes taxation as a key mechanism for accelerating development, especially in Least Developed Countries (LDCs) (Yohou and Goujon, 2017). The design of a country's tax system is critical because it determines how much tax can be raised to finance public spending towards economic and social development (International Monetary Fund (IMF), 2017). In this respect, Bird, Martinez-Vazquez & Torgler (2004) suggest that it is more important to establish whether developing countries should tax more than they do to meet spending needs. Although several studies assume that more taxation is required to advance poor countries through public spending, Bird et al. (2004) argue that there is need to understand whether these countries have sufficient capacity to tax and whether it is commensurate with the nations' tax effort (Bird et al., 2004).

Against this background, there is need to ascertain the appropriate course of action required to raise adequate or additional tax revenue. This can be facilitated through the provision and interpretation of empirical evidence on the outcomes of existing tax systems to inform normative evaluation of tax policies. Literature posits that there are numerous economic and institutional factors that limit the amount of taxes that a country can actually raise. The greater part of the SADC is made up of developing countries that still require significant economic growth and development to match their counterparts in the developed world. In this regard, there is need to enhance the understanding of whether current tax systems in the SADC provide sufficient tax revenue to meet necessary public spending needs. As such, the substantive aim of this study was to assess the determinants of tax capacity and tax effort in the SADC in view of providing a pragmatic approach to tax policy design.

Berry and Fording (1997: 158) define taxable capacity as the "capability of a governmental entity to finance its public service." Similarly, Ahmad and Stern (1989: 1017) define taxable capacity as "the ability of people to pay tax and the ability of the government to collect, while

tax effort reflects the degree to which taxable capacity is used.” In this thesis, the term ‘tax capacity’ is synonymous with the term ‘taxable capacity’ and substantively defines a country’s maximum or potential level of tax revenue.’ Further, this study defines tax effort as the potential a country has to increase tax revenue at a given point in time (Ndiaye and Korsu, 2014). In this regard, Cyan, Martinez-Vazquez & Vulovic (2013) assert that “tax effort serves as an effective indicator and point of departure for tax reforms as well as an enduring indicator of the sufficiency of government revenues.” As such, proposals for practical tax policy changes should be guided by the realization of what is tenable with regards to tax capacity and tax effort.

Although some governments have not been successful in ensuring that individuals and businesses make contributions to the finance public expenditure, the presence of low tax ratios is not always indicative of limited capacity or capability to tax (von Haldenwang and Ivanyna (2011). In modest terms, the greater part of existing empirical evidence on the analyses of tax revenue performance does not support the heightened concerns over the vulnerability of tax effort in developing countries (von Haldenwang and Ivanyna, 2011). In this regard, von Haldenwang and Ivanyna (2011) are of the opinion that development policy in individual countries needs to be synchronized with the requirements which ensure that tax capacity is attained. Against this background, this study concurs with von Haldenwang and Ivanyna (2011) and Ndiaye and Korsu (2014) that it is important to determine the exogenous factors that influence tax capacity in order to inform those concerned with tax policy in individual countries and regions.

Notably, the recent years have been marked by repeated calls for SADC member states to consider raising adequate levels of revenue to finance their own developmental programmes. Nevertheless, it is unclear whether the SADC has been unable to adequately fund its own programmes because of the limitations from low tax capacity in generating tax revenue or due to lack of willingness to use the already-achieved maximum tax capacity to fund public investments which generate more tax revenue. In concurrence with Ndiaye and Korsu (2014), this study posits that understanding tax capacity and tax effort issues helps to guide countries on selecting the most appropriate measures for fiscal policy mix, especially in countries facing unsustainable public debts and fiscal deficits.

Against this background, this thesis focuses on an empirical analysis of tax capacity and tax effort in the SADC over the period 2002-2016. Although SADC is made up of 16 countries, this study focuses on 13 SADC member states which include Angola, Botswana, Eswatini

(formerly known as Swaziland), Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, United Republic of Tanzania (referred to as Tanzania herein), Zambia and Zimbabwe. The choices that influenced the selection of this sample are elaborated in section 1.6.

1.2 Background of the study

As part of its' drive to promote regional integration, the SADC Secretariat facilitates and coordinates fiscal policy guidance in relation to the macroeconomic convergence programme and the programme on cooperation on taxation for the region. In addition, the SADC Secretariat also seeks to facilitate the formulation and harmonisation of the regions' fiscal policies and to align them with other regional and international benchmarks. Nevertheless, progress towards coordination of tax regimes has been somewhat slow in view of the recent commitment by SADC member states towards the achievement of the Sustainable Development Goals (SDG's) and the African Union (AU) Agenda 2063. The Regional Indicative Strategic Development Plan (RISDP) identifies six potential sources of finance for development which include; (i) public finance, (ii) Official development assistance (ODA), (iii) debt relief, (iv) domestic savings, (v) Foreign Direct Investment (FDI) and Portfolio Investment (FPI), and (vi) Development Finance and the Development Finance Institutions network. In this regard, public finance, in particular tax revenue remains an integral part towards financing economic and social development in the SADC region.

It is apparent that there is unambiguous consensus supporting the notion that that building an effective tax system is vital for economic and social development in developing countries (Bird, 2008; von Haldenwang and Ivanyina, 2011; Mascagni, Moore and Mccluskey, 2014). From a global view, there is vast stock of literature on theory and empirical studies that have attempted to contribute towards building effective tax systems. Since taxation remains an essential component of government finance in most developing countries, it is imperative to assess the nature of tax capacity and tax effort. This necessary in order to establish the extent to which taxation can pragmatically support developmental and budgetary needs in developing countries or regions. Several studies have assessed the determinants of tax revenue performance in developing countries using the standard approach to explain how changes in economic structure, social and political conditions have affected tax revenue performance. (Teera, 2003; Imam and Jacobs, 2007; Mahdavi, 2008; Mkandawire, 2010; Morrissey and Clist, 2010; Bothole, 2011; Addison and Levine, 2012; Dioda, 2012). Using Stochastic

Frontier Analysis (SFA) a considerably smaller pool of studies extended the standard approach further to examine the determinants of tax capacity and tax effort in both developed and developing economies. This was used to ascertain whether sample countries attained their tax capacity and to determine the corresponding tax effort (Le, Moreno-Dodson & Bayraktar, 2012; Fenochietto and Pessino, 2013; Ndiaye and Korsu, 2014; Langford and Ohlenburg, 2015; Brun and Diakite, 2016; Yohou and Goujon, 2017). Methodologically, the extension of the standard approach permits researchers to determine the extent to which a country can tax given its economic structure and thus enables the estimation of how much more a country may hope to raise. In this regard, this leads to the identification of broad areas where tax policy efforts can be channelled in addition to variables imbedded in the economic structure.

There is limited empirical evidence of studies on the analysis tax capacity and tax effort in the SADC, however, researches have been conducted with respect to other aspects relating to tax revenue performance. Ade, Rossouw and Gwatidzo (2018) made an analysis of the determinants of tax revenue performance using panel data from 15 countries over the period 1990-2010. One of the major contributions from Ade et al. (2018) was the attempt they made to model the impact of Foreign Direct Investment (FDI) on tax revenue, particularly, the direction of causality. In another study, Garikai (2009) examined the determinants of tax buoyancy in the SADC using a panel data for 14 countries over the period 1994-2005. Glenday and Hollinrake (2005) examined the nature of the tax capacity using panel data for 13 SADC member states over the period 1990-2001. This was done by examining the influence of various structural features of the SADC countries in explaining differences in tax yields in order to explain differences in tax efficiency of the VAT and sales taxes across SADC Member States.

In spite of the contributions of research on the drivers of tax performance in the SADC, the development of this thesis is based on the belief that there is need to defamiliarize existing theoretical and empirical contributions on tax design and tax policy in order to provide a practical guide to the development, effective monitoring and evaluation of tax systems in the SADC.

1.3 Statement of the problem

According to Cyan et al. (2013: 4), “developing countries with lagging indicators in health, education, public infrastructure and regulatory services are commonly perceived to be in need of higher public spending to meet short term population needs as well as to put the country on a longer term development trajectory.” To a larger extent, this assertion is congruent with the

state of economic development in most of the SADC member states. As such, in 2017, the then Chairperson of SADC, former President Jacob Zuma of South Africa, reiterated the urgency of finding alternative and innovative ways of funding programmes at the 37th Ordinary SADC Summit of Heads of State and Government in Pretoria which was held on the 19th of August. Notably, some of the studies commissioned by the SADC secretariat suggest the introduction of import tax, export tax and financial transaction tax as alternatives for funding public expenditure ('Time SADC harnesses capacity to fund own programmes' 2017). There is wide acceptance that government expenditure is crucial in facilitating economic growth and development, particularly in developing countries. However, theory asserts that if government expenditure is largely comprised of non-productive spending, then this counteracts efforts towards igniting growth or development. Nevertheless, recurrent expenditure remains a major component of government expenditure in all member states in the SADC. In order to move towards more productive forms of spending, government needs to first take away as tax continues to be an important component of domestic resource mobilization. However, the prevalence of high public debts and fiscal deficits in the SADC is indicative of domestic mobilization challenges in member states in the region.

Notably, tax revenue remains indispensable in many developing countries as a source of funding for provision of public service or development projects. The motivation behind this study originates from the notion raised by Auerbach (1996:665) that "policymakers are often frustrated by the inability of economic research to provide clear and precise information on the economic effects of tax policy." This heightens the need to understand whether SADC countries have attained their full potential to tax (tax frontier) and whether maximum effort has been exerted to this effect. This presents a practical guide for tax policymakers on the way forward in view of the need to raise additional or adequate revenue for developmental programs. At the same time, the investigation made in this study provides information about the reality of the outcomes of tax systems over the period 2000-2016 by articulating whether countries operated below or above the tax frontier and the implications thereof. It is imperative for policymakers to appreciate and understand that poorly designed tax structures may result in weak and inadequate tax revenue performance from which a portion of additional public expenditure is expected.

Cyan et al. (2013) argue that the fundamental issue when estimating tax effort should be to bring out concepts that are of high relevance to developmental needs and budgetary ambitions

of a country and to serve as an indicator of potential tax reform needs. In this regard, while it may be prudent to understand the factors contributing to such performance, the assessment of the underlying principles which govern the foundation of the tax structures cannot be ignored. Notably, several studies on the determinants of tax revenue performance in developing countries appraise the outcomes of tax systems. However, there is ambiguity over whether countries would have attained their maximum potential to tax or whether their efforts have been sufficient to utilize such potential. In this regard, this study made an empirical analysis of tax capacity and tax effort in the SADC over the period 2002-2016 and is complemented by a narrative analysis of tax policy in member states over the same period.

Therefore, the nature of the problem with tax revenue performance in the SADC region is not necessarily on whether it is sufficient to meet budgetary needs but on whether member states achieve their potential tax revenue efficiently. Further, this study sought to determine whether changes in tax legislation have been related to tax revenue performance in the SADC.

1.4 Research objectives, questions and hypotheses

The substantive objective of this study was to assess tax capacity and tax effort in the SADC. This is against the background of the need to provide a pragmatic approach to addressing eminent and imminent problems that limit the role of taxation in financing development and budgetary needs.

1.4.1 Specific research objectives

The specific research objectives were as follows:

- (1) to determine the factors that influence tax capacity in the SADC;
- (2) to calculate tax effort in the SADC;
- (3) to ascertain the rank SADC countries according to their tax effort;
- (4) to evaluate whether there have been significant changes in tax legislation in the SADC over the period 2002-2016;
- (5) to proffer a pragmatic approach to tax policy design in the SADC;

1.4.2 Research questions

The following research questions were formulated:

- (1) What factors influence tax capacity in the SADC?
- (2) Are tax systems in the SADC countries operating below or above their potential?

- (3) What is the ranking for SADC member states in terms of tax effort?
- (4) Have there been significant changes in tax legislation in the SADC over the period 2002-2016?
- (5) What corrective measures can help to direct tax policy design in the SADC?

1.4.3 Hypotheses of the study

The study tested the following hypotheses:

- (1) Population, financial deepening, GDP per capita, openness and foreign aid have a positive influence on taxable capacity;
- (2) Political stability, corruption, government effectiveness and inflation are significant in explaining tax effort;
- (3) Tax effort in the SADC is insufficient to attain tax capacity;
- (4) There are significant changes in tax legislation in the SADC over the period 2002-2016;

1.5 Significance of the study

In view of the fact that the SADC is yet to graduate to the status of a developed region, additional revenue is required to promote further economic and social development. More importantly, taxation still remains an essential aspect of domestic revenue mobilization efforts towards raising adequate funds to finance development. In this regard, the research gap filled of this study follows from the thesis statement that there is need to assess whether SADC countries have attained their full potential to tax and whether maximum effort has been exerted to utilize such tax capacities. Further, it is important to determine whether the changes in tax capacity and tax effort are related to alterations in tax legislation of member states.

It is critical to note that many developing countries lack well-functioning Tax Policy Units (TPUs) to guide and inform tax policy debates on the basis of facts, data analysis and multidisciplinary efforts (IMF, 2017). The role of TPUs is to promote the integrity in tax systems and to inform stakeholders' enroute to achieving coherence, fairness, efficient and administrable tax systems. In this regard, TPUs are considered to be a crucial element in building tax capacity in developing countries (IMF, 2017). Although many SADC countries have made significant strides in establishing Tax Administration Authorities, relatively less success has been realized in establishing specialized TPUs. Grote (2017) suggests South Africa as one of the countries that has an established TPU, however, many other developing countries

governments still lack such units. Similarly, most of the countries in the SADC are yet to match the TPU of South Africa in terms of its functions and role in guiding tax reform.

Taking account of the absence of well-functioning TPUs in developing countries, Grote (2017) contends that lack of information makes decision making difficult and hinders the debate on tax reform. Further, this can lead to ill-designed tax policies or tax systems which are illegitimate in the eyes of the public, consequentially having a toll on tax revenue performance (IMF, 2017). In cognisance of the Memorandum of Understanding (MOU) on Taxation and related matters in the SADC, this study is affirmative that progress has been subdued towards formulation and harmonization of tax policies in the region in relation to the macroeconomic convergence programme. Since Keen (2012:9) contends that “we should not pretend that we lack guiding principles, or that broad commonalities of tax design and advice are necessarily inappropriate,” the inclination is that lack of progress on tax matters in the SADC has been perpetuated by the insufficiency of specialized tax policy studies and coordination of policy guidance. In this regard, this thesis presents research work that has potential to ignite thought on facilitating substantial adoption of the theory of taxation in developing countries that is consistent with maintaining and monitoring tax capacity and enhancing tax effort in the SADC.

While the standard approach is relatively common in assessing tax performance, its major drawback in previous studies was that policy implications could not be extended beyond assessing the feasibility of administering different kinds of taxes to improve tax revenue performance. Despite being able to control for heterogeneity in some instances, Bird (2008) asserts that a “one size fits all approach” is not always ideal as policy advice should be precise by articulating when generalisations are acceptable, and where specific recommendations may be more suitably applied to distinct countries or regions. However, to a larger extent, the standard approach cannot be explicitly recused from this limitation. From SFA employed in this study, it is possible to estimate the determinants of both tax capacity and tax effort, where the standard approach simply determines the factors influencing tax revenue performance. One of the most important implications arising from the use of the SFA is that it provides for broad policy guidance on tax reform in countries with different tax revenue levels of taxable capacity and revenue intake, hence, providing a more pragmatic approach to informing tax policymakers.

The standard approach has been used to assess the determinants of tax revenue performance in studies that include; Teera, (2003), Imam and Jacobs, (2007), Mahdavi, (2008) Mkandawire, (2010), Morrissey and Clist, (2010), Botlhole, (2011), Addison and Levine, (2012) Dioda, (2012). In contrast, the quantitative analysis in this thesis employed the SFA and is similarly situated with studies that include; Gupta, (2007), Le et al. (2012) Cyan, Martinez-Vazquez & Vulovic, (2013), Fenochietto and Pessino, (2013), Ndiaye and Korsu, (2014), Langford and Ohlenburg, (2015), Kroupova and Slaboch (2015), Brun and Diakite, (2016) and Yohou and Goujon, (2017).

Although the analysis of tax revenue performance has precedence in the SADC (Glenday and Hollinrake 2002; Garikai 2009; Ade et al., 2018), the originality of thesis comes from raising awareness on known conceptual tax design issues by departing from the conventional habituated ways through the use of a mixed method approach. This interpretation of ‘originality’ is inspired by the notion postulated by Lodge (1992) where defamiliarization is viewed to be another form of originality. This thesis offers an opportunity to re-view and rethink tax capacity and tax effort in the SADC by bringing insight into tax design issues that are otherwise unfamiliar in tax policy analysis done on the region. The original contribution of this study is the use of a mixed method approach, involving a Stochastic Frontier Approach (SFA) to assess the state of tax capacity and tax effort in the SADC as well as a narrative approach to augment to determine whether SADC countries have attained their full potential to tax and whether maximum effort has been exerted to utilize such tax capacities. In addition, the study determines whether the changes in tax capacity and tax effort are related to alterations in tax legislation of member states.

As such, the major contribution of this study is that it provides useful insight obtained from the policy implications derived from estimates of tax capacity and tax effort in the SADC. In this regard, the study offers policy recommendations pertaining to tax policy in relation to the regions’ macroeconomic convergence criteria and in view of the MOU of Cooperation on taxation and related matters. Hence, the study provides a possible footing for future tax reforms in the SADC region towards tax harmonization as one of the essential elements for effective regional integration. Additionally, this study offers a foundation for other researchers to conduct studies to examine the determinants of tax harmonization in the SADC, in view of the need to promote regional integration as done in other regional groupings like the European Union (EU).

1.6 Methodology

The methodology of this study involved the use of a mixed methods approach, in view of the need to ultimately provide a pragmatic approach to tax policy design in the SADC. The method employed considers both quantitative and qualitative analysis, where the latter is used to aid in explaining the results obtained in the former. In this regard, the analysis of this study was done in two phases.

1.6.1 Phase one: Quantitative analysis

The first phase involves the estimation of a stochastic tax function of total tax for 13 SADC member states namely, Angola, Botswana, Eswatini (formerly known as Swaziland), Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, United Republic of Tanzania (Tanzania), Zambia and Zimbabwe. The exclusion of Madagascar and Comoros from analysis is because the period of analysis (2002-2016) includes the time before these countries joined the SADC in August 2005 and August 2018 respectively. The Democratic Republic of the Congo is also excluded because it left the regional grouping in 2004 and rejoined in 2007 and thus creating a gap in the countries time series as a member of the SADC. Although Seychelles graduated to a high-income group status in 2015, it was largely considered as a developing country over the greater part of the period of study 2002-2016, hence its inclusion in the sample of SADC countries.

The stochastic frontier analysis used in this study specified the maximum amount of tax revenue that SADC member states could collect from a set of determinants of revenues. Further, the study was able to estimate the determinants of tax effort. The stochastic frontier approach sets out a tax frontier in which, taxation is the highest level of taxation feasible under the given set of country conditions. In this regard, it estimates a measure of tax capacity in the country given its economic, institutional, social and demographic characteristics (Cyan et al., 2013). One of the major contributions arising from the employing the SFA is that the study was able disentangle tax effort of tax revenue performance, which is not apparent when using the standard approach. Moreover, this study disentangles random effects from tax effort and further disentangles short-run tax effort from long-run tax effort. The estimation procedure entailed the use of a single equation where parametric distributional assumptions were applied assuming heteroskedasticity in the variance of error of tax effort and the idiosyncratic error component. Tax effort is classified as persistent (long-run) and transient (short-run) where the latter is more inclined to tax policy and the former relates more to tax administration issues.

Nevertheless, the use of tax policy in the long-run may be to reorient or restructure the tax system to reduce persistent technical inefficiencies. Although there are studies that focused on tax effort, there is no evidence of studies that have used a four-component model in a tax frontier as done in this study.

The estimation procedure entailed the use of a single equation where parametric distributional assumptions were applied assuming heteroskedasticity in the variance of error of tax effort and the idiosyncratic error component. The study estimates the random-effects separate from tax effort in order to capture the time- invariant country-specific effects. Further, tax effort is classified as persistent (long-run) and transient (short-run) where the latter is more inclined to tax policy and the former relates more to tax administration issues. Nevertheless, the use of tax policy in the long-run may be to reorient or restructure the tax system to reduce persistent technical inefficiencies. In this regard, despite the contribution of studies on the SADC such as Garikai (2009) and Ade et al. (2018), this study was able to estimate the determinants of tax capacity and estimate tax effort of individual countries. Further, the study was able to estimate the determinants of tax effort and to rank each member state according to its tax effort over the period 2002-2016. The determination of factors that influence tax effort portrays a much clearer agenda for comprehensive tax reform.

1.6.2 Phase two: Qualitative analysis

The second phase involves a narrative analysis of tax legislation in the SADC over the period 2002-2016. The method pursued here was inspired by Romer and Romer (2010) who conducted a narrative analysis of federal tax legislation in the United States over the period 1945-2007 as well as Cloyne (2012) who provides a narrative account of all legislated discretionary policy changes in the United Kingdom from 1945 to 2009. The study uses budget statements and Acts of parliament as the major sources of information to identify every significant piece of tax legislation over this period. In addition, the study uses other sources (where possible) to determine the main reason for each action and classified them into one of four categories namely;

- responding to a current or planned change in government expenditure,
- counteracting other influences on economic activity,
- reducing an inherited budget deficit, and
- the need to increase long-run growth.

Finally, the study classifies each tax change depending on whether:

- the intention was that it would be temporal or permanent,
- it centred on changing marginal tax rates, and
- it significantly changed investment incentives.

The results of the narrative analysis are presented subsequent to the quantitative results obtained in the first phase.

1.7 Assumptions

This study adopts and modifies some of the assumptions postulated by Tanzi (2006) as follows:

- i. The theoretical framework of this study assumes that tax policy is targeted to benevolent governments. This permitted the study to discuss tax policy choices in isolation of institutional choices.
- ii. Those who represent the government are driven not driven by public interest alone, hence personal interests have a role to play in decision making. This assumption permitted the study to address the institutional dimension to tax design. This made it plausible to factor in corruption, rent seeking behaviour or “state capture’ in the analysis.
- iii. The empirical evidence obtained from the analysis of tax capacity and tax effort in the SADC over the period of study 2002-2016 is based on reliable data and accepted economic principles that establish the association between the dependent variable and independent variables. This implies that the policymakers can determine, with a reasonable degree of accuracy the effect of change in policy instruments and the effect on tax revenue performance.
- iv. Tax policy instruments are set in legislation and can only be altered by enacting new laws or changing existing laws. Further, the laws are deemed to be clear, specific and possessing minimal noise such that it is possible to determine what a specific law seeks to change and what policy objective it seeks to address. This implies that changes in tax legislation cannot efficiently address numerous objectives.
- v. The executive branch of government must be able to control the instruments of tax policy within clear constitutional limits, not the parliament. The latter should be able to amend or approval proposals submitted by the executive but not to make major changes to it.

- vi. The study assumes that the size of the shadow economy in the SADC is considerable (see Appendix A).

1.8 Delimitations

- This study adopted a mixed methods approach to assess tax capacity and tax effort in the SADC region using panel data for 13 countries over the period 2002-2016.
- The scope of this analysis is future oriented and normative with the intention to guide tax policy action by testing the prepositions on the influences of tax capacity and tax effort in the SADC as well as the provision of a narrative analysis on changes in tax legislation in the SADC over the period 2000-2016.

1.9 Organization of the rest of the study

The thesis is structured as follows:

Chapter 2 moves on to the theoretical framework of the study which centres on the theory of taxation in developing countries as a guide to providing explanations of observed phenomenon and making predictions based on the analysis in this study. The chapter provides a substantive definition of tax and outlines the characteristics of taxes to delineate the context of taxes in the SADC. Further, the chapter discusses the economic perspectives guiding this study and the objectives of taxation as well as the principles of a good tax system and the classification of taxes.

Chapter 3 focuses on elucidating the nature of tax policy in developing countries by considering the origins, objectives and general issues of relevance when developing tax policy for a developing country. In addition, the chapter discusses some of the major challenges of tax policy and the considerations made when attempting to select the most appropriate tax mix or 'right' tax system.

Chapter 4 provides an overview of tax systems in the SADC in order to enhance the understanding of the background and evolution of tax systems of member states. It initially focuses on the global picture of taxation and moves on to articulating the historical, political and macroeconomic background of the SADC. Further, the chapter discusses the composition of tax structures and the current tax systems thereof in individual countries. The chapter also benchmarks current tax systems in the SADC against international standards to establish the standing of the region.

Chapter 5 discusses the role of the political economy of taxation and primarily focuses on explaining some of the prominent political constraints that influence tax policy and tax systems in developing countries.

Chapter 6 moves on to the theoretical and empirical review of the determinants of tax revenue performance in developing countries to ascertain the state of scholarship on that area and the various methods used in analyses. The chapter focuses on providing some of the different definitions of tax capacity and tax effort as well as the theoretical and empirical determinants of tax revenue performance in developing countries and the approaches used to assess tax revenue performance and vulnerability issues.

Chapter 7 focuses on the research design and methodology of the study and primarily focuses on elucidating the selection of the research approach. The chapter provides an overview of the research approach, philosophical assumptions, research philosophy, research strategy, research choice and the time horizon. Further, the study articulates the techniques, procedures and research instruments.

Chapter 8 then displays the estimations and interpretation of the findings from the analysis of tax capacity and tax effort in the SADC region. The chapter provides summary statistics and various pre-estimation and postestimation diagnostic tests and the estimates of tax capacity and tax effort thereof. The narrative analysis is provided subsequent to the quantitative results to augment the findings from the Stochastic Frontier Analysis.

Finally, Chapter 9 closes the thesis with findings, thesis contribution and policy recommendations.

CHAPTER 2

THE THEORETICAL FRAMEWORK OF TAXATION IN DEVELOPING COUNTRIES

2.1 Introduction

There exists a huge stock of wealth of theories on taxation, however, the central focus of this chapter is to introduce and discuss some of the key definitions, concepts and theories on taxation in developing countries. There the main aim of the chapter is to ascertain whether the theoretical framework of this study offers directives that can influence tax policy in the SADC. In order to bring clarity to the central focus of this chapter, the study developed eight key review questions as follows:

- i. How is tax defined?
- ii. What are the characteristics of taxes?
- iii. What is the prime goal of taxation with reference to the purpose of this study?
- iv. What are the main tenets of a good tax system?
- v. What are the main dimensions, ways or approaches of analysing tax revenue performance?
- vi. What is the nature of the recipient of tax policy advice?
- vii. How are taxes classified?
- viii. To what extent do the directives of the theory of taxation in developing countries guide tax policy?

The answers first and second questions address the need to have a substantive definition of tax and the characteristics of tax since there are other forms of non-tax revenue that could be easily be mistaken for tax. Thirdly, the study revisits the prime goal behind taxation to delineate the focus of the study, in order to retain consistency and relevance to the overall purpose. Fourthly, this study considers the elucidation of the main tenets of a good tax system, where apparently, most of the aspects link with administrative issues of the tax system. The motive coils around the need to establish the standard of tax systems that any tax policy ought to achieve. The fifth review question is answered by considering the two main dimensions (economic approach and administrative approach) that are often considered in literature when analysing tax performance. In this regard, this chapter discusses the economic and administrative approaches to tax design, while chapter 5 offers deliberations on the political economy of taxation. The

answer to the sixth question considers the nature of the intended recipient of tax policy advice and is related to the first assumption of this study which was discussed in the first chapter. This restricts the review to the discussion of theoretical underpinnings related to policy choices in the absence of institutional dimensions. The answer to seventh review question addresses the need to bring insight into the classification of taxes based on tax progression, tax incidence and tax base. Overall, this helps to understand some of the phenomenon behind the evolution of existing tax systems.

The answer to the last review question is found in the conclusion of the chapter. In view of the need to create a direct association between this thesis, tax practitioners and policymakers in the SADC, this study predominantly deals with the concepts and theoretical underpinnings that are aligned to taxation in developing countries. This preference was guided by the need to draw from a more appropriate theoretical base that is instrumentally relevant to generate practical evidence-based solutions for the SADC.

The next two consecutive subsections focus on the definition of tax and its characteristics. This is followed by a subsequent section on the economic and administrative approaches to analysing taxation. The next subsection then considers the link between welfare economics and the theory of taxation. The next subsection explains the objectives of taxation. This is followed by the subsection on the discussion of the main tenets of a good tax system. The next subsection focuses on classification of taxes according to three forms of basis. Lastly, the chapter ends with a conclusion.

2.2 Definition of tax

Messere and Owens (1987) argue that it is difficult to define and identify taxes. According to the Organization for Economic Cooperation and Development (OECD, 1996: 3), “the term “taxes” is confined to compulsory, unrequited payments to general government. Taxes are unrequited in the sense that benefits provided by government to taxpayers are not normally in proportion to their payments.” Nonetheless, the keywords to the definition provided by OECD (1996) are problematic. The two major concerns are over the use of the word unrequited, which implies that the benefits provided by government are not proportionate to the payment made by taxpayers (James and Nobes, 1998). Secondly, the use of the words ‘general government’ is regarded as worrying because the composition of what holds as general government differs across the world (Messere and Owens, 1987). Consequently, James and Nobes (1998) define a tax as a compulsory levy made by public authorities for which nothing is received directly in

return. However prior to this definition, Messere and Owens (1987) criticized the use of the term ‘compulsory’ because of the existence of payments made by citizens to government, which are compulsory but difficult to classify as taxes. For instance, passport fees and contributions to social security funds.

Different economists have arrived at different definitions of what a tax is, however, this study adopts the definition by OECD (2004) because in most circumstances the definition also appears on statistical standards developed by international organisations such as the IMF, OECD, Eurostat and ILO. In the context of this thesis, *“taxes are compulsory, unrequited payments, in cash or in kind, made by institutional units to government units; they are described as unrequited because the government provides nothing in return to the individual unit making the payment, although governments may use the funds raised in taxes to provide goods or services to other units, either individually or collectively, or to the community as a whole”* (OECD, 2004).

2.3 Characteristics of taxes

Just as the economic definitions of tax vary, it is prudent to reduce ambiguity on the characteristics of taxes since the main sources of government funding come from tax revenue and non-tax revenue. Following the substantive definition of tax adopted in this study, this section elucidates on some of the basic characteristics of a tax that distinguish it from other forms of non-tax revenue like grants, fees and fines.

(a) Taxes are compulsory

Weier (2006) defines the compulsion of tax to imply that a taxpayer has no choice regarding making their contribution. In most countries, practical and effective taxation happens through the imposition of tax laws, which make it legally binding to contribute tax. However, this implies that objection or refusal by taxpayers to honour their obligations can be regarded as an offence punishable by law (Weier, 2006).

(b) Taxes are payable by institutional units

According to OECD (2015: 372), an institutional unit is “an economic entity that is capable, in its own right, of owning assets, incurring liabilities, and engaging in economic activities and transactions with other entities.”

(c) Taxes are unrequited payments

As alluded to by Messere and Owens (1987) and OECD (2004), making unrequited payments implies that the benefits provided by government are not proportionate to the payment made by taxpayers. In simple terms, government does not offer any service in return to the individual entity who makes tax payments. Nonetheless, the imposition of taxes is generally for public purposes in order to raise funds for public expenditure (Weier, 2006).

(d) Tax payments can be in cash or kind

Although the provisions of the definition of a tax provides that tax payments can be made in cash or kind, normally, institutional units in most countries make their payments in cash. (OECD, 2004).

(e) Taxes are contributions

The rationale of contributing taxes is that it is the responsibility of every institutional unit to support government by contributing their share towards funds for public expenditure (Messere and Owens, 1987). This is in view of the notion that there are public services like street lighting and national security that require the use of public finances as individuals cannot tend to them. Against this background, citizens may need to support such causes (Messere and Owens, 1987).

(f) Yield no direct benefit

Unlike other forms of non-tax revenue like fees, the taxpayer obtains no direct benefit from contributing taxes. While it is noble for governments to pursue the intended goal of raising revenue for public expenditure, often the return to citizens is seldom proportionate (Weier, 2006).

(g) Taxes come from income or wealth

For institutional units to contribute towards taxes, governments observe their income or wealth. As long as there is generation of income or wealth, it is crucial for institutional units to honour their obligations in support of the government. According to OECD (2004), income subject to tax refers to all sources of income liable to tax without taking account of tax allowances. The latter refers to the amount of income on which one does not have to pay taxes (Cambridge dictionary).

(h) The recipient of taxes are governments

OECD (2004) describes government as the recipient of taxes. Normally tax authorities are responsible for tax administration as part of government departments in ministries or

independent government agencies. Generally, the rationale of remitting taxes to government is to support it as entity or representative body that provides public services to its citizenry that private players would otherwise not provide.

(i) Prime objective is to raise revenue for public spending

Weier (2006) suggests that the primary goal of imposing taxes is to raise revenue for public expenditure. This is a commonly shared view by economists in public economics and thus forms the foundation of various theories including the theory of optimal taxation and the theory of taxation in developing countries (Tanzi and Zee, 2001; Bird and Zolt, 2008).

2.4 Approaches to analysing taxation

Given the need to provide a theoretical base to inform this study, this section focuses on a wider perspective to the analysis of taxation in developing countries. According to Di John (2006), three main approaches have informed the extensive research on the determinants of tax collection and tax reform and these include the economic approach, administrative approach and the political approach. Nonetheless, the first two approaches have been relatively influential in both theoretical and policy debates on taxation in developing countries (Di John, 2006). Notably, in order to move as close as possible to proffering pragmatic solutions towards tax policy in the SADC, it is critical to consider the influence of both technical and institutional factors. Against this background, the following consecutive subsections provide a brief overview of the economic and administrative approaches to the analysis of taxation. In addition, Chapter 5 offers a more detailed account on the political economy of taxation in developing countries.

2.4.1 The economic analysis to taxation

According to Profeta (2003) and Di John (2006), the economic approach primarily deals with understanding the structure of tax systems and the adoption of fiscal reforms through the assessment of the trade-off between equity and efficiency. Di John (2006) limits the scope to a setting of a general equilibrium framework. Similarly, the Institute of Fiscal Studies (IFS, 2010) asserts that there is need for a framework for thinking about how to judge tax systems on particular aspects that include its effects on distribution and efficiency. In this regard, this necessitates the establishment of the criteria of a good tax system as the starting point to the economic approach to tax design (IFS, 2010). Although there is widespread acceptance of what makes a good tax system, it is crucial to consider distribution and efficiency issues in a way

that resonates with the setting of a given country. While, IFS (2010) use the optimal theory of taxation as their basis of understanding the trade-off between efficiency and equity goals, this thesis primarily focuses on the theoretical underpinnings on taxation in developing countries.

The economic approach is non-representative of the role of institutional in determining the capacity of governments to create and implement tax policies (Di John, 2006). In addition, it does not offer reasons as to why tax structures are different in comparable economies (Di John, 2006). In view of the need to address some of the limitations of the economic approach, this study augments its use by adopting the administrative and political economy approaches to taxation.

2.4.2 The administrative approach to taxation

The shortcomings of concentrating on tax policy (choice of taxes) in isolation is that it reduces the consideration of the aspect of tax administration. Bird (1989) argues that tax reform without regard for administrative issues may be misleading and therefore asserts that ‘tax administration is tax policy’ (Bird 1989: 315). The administrative approach centres on improving the effectiveness and efficiency of tax systems through institutional design and policy. Efficiency refers to the administrative costs involved in the collection of different kinds of taxes, cost of taxpayer compliance and enforcing tax laws. Effectiveness defines the degree to which taxes are predictable, transparent, and enforceable by a fair judicial system. The relative importance of the administrative approach lies in its ability to explain the factors that influence the capacity of governments to collect revenue (Di John, 2006).

According to Di John (2005), there are peculiar issues that are shared by tax systems in developing countries that limit the feasibility of tax policy. Bird (1989) argues that the nature of a country is an important determinant influencing the course of tax policy. In this regard, several factors are crucial in understanding the role of tax administration in an economy, as it is insufficient to presume that governments should only worry about raising some desired level of tax revenue (Bird, 1989). Other critical factors observed in developing countries include illiteracy, inadequate skilled human resources, obsolete equipment and facilities, lack of land title, lack of information on taxpayers, the costs associated with compliance and the costs of enforcement of laws (Bird, 1989). Therefore, the question of what to tax becomes relatively important as answering the question of how-to tax. Based on the administrative approach, Di John (2005) asserts that tax policies in developing countries should consider the capacity for

tax administrators to implement, use simplified tax rates and laws as well as being subjected to minimal political influence.

Nevertheless, the administrative approach has its own inadequacies as it assumes that tax administration is a static concept and yet in reality, change is inevitable. The approach is criticised for its inability to explain the reasons behind change (Di John, 2005). In this regard, there is no confident claim made to support why differences in tax capacities occur and why robust tax policies are not enforced (Di John, 2005). Against this background, this study extends the theoretical framework beyond the postulation emanating from literature on the economic and administrative approaches to taxation in developing countries. Hence, chapter 5 discusses the role of the political economy of taxation in developing countries.

2.5 Linking welfare economics and the theory of taxation in developing countries

In view of the overall objective to provide a pragmatic approach to tax policy design in the SADC, this study relies on other forms of research knowledge besides policy literature. In order to make a case and simplify the economic approach to taxation, this study adopts the welfare economics view as the ideology influencing government. This explicitly allows focus to centre on the technical aspects of tax design that are within the control of government in developing countries. According to Sugden (2012), the implicit assumption in welfare economics is that the motivation of government or the policymaker (social planner) is the overall good of society. In addition, welfare economists form an imagination of reality by assuming the perspective of a spectator (someone outside the society). The spectator is impartial regarding the preferences and interests of various agents in the society under consideration, hence resulting in the exclusion of private interests and biases from analysis.

Any form of tax policy advice given is often, if not at all times addressed to government or policymakers. This may be the reason why scholars often carry out various researches from which they draw policy implications and make recommendations for action to the policymaker. With reference to practice of taxation in the SADC, it becomes crucial to understand what government seeks to achieve and why they intend to do so, nonetheless, this is established in chapter 4. The notion of attaining a good tax system is equally important to developing countries, hence it remains paramount to understand how the theory of taxation integrates with the views of a benevolent government.

Contrary to the view that governments are benevolent, this study acknowledges that in reality there are two additional possibilities that limit the implementation of robust tax policy. The first possibility is suggested by Tenhunen (2007) that government is a ‘choice architect’ who ultimately determines what would be best for the society after considering all the factors influencing its decisions. Although the view of the impartial benevolent spectator is idealistic, it would be prejudicial to pretend that we can wish away the influence of factors in the environment in which tax decision-making occurs (Tenhunen, 2007). In general, this is because there will always be economic, social and political challenges that threaten to weaken the implementation of economic policy. As such, the policymaker has the power and responsibility to give society what they think is best since individuals do not decide for themselves (Tenhunen, 2007). The second possibility however, is that it is also possible that the policymaker maybe oblivious of the recommendations of the impartial benevolent spectator because they do not share the same philosophy position (Sugden, 2012).

The resulting limitations of the economic approach suggested by Sugden (2012) are consistent with the emerging need to provide a wider perspective to taxation in developing countries. Against that background, the subsequent chapter dwells on the concepts of the political economy of taxation. This will aid to bring insight into why the second possibility reiterated above, may become an inherent phenomenon. Notwithstanding this, the assumption in this study on the economic approach to taxation is that government is an impartial benevolent authoritarian who would implement tax policy from the view of an impartial benevolent spectator (benevolent government).

2.6 Objectives of taxation

Although the primary function of taxation is to raise revenue for public expenditure, there are several reasons why government may impose taxes such as using it as a tool for redistribution and regulation (Ahmad and Stern, 1989; Burgess and Stern, 1993; Bird and Zolt, 2008). Nonetheless, the focus of this thesis is on the primary goal of raising tax revenue.

2.7 Principles of a good tax system

This section primarily focuses on practice literature derived from tax practitioners. Wallace and Wray (2016) suggest that practice literature is important as experienced practitioners may provide accounts of how things are done as well as information on how they feel about the environment in which they operate. In this regard, this allows the world and policymakers to

understand better how practitioners operate. Since taxpayers and government are associated by taxation, this study concurs with Wallace and Wray (2016) thus, taking the position that the shortcomings of tax systems are observed and relayed better by tax practitioners than government itself. Accordingly, ACCA (2009) asserts that there is need to describe what would constitute a tax system that is efficient and fair in the 21st century. This comes against the backdrop that times have changed since Adam Smith who postulated the four canons/tenets of a good tax system in 1776.

There is widespread consensus that a “good” tax system is reflective of a design that comes from an appropriate set of rules. Tax practice often brings together several practitioners that include economists, legislators, tax practitioners and taxpayers (Nellen, 2002). In this regard, various researchers have come up with their own tenets of a good tax system and these include the Association of Chartered Certified Accountants (ACCA, 2009), the Institute of taxation and Economic Policy (2012), Mercier (2013) and the American Institute of Certified Chartered Accountants (AICPA, 2017) among others.

2.7.1 Purpose of developing principles of a good tax system

Tax reform proposals often seek to alter existing tax rules and consequently change aspects of tax systems. The need for tax reform is evidenced by the establishment of various tax initiatives that have come up following the adoption of the Sustainable Development Goals (SDGs) in 2015 (United Nations, 2015) and the Addis Tax Initiative (July 2015). In the latter, 55 countries became signatories to the initiative and committed to improving taxation, moreover, 16 out of the 55 are African countries (International Tax Compact, ITC, 2015).

Slemrod (2016) posits that there is need to understand that tax policy is tax system policy. This implies that there is need to enhance the understanding of the theoretical and practical issues that have led to the structure of existing tax systems and the role that tax policy to move present day tax systems towards their tax capacity. Normally, politicians, economists, tax practitioners and other concerned stakeholders will often debate on tax proposals that have potential influence on national and subnational tax systems. In this regard, there is need for an objective framework for evaluating and improving the tax rules that govern tax systems. Consequently, some tax practitioners and researchers have come up with an array of widely accepted principles of a good tax system. These are commonly known as the tenets of a good tax system (AICPA, 2017).

Mercier (2013) is of the opinion that since the primary goal of taxation is to raise money to finance public expenditure, tax should not be used to control behaviour. In this regard, policymakers are encouraged to resist the temptation of using tax codes that will push their private interests over advancing economic interests and prosperity of citizens. Although taxation will always cause some distortion of some sort in the economy's performance, it is important to minimize the harm of tax burden. This essentially motivated tax practitioners to come up with the fundamental tax principles would be to provide a guide for tax policymakers (ACCA, 2009; ITEP, 2012; Mercier, 2013; AICPA, 2017).

The value assumption made here is that if we disregard the notion of using taxation to control behaviour, then it simplifies the attempt to use the tenets of a good tax system to explain how things should be or how to make improvements to minimize the harm of tax burden. This assumption argues the use of the economic approach as a broad perspective forming the basis upon which the principles tenets of a good tax system are founded.

2.7.2 Principles of a good tax system

The canons developed by Adam Smith included equity, efficiency, convenience and certainty (ACCA, 2009). The equity principle stated that every individual in a given state, ought to contribute to supporting the government through tax in way that is proportionate to their respective abilities. The principle of efficiency stated that the design of a tax should not result in the cost of collection becoming inordinate relative to tax revenue. The third canon of convenience emphasizes the need for convenience in the manner and time at which the taxpayer makes their contribution. Lastly, the canon of certainty is based on the notion that the tax that each individual is supposed to pay should be certain and not arbitrary, regarding the time, manner and amount to be paid. Accordingly, ACCA (2009) asserts that in modern times, the principle of equity seems to support progressive taxation, hence, it is argued that this would be fair. However, it becomes more of a political question than a fact in instances where huge inequalities exist in terms of the distribution of wealth and income.

Table 1 provides a summary of tenets of a good tax system. The tenets (canons) of a good tax system have since been extended further from the four postulated by Adam Smith in 1776. The rationale for the extension was that there was need to establish a set of principles that would offer a comprehensive guide to governments in pursuit of effective tax policies. However, this does not imply that all the tenets would have to be fulfilled as a package. This is contrary to Adam Smith's four canons as these came across as general facts (ACCA, 2009). Similarly,

Nellen (2002) asserts that when considering tax reform proposals, it is important to check whether the proposed changes conform to the design of a good tax system.

Table 1: The principles/tenets of a good tax system

Principle	Brief Description	Source
Simplicity	The tax code should be easy for the average citizen to understand and minimize the costs of compliance with tax laws.	ACCA (2009) Mercier (2013) ITEP (2012)
Accountability	Taxes and tax policy should be observable and not concealed from taxpayers. Similarly, any improvements or changes should be public and open to public debate. Accessibility and visibility of information on tax laws is crucial.	ACCA(2009) Mercier (2013) AICPA (2017)
Economic Neutrality	The tax system should bring forth minimal impact on business and expenditure decision making of individuals and businesses. The effect should not make one question their decision to carry out a transaction.	Mercier (2013) ITEP (2012) AICPA (2017) ACCA (2009)
Equity and fairness	A fair tax system should be such that all taxpayers are treated the same by not either shifting tax burden between classes of citizens or to reprimand success. In essence, there is uniformity in the treatment of similarly situated citizens. Horizontal equity will result in the application of the same tax rules to individuals with similar income and/or assets. On the other hand, vertical equity refers to situations where the imposition of tax will take more from those with higher earnings and thus focuses on the ability to pay.	Mercier (2013) ITEP (2012) AICPA (2017)
Complementary	The tax code should help to preserve good relationships between the different levels of	Mercier (2013)

	government, for instance local and central government. Tax decisions at one level should not bring detrimental effects to the other level.	
Competitiveness	Business activity is common in places where there is low tax burden, thus governments can use this as an instrument to attract productive business. A low tax burden fosters economic growth and wealth creation. Further, competitiveness brings more involvement that of the public and the end of micromanagement by policymakers and political favouritism.	ACCA (2009) Mercier (2013)
Appropriate government revenues	There should be balance, reliability, stability and predictability of appropriate government revenue levels. Effectiveness in a tax system comes from attaining the broad-based feature, avoiding special exemptions and the use of low tax rates that do not have many gaps. A high-quality tax system should be stable, meanwhile it should exert certainty of taxation and revenue flows. Likewise, businesses and individuals should be able to plan financially.	Mercier (2013) AICPA (2017)
Certainty	Tax rules should not be ambiguous. There should be clarity on the amount of tax due, the mode of payment and the specific time when the payment is due.	ACCA (2009) AICPA (2017)
Convenience	Convenience of time and the manner of paying taxes is crucial to the contributor of taxes.	AICPA (2017)
Effective tax administration	For government, the tax system should be easy to administer and to foster low-cost but efficient administration. The costs of collecting a tax should be the least possible for government and taxpayers.	Mercier (2013) AICPA (2017)
Information security	Tax authorities should protect taxpayer information from unintended and improper disclosure.	AICPA (2017)

Economic growth and efficiency	A tax system should not distort the productive capacity of the economy.	AICPA (2017) Mercier (2013)
Transparency and Visibility	Taxpayers should have knowledge about the existence of a tax and time of imposition as well as and the manner of imposition.	ACCA(2009) Mercier (2013) AICPA (2017)
Minimum tax gap	The structure of tax laws should minimize non-compliance.	AICPA (2017)
Tax is subject to rule of law	Taxpayers are morally obliged to pay taxes in accordance with the stipulations of the law.	ACCA(2009)
Regularly reviewed	There is need to regularly review tax laws and evaluate whether they still conform to the purposes they were created for.	ICAEW (1999)
Subject to proper consultation	Genuinely collaborated consultation is key to gaining support and constructive criticism on proposed tax policies.	ICAEW (1999)

Source: ICAEW (1999), ACCA (2009), ITEP (2012), Mercier (2013) and AICPA (2017)

The establishment of the principles of a good tax system is of great importance because it provides a guide for tax policy that aims at creating an ideal tax system. The relevance of the principles emanates from the notion that tax practitioners have put forward the elements of the kind of system they regard as best. This may be perceived as an acknowledgement of commitment to fulfilling tax obligations as long as taxing authorities take cognisance of some of the key issues raised. This implies that governments ought to formulate tax policies that resonate with these principles since non-tax compliance compromises tax revenue collection. Hence, the fulfilment of the aforementioned principles may aid to reduce tax evasion, tax avoidance and non-compliance.

Notably, different scholars agree that the canons postulated by Adam Smith remain largely uncontested and that further frameworks provide a practical guide to the assessment of tax systems and tax policy proposals.

2.8 Classification of taxes

The previous sections of this chapter provide the definition of taxes and characteristics of taxes in order to generate an understanding of the nature of the prime subject of this thesis. However,

it is important to extent this insight by providing an explanation on how taxes are classified. The intent is to shape the understanding of the basis of taxation as the foundation upon which a tax system is used to collect revenue. Since literature suggests that prevailing tax systems reflect the outcome of tax policy decisions, the different classifications of taxes discussed in this section are deemed crucial in informing decision-making tasked with the responsibility to select the 'right' tax system. This section predominantly focuses on three basic forms of categories that include; based on incidence, the basis of progression and the basis of base.

2.8.1 Basis of incidence

Incidence of tax refers to the determination of the economic entity that eventually pays the tax (OECD, 2004). The use of tax incidence as a basis for taxation is the most common classification covered by literature in public economics and is either direct or indirect. The concept of incidence aims at showing how real income of households declines due to taxation (Ahmad and Stern, 1989; San and Younger, 2003). It is not clear where the terminology 'direct' and 'indirect' came from; however, it is clear that the classification originated from an administrative distinction (Hicks, 1946). The consideration by tax administration authorities' is whether directly or indirectly approach a definite group of potential taxpayers (Hicks, 1946).

2.8.1.1 Definitions of direct taxes and indirect taxes

Martinez-Vazquez, Vulovic & Liu (2011) define direct taxes as those that maybe modified to suit the specific features of the taxpayer. In simple terms, direct taxes are charged and collected directly from the entity who is supposed to bear the tax (James and Nobes (1998). The collection of direct taxes normally goes through an intermediary (for instance an employer). Hence, it is possible for the taxpayer not to have any contact with the tax authorities. Further, the assessment and collection of direct taxes can be dependent on the circumstances of the individual (James and Nobes, 1998). Examples of direct taxes include corporate income tax, personal income tax and land tax among others (Ahmad and Stern, (1989).

Indirect taxes refer to those that are levied on transactions regardless of the condition in which the buyer or seller (Martine-Vazquez, et al., 2011). In addition, indirect taxes are not directly collected from the entity that is supposed to bear the tax (James and Nobes, 1998). Although one entity / person undertakes the payment of tax, collection occurs on another. As such, the prices of goods and service normally include indirect taxes, which may not be noticeable on the bill. However, individual circumstances do not affect indirect taxes that may depend on the

nature or characteristics of goods that people buy (James and Nobes, 1998). Table 1 shows some of the common differences between direct taxes and indirect taxes. Examples of indirect taxes include Value Added Tax (VAT), excise taxes, tariffs and sales tax among others (Ahmad and Stern, 1989).

Table 2: Differences between direct taxes and indirect taxes

Direct taxes	Indirect taxes
It is easier to spread equally the tax burden	More stable and systematic source of revenue.
Delayed tax revenue	Collection fast and constant.
High cost of gathering	Costs are low
Developed tax administration	Can impose higher burden on poorer people.
People try to avoid them	Depend on the cycle

Source: James and Nobes (1998)

2.8.1.2 Merits of direct taxes

Below are some of the merits of using direct taxes that relate to the principles of a good tax system:

- (a) **Certainty:** There is certainty in the use of direct taxes, as both government and the taxpayer know the quantity of tax. For instance, the use of withholding taxes in labour income reflects the use of specified marginal rates known with certainty by both government and the employer. In line with the principles of a good tax system, direct taxes equally address issues on knowledge about the tax rate, time of payment, method of payment.
- (b) **Equity:** The principle of equity of sacrifice applies in direct taxation although it hinges on the level of income and as the tax rate increases with the level of income. The utility foregone at each level of income is the same for every individual as marginal rates only differ across income levels and not within the same range.

- (c) Reduce inequality: Progressive principles largely apply when using direct taxation as more taxes come from the rich than the poor people because of the differences in their levels of income.
- (d) Simplicity: The general procedures and regulations of income tax are relatively simple and clear.

2.8.1.3 Demerits of direct taxes

Below are some of the demerits of using direct taxes that relate to the principles of a good tax system:

- (a) Arbitrary: Direct taxes somewhat seem to be random or arbitrary due to the absence of a standard procedure to determine the degree of progression in the taxation. For instance, it is often unknown how governments come up with the different marginal rates for different income levels and whether there is a sound or solid justification for their procedures. This poses a challenge when attempting to compare tax rates in across regions or countries.
- (b) Disincentive to savings and work: The use of different marginal rates tends to make direct taxes progressive nature. Although the taxable base is income, individuals with more income pay higher taxes and remain with less disposable income compared to the case of those in lower ranges of income. In this regard, the willingness to work and save is likely to be optimal at some level of income. This probably explains why Seligman (1908) argues that direct taxes seem to punish success.
- (c) Insufficient to meet required revenue for poor countries
- (d) Uneconomically: It is relatively more costly to collect direct taxes because of the general nature of spread of the tax base.

2.8.1.4 Merits of indirect taxes

- (a) Convenient: The imposition of indirect taxes occurs in small amounts that are embedded in the price of goods or services. In this regard, the burden of tax seems lighter than in the case of direct taxes where a lumpsum taxes apply.
- (b) Economy: The costs of collection and the administrations are very low, coupled by procedures that are relatively easy to handle than in the case of direct taxation.
- (c) Wide coverage: Indirect taxes have a wide coverage spanning across a spectrum of essential commodities, luxuries, and even harmful ones.

2.8.1.5 Demerits of indirect taxes

- (a) Discourage savings- The imposition of indirect taxes ultimately translates to an increase in prices. Assuming that the level of income remains constant, then the effect would be that it reduces the incentive to save as the taxpayer remains less income than before.
- (b) Results in regressive outcomes: The use of indirect taxes implies that almost everyone in the economy will feel the burden when they purchase essential goods and services. However, while the burden is equal for every individual such taxes neglect the notion of redistribution, hence there is no difference in the way that the poor and the rich are taxed.
- (c) Uncertainty in collection- Uncertainty arises because taxation can only occur if individual spent on goods and services that attract taxes. In this regard, it becomes difficult to predetermine the revenue that government may get.

2.8.2 Basis of progression

Tax progression has been a matter of concern to professionals, politicians and even the public (Seidl, Pogorelskiy & Traub, 2012). Tax progression is classified as being progressive, proportionate or regressive (James and James and Nobes, 1998). Nonetheless, Seligman (1908) suggest that tax progression begins somewhere and will eventually approach a certain limit. This implies that it is crucial to understand the degree of tax progression in a country in view of where the tax system started from and where it may potentially approach the limit in progression.

2.8.2.1 Definitions

Different scholars have come up with various definitions of tax progression. Seidl et al. (2012: 1) define tax progression as “a situation when, as income increases, so the average tax rates, the higher income strata pay a relatively larger share of gross income than the lower strata. In this regard, Seidl et al. (2012:1) allude to tax progression as relating to “the deviation of a tax system from proportionality.” Similarly, Seligman (1908: 3) suggests that progressive taxation defines “a situation when the relationship between the amount of tax and the objects of taxation varies in such a way that as the amount of tax itself increases, the tax will represent a continually larger fraction of that amount”. Further, Seligman (1908: 3) defines “proportional taxation as a situation when the numerical relationship remains constant between the amount of tax and the things being taxed”. In addition, Seligman (1908:4) defines a regressive tax as one in which “the tax rate decreases as the income increases.” From the perspective of Seligman (1908),

there is widespread acknowledgment that almost every country has instituted progressive principles in their tax systems. Nonetheless, from the perspective of Seligman (1908), it is not clear whether this assertion would apply to developing countries because the examples provided largely characterize developed countries.

In summary, Seligman (1908:6) suggests that progression means the adjustment of tax rates for modified amounts or in simpler terms the changed rates for the same amounts going to different people. Although it is common to speak of tax progression in income taxation, Seligman (1908) suggests that it should be extended to other forms of direct taxation that include property tax, house tax, land tax, inheritance tax and even to indirect taxes. However, it commonly involves direct taxation, especially income taxes.

2.8.2.2 Measurement

In order to understand where tax progression begins and ends as well as its role in any economy, there is need to appreciate how it is measured. Seidl et al. (2012) suggest that tax progression can be measured using three main routes that include: local, global and uniform measures. Local measures focus on tax schedules using tax elasticity and residual income elasticity. However, Seidl et al. (2012) criticize the measure for ignoring the role of income distribution of tax progression. This implies that local measures fall short on elucidating the extent of progressivity. In contrast, global measures of tax progression focus on evaluating taxation based on income distribution and welfare weights, however, the method of aggregation places limitations (Seidl et al. 2012). This implies that misinterpretation may occur as a regressive tax schedule may reflect more progressivity within a particular range of incomes than a tax schedule that is generally progressive right through because of compensation arising from aggregation. The use of uniform measures applies to cases where income distribution is the same, however, this has negative implications on making comparisons between countries (Seidl et al., 2012).

In view of the shortcomings of the local and uniform approaches, the emphasis in this thesis hinges on the use of global measures because of lack of data in other superior methods like Seidl (1994). Global tax progression measures have their merits and demerits as shown in Table 3, however, Seidl et al. (2012) suggest that one of the critical roles they play is that, it is possible to put tax schedules into categories (progressive, proportional, regressive) as well as enabling the ordering of tax progression.

Table 3: Merits and Demerits of Global measures of tax progression

Merits	Demerits
It is possible to use different tax schedules and different income distributions. This implies that international and intertemporal comparisons are feasible.	The aggregation method presumes that comparability is possible across different income strata.
Compensation income subintervals with opposing properties of tax schedules due to the use of aggregation.	The limitation posed by aggregation is that one tax schedule $T^1(.)$ may appear more progressive (than $T^2(.)$) with declining average tax rates over some range of incomes. Meanwhile another tax schedule $T^2(.)$ may have increasing average tax rates throughout the income distribution.
The use of double weighting focusing on specific weights for certain global measures and income distribution, implies that certain features of tax schedules will gain more(less) weight as more (less) taxpayers are affected.	

Source: Seidl et al. (2012: 26)

Table 4 shows a summary of some of the global tax progression measures found in literature. Seidl et al. (2012) assert that literature on the measurement of tax progression commonly refers to Reynolds and Smolensky (1977) use of the difference between the Gini coefficient of gross income and net incomes.

Table 4: Summary of some global tax progression measures

Tax progression measure	Originator
<p>Ratio of the area under the Lorenz curve of net incomes and the area under the Lorenz curve of gross incomes (Seidl et al., 2012: 21). Using the Gini coefficient measure then the outcomes would be:</p> $\frac{1-G_{Y-T}}{1-G_Y}$ yields tax schedules that are: progressive > 1, proportional = 1 and regressive <1	<p>Musgrave and Thin (1948)</p>
<p>Proposed a similar global tax progression measure related to Musgrave and Thin (1948), (Seidl et al., 2012: 21).Using the Gini coefficient measure then the outcomes would be:</p> $\frac{1-G_{Y-T}}{1-G_Y}$ yields tax schedules that are: progressive > 1, proportional = 1 and regressive <1	<p>Khetan and Poddar (1976)</p>
<p>The difference between the Gini coefficients of distributions of gross and net incomes and normalized by the Gini coefficient of the distribution of gross income (Seidl et al., 2012: 21). Using the proposed global measure:</p> $\frac{G_Y-G_{Y-T}}{G_Y}$ yields tax schedules that are: progressive > 0, proportional = 0 and regressive <0	<p>Pechman and Okner (1974) Okner (1975)</p>
<p>The ratio of the area between the Lorenz curves of gross incomes and Suits curve of taxes and the area below the suits curves of taxes (Seidl et al., 2012: 21). Using Gini coefficients the measure:</p> $\frac{G_T^Y-G^Y}{1-G_T^Y}$ yields tax schedules that are: progressive > 0, proportional = 0 and regressive <0	<p>Stroup (2005)</p>
<p>Employed a volatility-based approach to evaluate global tax progression of the whole tax system by using the ratio of the proportional standard deviations of tax revenue and aggregate income (Seidl et al., 2012: 21). The outcome is that: a progressive tax system >1; a proportional tax system =1 and a regressive tax system < 1</p>	<p>Kakinaka and Pereira (2006)</p>

Source: Seidl et al. (2012: 21-22)

In this regard, tax progression, proportionality and regression obtain if the Gini coefficient is positive, zero or negative respectively. Nonetheless, for impost progression, Seidl et al. (2012)

criticize the use of the difference between the Gini coefficient of net incomes and that of net incomes under a fictitious more progressive impost tax system.

2.8.2.3 Theories of tax progression

According to Seligman (1908), three distinct classes of theories that favour progressive taxation namely, the socialistic theory, compensatory theory and economic theory. Seligman (1908) suggests that tax progression has a long history dating back as far as 596 B.C when tax was levied on land on the basis of produce. In essence, the three aforementioned theories form the basis of the ideologies pursued by different countries in their introduction and application of the principle of tax progression. Consequently, the application of tax progression grew during the middle ages, however, its use declined in the seventeenth century. Further, the application of principle of tax progression was restricted to other taxes besides those on income during the eighteenth century (Seligman, 1908).

The most prominent example of such application refers to the situation in France during the revolutionary period. Other instances include England, Germany, Austria, Switzerland, Spain, Japan, Mexico, Italy and Holland among other countries. Nevertheless, Seligman (1908) cites the importance of realizing that the introduction of tax progression in several countries was reliant on the presence of certain conditions upon which progression would apply.

Similarly, if developing countries endeavour to use tax progression of any form, it is important to bring out what conditions would be adequate or necessary to achieve success. In this regard, this section dwells on some of the basic theories of progression to determine whether there are any directives from theory that could guide policymakers' decisions. Further, the underpinnings of theory may aid to explain whether observed phenomenon in developing countries like SADC, relates to foundations in theory.

2.8.2.3.1 *Socialistic theory of progression*

Adolf Wagner a German economist advocated the socialistic theory of tax progression, which suggested that two distinct periods characterized the environment in which taxation would occur (Seligman, 1908). The first period features purely fiscal reasons as a guide for raising adequate revenue to meet the needs of government. One of the most important considerations of the model is that the main role of government is to raise enough revenue. In the second period the socialistic theory suggests that social reasons like the need for equity take precedence over purely fiscal reasons. This implies that in the second stage, government goes beyond

focusing on purely fiscal issues to consider the need to ensure equitable distribution of wealth (Seligman, 1908). Consequently, fiscal policy is presumed to consider the needs of the administration while the socio-political policy focuses on relationships between different classes and how best to make adjustments satisfactorily.

Nonetheless, the criticisms made against socialism and taxation seem to suffice in the context of the propositions found in the socialistic theory of tax progression. Seligman (1908) argues that governments have also considered social and political factors when adjusting fiscal policy, hence it would be prejudicial to suggest that pure fiscal factors can be isolated. The implication of this critic is that there is no evident rationale to explain the separation of the two separate periods as distinct categories. Notably, Seligman (1908) cautions against the advice of modifying pure fiscal policy to factor in general society utility amid fears that it would lead to socialism or communism.

In addition, Seligman (1908) argues that it is not as simple as taking from the rich to give to the poor, thus while it is crucial to consider socio-political factors, the basic argument is that using the socialist theory, as the basis to introducing progressive taxes is far-fetched. The criticism by Seligman (1908) somewhat augments the assertion by Duncan and Peter (2012) that satisfying the trade-off between efficiency and equity is not easily achieved. This is because higher levels of tax progressivity increase income inequalities, hence, the tendencies for tax evasion become acute (Duncan and Peter, 2012). This implies that tax rates and tax evasion become positively related and in turn, both equity and efficiency decline (Duncan and Peter, 2012). In this regard, the notion of taking more from the rich does not always imply that they will be willing to pay those taxes; however, the effects of reduced equality arise on disposable income than the taxable income (Duncan and Peters, 2012).

2.8.2.3.2 Compensatory theory of progression

The first major form of advocacy towards the principles governing the compensatory theory originates from Mlle Royer whose work was endorsed in Switzerland around 1860 (Seligman, 1908). The argument is that it is the responsibility of government to compensate individuals affected by legal injustice and make amends for injustices inherited from the past. Nonetheless, the belief was that this would only be achievable through some form of tax progression. Seligman (1908) notes that other arguments include those of President Walker who suggested that if the differences in wealth are presumably due to the acts or commissions of the state, then the tax system should make allowances for such instances. In addition, Seligman (1908; 144)

asserts that another sincere form advocacy for tax progression resides in the work of Courcelle-Seneui who advances that tax progression is desirable if being rich makes a wealthy individual to be at an advantage over the poor. This assertion is against the claim that legal conditions favour the rich over the poor, hence the use of tax progression would be to diminish such advantages.

Notably, Courcelle-Seneui was in favour of taxes on consumption than income. Similarly, a French writer, Villiaumne asserts that "taxation ought to counterbalance the inequalities consecrated by custom and by law" (Seligman, 1908: 144). Nevertheless, Seligman (1908) criticizes the compensatory theory as being impractical as a standard due to the difficulty of measuring the injustices purported to be due to the actions of the state. Further, Seligman (1908) argues against the practicality of counterbalancing one form of injustice with another.

2.8.2.3.3 Economic arguments on tax progression

The basic argument over the decision to use proportional taxation or progressive taxation depends on its basis, that is, the theory of benefits or the theory of ability to pay (Seligman, 1908). In principle, the theory of benefits states that taxes should be paid in proportion to the benefits that accrue to the taxpayer (Seligman, 1908). The ability to pay principle states that a taxpayer should make their contribution based on his capacity to do so. Notably, the perspective surrounding the use of the term capacity focuses on production and consumption (Seligman, 1908). The fundamental issue of relevance arising from the theory ability to pay taxes is that it defines taxable capacity- a key component of this study.

The theory of benefits violates the notion that taxes are unrequited payments as described in the definition adopted in this study from OCED (2001). Similarly, Seligman (1908) rejects the theory of benefits as a controlling principle in general taxation and rather supports the theory of ability to pay. Notably, the theory of benefits relates to proportional taxation while the principle of ability to pay relates to progressive taxation. As such, theory postulates that proportional tax systems are not ideal for progression because the rich have to bear a more than proportional burden, thereby paying for higher taxes than those earning incomes below them. Nonetheless, this claim is not universal due to the presence of instances where the theory of benefits led to the use progressive taxes while the theory of ability to pay led to the use of proportional taxes. (Seligman, 1908).

2.8.2.4 Economic significance of tax progression

Based on the Laffer-efficiency, the assumption is that higher tax revenue is expected when higher wage taxes are imposed, however, higher tax exemptions would lead to lower tax revenues. Koskela and Schob (2012) suggest that introducing tax progression boosts employment and output in an economy; however, adverse effects may occur if the level of progression was already high. For instance, in the wake of inflation, the outcome of a progressive tax system tends to increase if tax brackets if tax indexing is absent (Burgess and Stern, 1993). The rationale of adjusting tax brackets to inflation would be to avoid a situation where lower income are driven into higher tax brackets resulting in higher tax revenue at reduced purchasing power. Further, Burgess and Stern (1993) assert that since developing countries normally receive a small share from income taxes compared to other forms of indirect taxes, there is a real decline in tax revenue. This is because indirect taxes are specific while progressive rates may be found on income taxes whose shares to total tax revenue are small (Burgess and Stern, 1993).

Holm and Koskela (1996) suggest that there is a popular belief that more progressive tax systems are associated with increased disincentives to work effort. It would seem as if they punish success and effort. Further, Holm and Koskela (1996), suggest that in the case of revenue-neutrality, a compensated rise in domestic tax progression would result in a reduction in both the domestic and nominal wage. This in turn leads to respectable employment. This proposition reinforces that tax policy may be used as an instrument to address other macroeconomic challenges like employment. However, in reality, it is difficult to fathom the possibility of non-interference with the objective of rising adequate or additional revenue.

Tax base refers to the measure upon which the assessment or determination of tax liability is based (businessdictionary.com, 2016). According to Ghura (1998), the elements of a country's tax base are better known as tax handles. Examples include the share of agriculture in GDP, the share of mining in GDP, the ratio of the sum of exports and imports to GDP. Further, Ghura (1998) affirms that "the sectoral composition of value added constitutes the key element of the tax base."

2.8.2.5 Economic theory on tax base

Besley and Persson (2013) regard broadening tax base as one of the critical factors in the process of development. UNCTAD (2015) notes that there has been substantial sectoral transformation and economic diversification in both developed and developing countries over

the period 1970-2013. This is consistent with the evidence provided in chapter 4 of this thesis on the overview of tax systems in the SADC. Notwithstanding this, the characteristics of developing countries limit the ability of governments to design tax systems that are efficient and modern. Therefore, this study contends that limitation found in environment in which tax occurs may result in governments resorting to generating tax revenue from available options, without giving careful consideration to efficiency or equity issues (Kayaga, 2007). This is consistent with the assertion that developing countries employ tax design based on what is practically possible rather than on what is optimal (Bird, 2008). Further, this augments the claim that governments may be benevolent but may fail to explicitly follow tax policy advice because of the emergence of contemporary issues within or outside their control (Tenhunen, 2007). As such, Besley and Persson (2014) are of the opinion that the economic structure of a country influences its fiscal capacity as most low-income countries face low tax revenues and narrower tax bases.

On one hand, it is argued that heavy reliance on foreign aid has subsequently led governments not to take any action towards improving their tax systems leading to narrower tax bases. On the other hand, governments face problems that often renew the need to restructure and expand tax bases as economies grow. (Besley and Persson, 2014). Nonetheless, the argument emanating from this claim is that despite the potential of widening the tax net and broadening tax bases as an economy grows, it does not imply that tax revenue will rise automatically (Besley and Persson, 2014).

According to Besley and Persson (2013) the standard economic approach perceives that low levels of tax revenue and the disproportionate dependence on narrow tax bases limit the overall tax revenue performance. Further, Besley and Persson (2013) assert that despite the fact that income tax rates are relatively similar between high-income countries and those of low-income countries; the tax base for the latter is narrow as compliance issues compound it. Empirical evidence based on country comparisons suggests that since statutory tax rates are relatively similar, the major reason behind low tax revenues is thus due to the tax base problems (Besley and Persson, 2014). In this regard, Besley and Persson (2013; 2014) consider the tax base as a huge hindrance to the enhancement of fiscal capacity in developing countries. The resulting implication for tax policy would be to focus on broadening the tax base instead of changing tax rates in order to increase tax revenues in low-income countries (Besley and Persson, 2014).

Kayaga (2007) affirms that this is why many developing countries have numerous small tax sources and are heavily reliant on foreign trade taxes as well as having relatively limited use of personal income taxes. Similarly, Tanzi and Zee (2001) argue that the reason why PITs have not provided significantly towards total tax revenue because the tax base is already narrow. In addition, the use of tax exemptions and deductions results in a further decline in the narrow tax base, thereby reducing tax revenue (Kayaga, 2007; Besley and Persson, 2013). Similarly, the growth of the informal sector erodes a larger portion of the potential tax base for PIT (Kayaga, 2007; Besley and Persson, 2014). Similarly, corporate income taxes (CITs) in developing countries are regarded as inefficient because the provisions of tax policy often tend to narrow the tax base unlike what may be observed in developed countries. In order to capitalize on the use of VAT in broadening the tax base, governments would need to limit VAT exemptions (Kayaga, 2007).

Besley and Persson (2013) suggest that as governments attempt to move from low levels of revenue, tax bases normally shift from trade taxes and excise duties towards labour income and other broad bases like value added. Nonetheless, there are incentives and constraints associated with the process of shifting tax bases. According to the Trepelkov, Tonino & Halka (2017), the nature of the global economy has evolved confronting the use of independent nation-centric tax policies. Similarly, Park (2008) suggests that globalization has led to the erosion of the tax base due to the increase in capital mobility and international tax competition on capital. This implies that there is need to reconsider the way in which governments mobilize revenue, as conventional avenues are susceptible to potential loss. Aizenman and Jinjark (2009) consider the effect of globalization on tax bases of countries at different levels of development and describe globalization as a process that stimulates more trade and financial integration. Aizenman and Jinjark (2009) suggest that globalization will cause a shift in tax revenue as countries move from “easy to collect” taxes such as tariffs and seigniorage to those that are difficult to collect like value added tax and income tax. Consequently, it emerges that trade and financial openness positively influences taxes that are difficult to collect and suggest a negative relationship for the other taxes (Aizenman and Jinjark, 2009)

In view of enhancing the understanding of the effect country specific determinants on tax bases and tax revenue, Chapter 6 provides an overview on the theory and empirical evidence in developing countries.

2.8.2.6 Economic significance of tax base

Among other factors, the Addis Agenda for 2030 calls for broadening of tax bases in view of supporting the role of resource mobilization for sustainable development in Africa. Consequently, emphasis is on the need to protect tax bases from erosion. (Trepelkov et al., 2017). The United Nations, is assisting developing countries to build their capacity to enhance effective protection and broadening of the tax bases (Trepelkov et al., 2017). As such, two main tools have been developed in the form of handbooks to provide a practical guide to tax officials and professionals in developing countries on how to assess and implement the most appropriate routes for protecting and broadening their tax base. This reinforces the assertion that there is a huge stock of wealth of literature on the guiding principles to aid tax policymakers in designing robust tax systems.

According to Ilzetzi, (2015) the importance of tax base is reflected in the choices that governments face over the decision to raise revenue through increasing taxes or broadening the tax base. In addition, Ilzetzi, (2018) suggests that making changes to the tax base has essentially been part of proposals on removing tax exemptions or closing loopholes and has been motivated by fiscal strain. In this regard, the proposition to shift tax bases has become prominent feature in tax reform proposal over past decades (Pedone, 2009; Ilzetzi, 2018). In addition, Slemrod (2016) affirms that tax bases must be regarded as an important feature of tax system design because they interrelate with tax rates, tax enforcement and tax administration.

Pedone (2009) argues that the inadequacies found in defining, measuring and assessing tax bases has contributed to several problems in income taxation which largely remain unresolved. According to Chaudhry and Munir (2010), elements of the tax base are essential in influencing the variation of tax revenue. Based on empirical evidence from Pakistan, Chaudhry and Munir (2010) contend that a narrow tax base is one of the root causes of the low tax revenue experienced by the country, hence, they propose that broadening the tax base would aid to remedy the situation. Nonetheless, the argument by Pedone (2009) remains valid in view of the challenges of assessing income tax bases. Different studies have come up with various methods to broaden the tax base. For instance, Kayaga (2007) suggests that the introduction of VAT was employed as a strategy towards broadening the tax base in developing countries. In order to provide evidence for informed decision making, several empirical studies have used the standard approach to examine tax revenue performance, using regressors that include elements of the tax base along with other macroeconomic variables (Ghura, 1998; Mahdavi, 2008; Gupta

2007; Bothole, 2010; Mkandawire, 2010; Pessino and Fenochietto 2010; Addison and Levin, 2012; Dioda, 2012 and Yaya, 2015).

2.8.2.7 Tax base erosion

While convention seemingly advocates for broadening of the tax base, changes in economic structures and the emancipation of globalization practically challenge tax policy decisions on the alternatives available to raise adequate government revenue for its spending needs. It is argued therefore that, unlike developed countries, political, social and administrative challenges constraint governments in developing countries from building sound public finance systems (ITC, 2010). Notwithstanding this, governments are confronted by shrinking tax bases that have risen due to a diverse spectrum of factors within and beyond the control of government. According to Bayar and Frank (1987) there are four main forms in which the tax base is eroded and these include tax evasion, tax avoidance, tax expenditures and tax under estimation. Nevertheless, the focus in this thesis is on the first three. Fuest and Riedel (2009) argue that there is widespread belief that tax evasion and tax avoidance are the most imperative factors constraining revenue mobilisation in developing countries. Nonetheless, tax expenditures and other factors also influence revenue mobilisation (Fuest and Riedel, 2009).

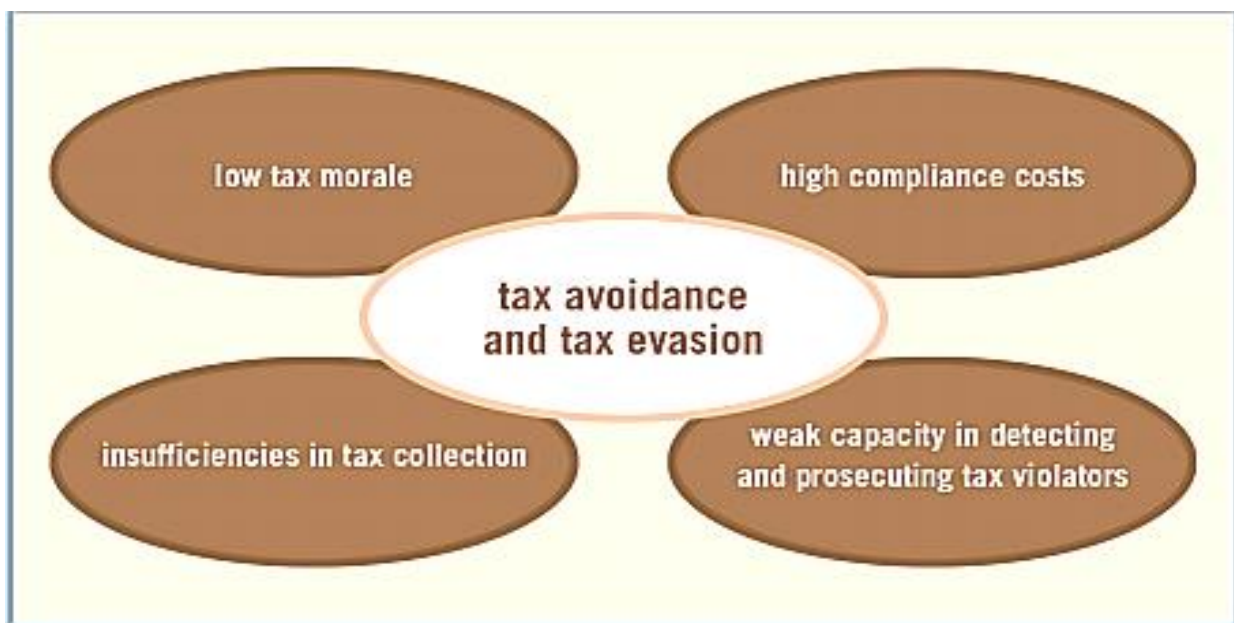
Fuest and Riedel (2009) assert that universal definitions do not exist for tax evasion, tax avoidance and tax expenditures; however, some form of tentative definitions are required to proceed with research. Tax evasion refers to “illegal practices to escape from taxation,” (ITC, 2010: 9). According to Souza (2016), the occurrence of tax evasion in developing countries arises because taxpayers seek to compensate for government expenditure they do not benefit from and the imperfection of financial markets. In part, this phenomenon is supported by the theory of benefits that affirms that taxpayers will only be willing to contribute what is proportionate to the benefit they derive from government expenditure (Seligman, 1908). Souza (2016) attributes tax evasion behaviour to two main characteristics of developing countries, that is, imperfect capital markets and the nature of interests pursued by governments. Further, Souza (2016) suggest that taxpayers use evasion as a tool to cushion themselves from undesirable behaviour of politicians and unfavourable public policies. Tax evasion may take the form of concealing taxable income or taxable profits and other taxable activities. As long as developing countries are challenged by lack of capacity to observe or measure the tax base, it is plausible that these loopholes will continue to undermine tax revenue collection efforts. Similarly, taxpayers may misrepresent the amount or source of income or deliberately overstate

factors influencing deductions, tax exemptions and tax credits (ITC, 2010). This with the constructs that emerged from the discussion on role of tax incentives in the previous chapter.

Tax avoidance refers to a situation when taxpayers undertake particular activities with the sole intent of reducing their tax liability (ITC, 2010). Accordingly, ITC (2010) suggests that tax avoidance occurs within the legal context of the tax system as taxpayers capitalize on loopholes or advantages in the tax code. According to ITC (2010), the limited availability of high quality data in developing countries makes it challenging to measure the size and extent of tax evasion and tax avoidance. Consequently, there is scanty reliable empirical evidence partly because the phenomenon is difficult to observe. This also makes it difficult to make comparisons across countries, including the SADC.

Nonetheless, in order to fight the factors influencing tax evasion and tax avoidance, there is need to consider what facilitates such behaviour. Although, this study will not provide a detailed outlook of these factors, Figure 1 shows some of the major reasons leading to tax evasion and avoidance.

Figure 1: Factors facilitating tax evasion and tax avoidance



Source: ITC (2010: 13)

Tax base erosion may also occur through tax expenditures, which “are usually defined as deviations from a benchmark tax system which give rise to tax revenue losses” (Fuest and Riedel, 2009). In addition, tax expenditures deliberately result in the decline in tax burden of

taxpayers and take various forms that include tax exemptions, tax credits, reduced tax rates, allowances, exclusions, deferrals and many other forms that may be confined to specific time spans or geographical location, like tax holidays and tax-free zones respectively (Fuest and Riedel, 2009). In chapter 4, this study provides a benchmark for SADC countries in cognisance of the notion that it is one way of determining whether tax systems have deviated from the standard comparator basis. Meanwhile, Fuest and Riedel, (2009) are of the opinion that tax base erosion may be one of the reasons for such a deviation.

There is no empirical evidence that has employed internationally comparable data to ascertain the existing extent of tax expenditures in developing (ITC, 2010; Fuest and Riedel, 2009). Additionally, it is difficult to compare because of the differences in concepts and measurements used by different countries to come up with data on existing tax expenditures (Fuest and Riedel, 2009). Nevertheless, Fuest and Riedel (2009) acknowledge that there is increased usage of investment incentives, despite, concerns that inappropriate use of tax expenditures may promote tax evasion and tax avoidance. Some authors are of the opinion that tax base erosion in developing countries has contributed to loss of tax revenue and the decline in the growth of tax base (Alm, Bahl & Murray, 1991). Further, there is belief that tax base erosion plays a hand in raising administration costs, impeding the progressivity of statutory tax rates and hampering horizontal and vertical equity (Al et al., 1991). The essence of highlighting the role of base erosion is to alert policymakers of the possible threat of factors that may undermine the effectiveness of their decisions aimed at broadening tax base. In this regard, there is need to internalize the concepts of base erosion in relation to formulating policy responses that seek to protect the tax base. To illustrate this, Wilford, Woody & Brady (2017) explain a scenario cited below.

Wilford et al. (2017) suggest that when the United States congress began fiddling with the corporate tax code, the tax base began to shrink. Although other factors were at play, Wilford et al. (2017) also attribute the base erosion to responses from businesses who felt that the US tax system was increasingly becoming burdensome. Although the instance provided here is for a developed country, the reasoning behind the need to protect tax base is universal. In developing countries, governments may tax depending on what is practically available than desirable without placing regard on whether this may provoke adverse reactions from various tax bases. Instead, any form of tax reform needs to simultaneously address the critical issues prompting tax evasion, tax avoidance, tax expenditures and tax underestimations. The

undesirable effect of not paying enough attention to tax base erosion is that even with tax reform, governments may still fail to raise adequate tax revenue to meet spending needs.

Alm et al. (1991) argue that there is non-existent empirical evidence on the severity and nature of tax base erosion in developing countries. Despite the challenge of measuring erosion of tax base, there is empirical effort showing attempts to provide supporting evidence on the effects of tax evasion and tax avoidance in developing countries. Nevertheless, Alm et al. (1991) acknowledge that tax base erosion is a multistage and complicated process where several opportunities may be pursued, however, there is need to consider and quantify all factors when coming up with strategies to fight it.

This study is cognisant of the fact that there are economic, social and political factors that determine the feasibility of existing tax regimes, however, protecting the tax base is undeniably critical. In this regard, Wilford et al., (2017) argues that it is important that lawmakers must be proactive and enact reforms that are friendly to the growth of businesses instead of waiting for administration and regulation from technocrats.

2.9 Conclusion

The central focus of this chapter was to review literature on taxation in developing countries to ascertain whether it can offer directives that can influence tax policy. The chapter began by providing a focus on the definition and characteristics of tax in cognisance of the fact that other non-tax revenue could be easily mistaken for tax. Further, the chapter elucidates on the rational of using a broader approach to analysing tax performance using both the economic and administrative approaches. The two approaches largely consider the technical aspects that often fall within the jurisdiction of technocrats or bureaucrats. However, this study notes that the purpose of conducting policy research is to generate knowledge to inform policymakers. In this regard, this study adopts the view of welfare economists, which, assumes that governments are benevolent; however, leaving room that in reality there may be reasons to depart from this set standard. This provides the motivation for undertaking Chapter 5 on the political economy of taxation in developing countries.

Further, the chapter considers some basic concepts in taxation that include objectives, the principles of a good tax system and three basic forms of classifying taxes. This study notes that although tax policy may address different objectives, literature argues that the primary goal of imposing taxes is to raise revenue to meet public spending needs. This implies that

governments in developing countries may need to reconsider whether their tax systems in view of raising adequate tax revenue, instead of using tax policy as an instrument of behaviour control. Despite the differences between developing and developed countries, the principles of a good tax system seem to be universal although their achievement may not occur at the same time. Regardless of the circumstances that a country finds itself in, the principles provide a guide to actual tax policy, as the underlying theoretical prescriptions laid in this study emanate from tax practitioners. The practical link between the principles and tax policy is that the various publications of practice literature considered in this study provide a guide into the nature of a tax system that would bring ease the operation of the domain in which practical implementation of taxation occurs. In practice, this will aid policy makers to identify the shortcoming of tax systems in their respective countries. The chapter dwelt on the three forms of classifying taxes that include tax incidence, tax progression and tax base. The motive was to bring insight into the theoretical concepts contributing to the existence of different tax systems in accordance with the standard or basis of their origin. Notably, these classifications can be considered as isolated cases or as a combination of one or all in the design of tax systems. While policy advice is generally inclined towards broadening tax bases, the basis of incidence is equally central to such considerations. While the primary objective is to raise revenue, the degree of tax progression is equally important, however, not without its own limiting factors. In summary, the chapter provides a theoretical foundation to the understanding of the factors influencing the evolution of tax systems in developing countries.

CHAPTER 3

TAX POLICY IN DEVELOPING COUNTRIES

3.1 Introduction

In previous chapter, the theoretical framework of taxation provided insight on some of the factors influencing the evolution of tax systems in developing countries. Notably, literature relates the evolution of tax systems to tax policy, hence, this subsequent chapter provides insight into the historical background, the discussion of theories and concepts as well as contemporary issues on tax policy in developing countries.

Tanzi and Zee (2001) argue that an ideal tax system should raise adequate revenue without excessive government borrowing and that it should not discourage economic activity neither should it deviate too much from tax systems in other countries (Tanzi and Zee, 2001). This places momentous implications on the choices of tax policy. The notion of achieving equity and efficient in tax systems has remained critical, both in theory and in practice, however, in reality it is not an easy task, particularly in developing countries (Damme, Misrahi & Orel, 2008). Against this background, it becomes central to cross-examine how governments in developing countries design their tax systems as well as to have some insight into the circumstances of the environment in which the design tax policy happens. Overall, given the relative importance of taxation, Damme et al. (2008) contend that it is critical for governments to get tax policy right.

The central focus of this chapter is to provide insight into some of the concepts that form the theoretical base of tax policy in developing countries. The subsequent section to the introduction of this chapter focuses on elucidating the origins of tax policy in developing countries. The next section considers the objectives of tax policy. The following section broadly focuses on general issues of relevance for consideration when coming up with tax policy in developing countries. The subsequent consecutive sections focus on tax incentives, the challenges of tax policy, and considerations selecting the “right” tax system respectively. The last section on the conclusion ends the chapter.

3.2 Origins of Tax Policy in developing countries

Damme et al. (2008) suggest that there is need to consider that there are significant differences between developed countries and developing countries when designing tax policies. Arguably,

tax policies differ because of the fact that countries adhere to different philosophies on social justice and welfare policies. Understanding the origins of tax policy is very essential as it brings insight into the background and the evolution of tax systems we see today.

Tax models of the US and Europe (particularly the latter) have largely influenced tax policy advice to developing countries through IMF (Damme et al., 2008). This claim is based on the belief that economic thinking on tax policy the IMF originally came from models formulated for Europe and US since their technocrats understood more about the context surrounding them. To support this claim, Damme et al. (2008) provide an illustration of the proliferation of VAT in developing countries. Notably, the European tax model uses VAT and the philosophy guiding this tax system is that social inequality links with income inequality, hence, redistribution is required. From a sample of 54 developing countries studied by Damme et al. (2008) it emerges that the IMF recommended or endorsed VAT in 90% of the overall sample. Moreover, in 80% of the consultations made in these countries, the IMF advised that there was need for a decrease in tax exemptions.

In some instances, the advancement of tax policy advice to developing countries was part of the packages for structural adjustment and stabilization policy conditionalities of the IMF and World Bank (Damme et al., 2008). In this regard, there is ambiguity over whether governments implemented tax policy advice in good faith or whether the desperation for funding superseded. One of the key implications arising from this, is the need to answer the question on how tax systems should be designed in developing countries.

The theory of optimal taxation is one of the most prominent theories of taxation. According to Mankiw, Weinzierl and Yagan (2009) the phenomenon on the optimal design of tax systems has a long history which has intrigued economists and confounded economic policymakers. “The standard theory of optimal taxation posits that a tax system should be chosen to maximize a social welfare function subject to a set of constraints. The literature on optimal taxation typically treats the social planner as a utilitarian: that is, the social welfare function is based on the utilities of individuals in the society,” (Mankiw et al. (2009: 3). Notably, Mankiw et al. (2009) are of the opinion that OECD tax systems largely follow the directives of the theory of optimal taxation although there are a few dimensions where the gap between theory and practice remains evident. In contrast, Tanzi and Zee (2001) argue that the design of tax systems in developing countries hinges more on what is possible rather than in pursuit optimality. Consequently, it can be argued that the use of the directives of optimal tax theory would be

inappropriate to base the theoretical framework for the analysis of tax capacity and tax effort in the SADC.

Since 2010, one of the most prominent works in tax design is found in the research undertaken by the Mirlees Review. The commission set out to identify the characteristics of a good tax system for an open developed economy in the 21st century and to recommend how the UK tax system could be reformed in that direction. This illustration exemplifies the need to align theory to a particular context in order to adequately inform practice. In this regard, Bird and Zolt (2003) contend that commitment in domestic policies towards tax reform should come from within developing countries than from outside. Similarly, Mankiw et al. (2009) and Tanzi and Zee (2001) suggest that the theory optimal taxation has had little influence in the design of tax systems in developing countries. Hence, governments in developing countries would have to craft tax policies that resonate with country specific needs and circumstances (Bird and Zolt, 2003).

3.3 Objectives of tax policy in developing countries

Tax policy in many developing countries primarily serves as a tool to raise revenue to meet public expenditure needs. However, non-revenue objectives may prompt restructuring of tax systems owing to the differences in the diverse nature of political, social and economic factors in different countries. For instance, regional groupings like SADC may decide to implement strategies towards tax coordination and this may prompt member states to reorganize their tax systems to meet this specific need. Further, considerations may be made to build stronger tax revenue performance, addressing corruption, promoting structural reforms by changing tax structure, promoting equity or efficiency or both and strengthening state building (World Bank, 2016). Likewise, Kayaga (2007) asserts that tax policy objectives may also include stimulating economic growth and stabilizing the economy. Generally, the objectives of tax policy are often comparable to those of public policy in developing countries (Kayaga, 2007).

Nonetheless, this study presumes that the prime objective of taxation in the SADC is to raise revenue to meet public spending needs.

3.4 General issues of relevance to developing countries

According to Bird (2008), the “best” tax system for any country emulates the structure of its economy, public expenditure needs, its capacity to administer taxes and its access to other non-tax revenue. In addition, Bird and Zolt (2003) suggest that it is also critical to consider the

opportunities available and the choices made by policymakers, while World Bank (2008) also considers resource endowments, philosophy guiding policymakers or governments and geographic location among other factors. One fundamental consideration in tax policy design is how a country can raise enough revenue to meet public expenditure needs in a way that is economically sustainable and conducive to political survival of those making policy decisions. Despite the existence of various sources of government revenue, taxes remain critical in most developing countries. In this regard, this section focuses on some of the theoretical foundations that are considered when deciding the composition of tax revenue.

The central focus of this section is to elucidate on some of the major taxes in developing countries that take up a larger share of tax revenue. These include; corporate income tax, value-Added Tax (VAT), excises, import tariffs and personal income taxes. Ahmad and Stern (1989) suggest that the choice of revenue instruments chosen and the revenue obtained, depend on the organization of production activities in the economy, defined tax bases, selected tax rates and the administrative capabilities of tax authorities. According to Yonah and Margalioth (2007), conventional wisdom on tax policy in developing countries suggests that consumption taxes are superior to income taxes due to the emphasis placed on efficiency and redistribution. Notably, this contradicts the claim by Damme et al. (2008) that seemed to suggest that advice from the IMF has been Eurocentric.

In addition to consumption taxes, Yonah and Margalioth (2007) argue that withholding of corporate income would work in developing countries. This probably due to the relative ease of observing the tax base and ease of administering the tax. In view of efficiency, this method provides one of the least cost methods for government to tax corporate income. Damme et al. (2008), criticised the notion that in some cases, tax policy advice from the IMF focuses on building efficient tax systems, yet most developing countries seek for more equity. However, Yonah and Margalioth (2007) are of the opinion that developing countries should tax efficiently while reserving expenditure policy to address redistribution goals.

3.4.1 Macroeconomic considerations

3.4.1.1 Level of tax revenue

Bird and Zolt (2003) and World Bank (2008) affirm that no single tax structure or mix of taxes can meet the requirements of every country. As such, there can never be a single target of tax performance for all countries. This notion reinforces the need for this study as it focuses on analysing tax capacity and tax effort, as opposed to tax performance alone. However, it can be

argued that the absence of a single target for tax performance does not explicitly nullify the importance of benchmarking tax systems. Tanzi and Zee (2001) suggest that the level of tax revenue set by governments depends on level of public expenditure required by a country at a given level of national income. In this regard, an optimal level of tax revenue should be congruent to an optimal level of public expenditure (Tanzi and Zee, 2001). However, optimal tax theory does not proffer adequate practical guidance on how to integrate optimal tax revenue and optimal public expenditure (Tanzi and Zee, 2001). Therefore, lack of practicality renders the theory of optimal taxation inappropriate to direct the practical implementation of tax policy in developing countries (Tanzi and Zee, 2001).

To demonstrate the importance of acknowledging differences in country characteristics, one typical example is that of countries with massive reserves of natural resources like oil or minerals that may tend to be less reliant on tax revenue than those without. This is consistent with what has been observed in Angola so far as it is one of the countries experiencing low tax revenue performance, yet revenue from oil contributes approximately 50% to GDP. Another instance, is that of countries with seaports where tax handles linking to ports complement other components of their tax structure, however, such options are not available to landlocked countries due to their geographic location. In this regard, the design of tax policy needs to take cognisance of the varied array of factors that may influence the level of tax revenue for each respective country.

3.4.1.2 Tax structure

There is no clear and conclusive direction about the composition of tax revenue. The manner in which countries raise their tax revenue is not similar due to a variety reasons that include a country's history, tax structures of neighbouring countries as well as other factors discussed in the previous subsection (Bird and Zolt, 2003).

Bird and Zolt (2003) suggests that the mix between consumption taxes, income taxes and trade taxes play a critical role in international trade of low-income countries compared to high-income countries. However, this condition does not hold for transitional economies even if they are low-income countries because as a country develops a decline in trade taxes (especially customs duties) is expected due to import substitution (Bird and Zolt, 2003). Notably, the adoption and increased use of VAT in the SADC was motivated by the need to replace trade taxes.

Gordon and Li (2005) argue that taxes on labour have a limited role in developing countries, meanwhile consumption taxes are critical because of the relative difficulty in observing labour income where the larger part of the population engages in informal activities. Moreover, the effective tax rates applied to firms would differ distinctively from one firm to another notwithstanding that most firms in developing countries are small. The presence of large shadow economies makes it difficult to tax as firms use cash outside formal systems to avoid using the financial sector where transactions can be monitored (Gordon and Li (2005). Nevertheless, in October 2018, the Government of Zimbabwe was able to tap into the informal sector through the use of an intermediated money transfer tax since some informal businesses have had to use mobile money as the country faces cash shortages.

Ehrhart (2011) considers the role of the political economy on tax structure and argues that the choices made by those with political power shape the views of how to perceive the characteristics of tax systems in developing countries¹. A typical example is when an aspiring candidate lobbies for a cut in taxes with the motive of gaining votes, if this is instituted, it will definitely change the percent contribution of that specific tax to overall revenue meanwhile public expenditure needs cannot be adjusted to suit such changes. Alternatively, a candidate may seek to enhance foreign direct investment (FDI) flows with the motive forming a better impression about their capabilities to the electorate. One may lobby for the establishment of tax incentives whose effects may largely become adverse than previously perceived. If the larger part of profits is remitted back to host countries, then the net effect of the tax incentive will leave the economy worse off. In this regard, a thorough investigation on the source and composition of FDI where tax incentives are to be applied becomes critical (Ehrhart, 2011).

3.4.2 Direct taxes

3.4.2.1 Corporate Income Tax (CIT)

Abramovsky, Klemm & Phillips (2015) argues that the application of economic principles governing corporate income taxation is similarly situated for both developing countries and developed countries. However, differences arise from costs and benefits that are associated with a particular CIT system as well as its incidence and effects on the behaviour of tax payers. Much of this depends on the characteristics of the country under consideration (Amramovky et al., 2015). According to Carnahna (2015), CIT is one of the primary sources of direct or income tax and is often considered differently for large corporations and for small businesses.

¹ The political economy of taxation is discussed in chapter 5.

Generally, CIT is levied on the profit earned by companies and this refers to the revenue made after deducting allowable expenses. Abramovsky et al. (2015) suggest that the aim is to tax profits of companies that are generated within a given jurisdiction. According to the source-based principle, CIT is imposed on incomes earned within borders. Some countries use the residence principle to tax foreign profits of firms whose headquarters are within the country borders. However, the residence principle is only applied when profits are repatriated. In view of the political economy, policymakers may take perverse decisions where elite groups have considerable power in industry in order to solidify their political survival. Where the application of the residence principle may be appropriate, the political economy literature suggests that corrupt policymakers may work against it to avert favoured groups from being taxed.

Carnahna (2015) states that on average, CITs make a larger contribution to overall revenue in developing countries with figures lying in between 1.5–3 per cent of GDP. However, in the context this study, some SADC countries have larger shares of tax revenue coming from consumption taxes. Examples include Tanzania, Zambia and Zimbabwe. Notwithstanding this, the role of CIT remains prominent in all SADC countries as one of the leading taxes. Nevertheless, this study concurs with Carnahna, (2015) that the contribution of CITs to overall tax revenue in developing countries is smaller relative to that of developed countries where averages range around 3%. Given that nature of the firms in developed countries, governments tend to observe large corporations better, hence they contribute a significant portion to total CITs compared to small businesses.

From an economic view, the burden of the CIT is borne by individuals than the company itself as an entity (Carnahna, 2015). Normally, it may be conceived as payment of taxes on behalf of a particular group of people linked to the company such as shareholders who may earn lower profits, employees who may earn lower wages and customers who may pay a higher price (Carnahna, 2015). Against this background, it becomes critical to ascertain whether collecting tax revenue at a corporate level is a better alternative to any other form of collecting taxes. In essence, it is possible to impose taxes on customers and employees; however, there may be limited available options to tax income of shareholders especially if they are foreign or if there are undistributed profits and profits from financial intermediaries like insurance companies and pension funds (Carnahna, 2015).

Carnahna (2015) argues further that in practice, many of the CITs are not designed well, hence multiple rates and complex depreciation schedules have become inherent features of CITs in developing countries. In this regard, compliance can be enhanced by moving to other broad categories of taxation besides large corporations (Carnahna (2015)). This however could prove to be problematic in developing countries, as the relative size of income tax bases seems to be shrinking with the rise of economic instability and the growth of the informal/shadow economy. Further, the perception on fairness as a guide to the principles of a good tax system is compromised if the design of CITs results in a firm feeling that the treatment of tax punishes growth and expansion (Carnahna, 2015). Consequently, such firms may choose not to comply, leading to misrepresentation they are small when in actual effect they have grown (Carnahna, 2015). Sometimes this spurs growth of activity outside formal systems like the financial sector.

Unlike developed countries, Abramovsky et al. (2015) assert that developing countries have weak tax administration and enforcement systems. In this regard, it is not surprising that pre-eminence is given to taxes that are simple to administer and those with less chances or opportunities to avoid or evade. Nonetheless, by nature CITs are complex and difficult to administer, coupled by several ambiguities (Abramovsky et al., 2015). The decision on what taxes to levy may also depend on whether alternatives like value Added Tax (VAT) or personal income tax (PIT) present better opportunities (Abramovsky et al., 2015). In cases where countries have large informal economies, the administration of PIT becomes relatively complex. In this regard, countries may eventually use specific taxes that resonate with their situation. Abramovsky et al. (2015) suggest that the nature of CITs in developing countries may be accustomed to lack of technical expertise, low capital bases, heavy reliance on aid and foreign direct investment among other factors. This is consistent with Bird and Zolt (2003) who emphasize the role of country specific characteristics in tax policymaking. Given the relative small sizes of economies in developing countries, these factors prompt the design of CITs regimes that are favourable to potential foreign investors (Abramovsky et al., 2015).

Abramovsky et al. (2015) assert that CIT regimes in developing countries are largely influenced by those developed in developed countries and this leads to complexity in operating them. This is consistent with the notion by Damme et al., (2008) that the origins of taxation in many developing countries are not original but follow policy advice from the IMF taken from the US or Europe. Examples include the use of special tax regimes like tax incentives although many of the developed countries are moving towards standard CIT regimes. From the previous

chapter it is apparent that the greater part of tax incentives in the SADC were implemented to attract foreign investment just as reiterated by Abramovsky et al., (2015).

3.4.2.2 Personal Income Tax (PIT)

Carnahna (2015) suggests personal income tax (PIT) as the other primary source of direct or income tax. The larger contribution of PIT comes from wage withholding from employees, which refers to tax levied on an individual's gross income. The other component of PIT comes from taxes levied on individuals on income earned, for instance on wealth of individuals. Carnahna (2015) asserts that PIT revenue is low and stagnant in developing countries ranging between 1-2% of GDP compared to the range of between 9-11% in developed countries. Further, Carnahna (2015) affirms that about 95% of PIT revenue in developing countries consists of public sector wages and that of large corporations. In that regard, this would lead to about less than 5% of the total population in developing countries paying PIT. Normally, there are straightforward systems used to administer the tax in the public sector and large corporations but these system cannot be used elsewhere with relative ease (Carnahna, 2015).

According to Kayaga (2007), direct taxes like PIT are desirable when a country has a taxpaying population that can be identified easily, is highly literate and able to do record keeping. Nonetheless, these characteristics are non-existent in some developing countries, hence the heavier the reliance on consumption taxes that are difficult to evade such as VAT (Kayaga, 2007). Notably, the greater part of the population in SADC countries resides in rural areas where economic activity is seldom recorded, hence making it difficult to tax. Moreover, the greater part of rural areas remains poor. Against this background, this study concurs with the notion that only a small portion of the population in SADC actually pays PIT.

Sicat and Virmani (1987) argue that what is of utmost importance to taxpayers and tax policymakers are the tax schedules and tax rates facing taxpayers. This is because the average tax rate will influence the amount of income that remains after being taxed and the resulting level of consumption possible thereof (Sicat and Virmani, 1987). This highlights the need to understand the extent to which tax progression is plausible given the limitations from inherent country characteristics or evolving features within developing countries (Sicat and Virmani, 1987). The marginal tax rate influences the decision to work, save and to purchase various goods (Sicat and Virmani, 1987). In view of the assertion by Tanzi and Zee (2001) that the tax system of a country must not deviate too much from those of neighbouring countries, this study contends that marginal tax schedules across the range of family income levels should be similar

in SADC. From the previous chapter, this study notes that while the EU was set on harmonizing direct taxes, the SADC has set to harmonize indirect taxes such as VAT and Excise taxes. In this regard, the notion of matching marginal tax schedules in the region may not be a priority for tax policy since PIT has a limited role. Sicat and Virmani (1987) suggests that while it may be possible to show in depth knowledge on income tax schedules in one country is it not possible to do so for a cross-country study due to the complexities involved in interpreting income tax manuals. Nonetheless, it is asserted that tax rates can be compared by using (i) the comparative tax on the hypothetical "average" taxpaying unit; (ii) the applicable tax rates at specific levels of income; and (iii) the comparison of top tax brackets and those of lowest income tax brackets (Sicat and Virmani, 1987). Similarly, this study sought to establish whether tax rates in the SADC were comparable and noted that they were relatively closer for indirect taxes than direct taxes.

Sicat and Virmani (1987) argue that it is inadequate to compare income tax schedules of different countries without considering the allowable deductions. This is because it may create the wrong impression about the tax base and the degree of progressive taxes, hence, policy advice would prove to be very dangerous. It becomes seemingly important to make comparisons by considering the point in the tax base when marginal and average tax rates become positive (Sicat and Virmani, 1987). Allowable deductions include; pensions, medical aid, life insurance, interest on mortgage loans, funeral aid and housing allowances to mention a few. However, Sicat and Virmani (1987) assert that to make country comparisons, only standardized allowable deductions can be used feasibly. This compounds the process of providing evidence-based plans on advancing the use of PIT as a feasible option for tax revenue generation in SADC.

In order to determine whether PIT is a feasible and viable option to sustainably raise tax revenue, it is equally important to understand the nature of the income tax bases in developing countries. Chapter 4 provides more insight into the economic theory and significance of tax base in developing countries. Nevertheless, Sicat and Virmani (1987) define the tax base as the net taxable income after deductions, exemptions and exclusions where the latter depends on policing affecting households. In the previous chapter, this study notes that although SADC countries use similar definitions of taxable income, it was difficult to precisely delineate the income tax base of each individual country. Conventionally, there should be specific deductions for the taxpayer, spouse and children, however, developing countries have limited administrative feasibility to enforce this, hence, limiting the size of the income tax base (Sicat

and Virmani, 1987). This compromises the principle of equity, as people in similar situations need similar treatment when levying tax, however, exclusion of other important criterion is apparent in the application of PIT in developing countries. From the previous chapter, it emerges that some countries have very low incomes which tends to naturally squeeze the tax base. Accordingly, players in the informal sector, agricultural economy, small service and industrial establishments become naturally exempted from paying taxes (Sicat and Virmani, 1987). Additionally, Sicat and Virmani (1988) suggest that the tax base is further constrained by the relative proportion of people facing poverty and the influence of pressure from politics or administrative costs to offer exemptions to favoured taxpayers. In this regard, understanding the tax base becomes crucial in the consideration of tax policy especially when tax reforms are needed.

Bird and Zolt (2014) suggest that as the poor become poorer and the rich become richer it becomes questionable whether developing countries can rely on PIT for redistributive purposes. This is consistent with the assertion that expenditure policies are better suited for redistribution than tax policy. Further, Bird and Zolt (2014) argue that empirical evidence seems to suggest that the contribution of PIT in relation to raising tax revenue is limited relative to consumption taxes. In this regard, it becomes paramount to question whether governments should continue to pursue redistribution using tax policy. Similarly, Bird and Zolt (2014) argue that PIT has not had the desired impact to reduce inequalities in developing countries as it is usually neither comprehensive nor progressive but rather just revenue from withholding taxes on labour income from the formal sector. Bird and Zolt (2014) further suggest that PIT has played a limited role because of the costs associated with administering progressive taxes. These costs include compliance, economic efficiency, political costs and the real costs of administration and cost which are often associated with poor design of PIT systems and administration. In the regard, this forms part of the basis of why it may be rational to opt for other taxes with lesser costs.

3.4.3 Indirect taxes

3.4.3.1 Value-Added Tax

According to Shoup (1988:139), “Value Added Tax (VAT) is a tax on the value that a business or firm adds to the things it buys from other firms when producing its own product.” Similarly, Lent, Casanegra and Guerard (1973) define VAT as a tax on the value that is added to goods and services by enterprises at each stage of the production and distribution processes. VAT is

comprehensive as it covers all economic activity from the initial stages of production to the retailing stage. Smith, Islam and Moniruzzaman (2011) suggest that the origins of VAT trace back to 1918 when a German economist, F Von Siemens, proposed it. However, the introduction of the first VAT was in France in 1954 following the work of Carl Shoup and Maurice Faure. Shoup (1988) asserts that the first form of VAT was restricted, however the first comprehensive VAT was first introduced in Brazil in 1967 to replace turnover taxes. According to KPMG (2015), more than 140 countries use VAT except for the US among others. It is argued that the US does not use VAT systems because it is well industrialized enough to be able to get its required revenue from income tax. However, Shoup (1988) is of the opinion that the widespread use of VAT remains unmatched in comparison to other forms of taxes as about 71% of countries in the world use VAT.

Lent et al. (1973) provide some of the key features of VAT in developing countries. The conceptual basis of VAT is that the tax is payable by each enterprise by employing a subtractive approach between the net amount of two separate items. This is done by subtracting purchases of goods and services from net sales and then taxing the balance or by employing the tax-credits (Lent et al., 1973). However, the latter, is more widely used as it sets off the tax paid on purchases against the tax payable on sale. The taxable base upon which VAT is levied is based on the use of broad levies aimed at reaching a significant part of domestic consumption expenditure; however, the coverage of VAT varies from one country to another (Lent et al., 1973).

According to Lent et al., (1973) the general scope of VAT is specified to taxable persons and taxable transactions. Taxable transactions refer to sales by persons engaged in industrial and commercial activities (Lent et al., 1973). The definition includes sale of goods and services rendered. Considerations are made on whether goods are movable (such as merchandise) or immovable such as real property (Lent et al., 1973). Nonetheless, most public utility services are outside the scope of tax and similarly sales by farmers also largely exempted from tax. However, financial services, construction services and sales from merchants are subject to VAT. Notably, only exports are exempted from VAT on their final value, however, any VAT charged on export goods in manufacturing cannot be paid back to exporters. In addition, some inputs used in manufacturing export goods are exempted from tax (Lent et al., 1973). Consideration of VAT rates is of particular importance especially in bringing insight into the distinction between nominal tax rates and effective tax rates. The imposition of tax on the price

of goods (exclusive of tax) leads to an effective tax rate that is equal to the nominal tax rate. However, if tax imposition is on the price inclusive of tax then this results in an effective tax rate that is higher than the nominal tax rate (Lent et al., 1973).

Shoup (1988) suggests that VAT was introduced as a replacement tax because other types of sales tax had serious defects that were not in VAT. However, these challenges contradicted the notion of raising revenue through taxes. The three major defects on sales tax/ turnover tax were that it was levied as a percentage of sales and not on the value added (Shoup, 1988). Along any value chain, sales tax would be paid from one stage to another, thus creating a disincentive to reduce economic activity at the earlier stages of production (manufacturing) and increase activity at the last stages of retailing. In this regard, the turnover tax was viewed as being ideal for luxury goods with high mark-up than goods with low mark-up (Shoup, 1988). VAT is neutral in that the total accumulated tax is the same for every dollar of the retail price. Further, there were equity issues with the turnover tax as rich consumers would be better off than poor consumers and buy retail goods more extravagantly (Shoup, 1988). Further, while the structure of VAT may generally apply to consumption only, Shoup (1988) argues that it was difficult to avoid using turnover taxes on the value of capital goods related to production. However, other countries have VAT charged on capital goods as suggested in Lent et al. (1973). Notably, Shoup (1988) is of the opinion that turnover on capital goods tended to inhibit growth, hence it was better if VAT could be delimited to consumption.

The other challenge with the turnover tax was that in the event of a merger through vertical integration, one phrase of the chain would disappear, thus the turnover taxes would decline in the case of VAT no changes occur (Shoup, 1988). The collection occurs from one firm instead of two. Further, the use turnover taxes were affected by the difficulty of exempting exports since it was challenging to isolate the value of the good from non-physical components like fuel or wear and tear incurred in production (Shoup, 1988). Suppose estimations are made on the true value of the exported good, overvaluing or undervaluing is possible which may lead to clashes with importers of those goods who may protest against disguised subsidies especially when trade agreements take a central role in trade between countries (Shoup, 1988).

The design and implementation VAT in developing countries has been viewed as a critical part of tax reform. According to Faridy and Sarker (2011), the widespread adoption of VAT in developing countries is largely due to tax policy advice from the IMF following its early adoption by the EU. One of the most peculiar issues about VAT in developing countries has

been that it tends to be higher among lower-income groups, thus prompting the need for better VAT systems (Faridy and Sarker, 2011). With reference to the case of SADC countries, this study notes that it may be presumptuous to explicitly and conclusively suggest that lower-income countries tend to have higher VAT.

There are three principles of VAT suggested by Faridy and Sarker, (2011) which serve to guide developing countries that have adopted VAT. Firstly, it is argued that a well-designed VAT system should raise more revenue with reduced economic and administrative costs relative to other broad-based taxes. Secondly, VAT avoids the defects of sales taxes and excise taxes by allowing for predetermination of the tax content of any product with greater degree of certainty. In this regard, improved decision making on resource allocation can be made independent of tax policies. Thirdly, Faridy and Sarker (2011) call for simplified tax administration when using VAT to promote greater efficiency in resource allocation.

Similarly, Bird (2005) reiterates the relative importance of VAT among several fiscal issues. Although VAT worked well in EU, Bird (2005) argues that its adoption in developing countries is challenged by the presence of less developed economies and different administrative structures. Nonetheless, for developing countries that have VAT, it invariably remains the most important tax head contributing significantly to total taxes. Although Bird (2005) affirms that VAT works, this does not imply that it would work in all developing countries because some countries are not prepared to make self-assessments. In this regard, 'No one size fits all' (NOSFA) approach is advocated in the use of VAT in developing countries with the exception of situations when countries face similar circumstances. Further, Bird (2005) argues that to some extent the future of VAT in developing countries is dependent on how well the political economy is understood in view of VAT policy and administration.

Bird (2005) argues that further reflections need to be made on the effects of VAT on effects on trade, revenues and the shadow economy. In view of trade liberalization, it is prudent to ascertain whether VAT is adequate to replace lost revenues (Bird, 2005). Similarly, given the considerable large size of the shadow economy found in developing countries it is critical to ascertain the role of VAT. Bird (2005) asserts that if VAT is dominant in the formal sectors of developing economies, then it will deter growth and development of the overall economy.

VAT may not work well as expected in developing countries because sometimes problems remain in the design of VAT policy that may evolve with time and depending on country

specific circumstances. Further, it is argued that the best way to implement VAT is through self-assessment, thus Bird (2005) quizzes the extent to which VAT systems in developing countries are run. Notwithstanding the arguments for the use of VAT in developing countries, Shoup (1988) argues that VAT is not ideal because of the following seven elements: a) foreign trade plays a major role, b) small-scale agriculture is important, c) retailing is largely dominant among small sellers, d) whether vertical integration in any two or more stages of production along value chains is unlikely to be motivated by turnover tax, e) basic accounting is not widespread, f) whether discrimination on investment goods is not considered harmful, and g) whether efficient and impartial tax administration has not yet been achieved. According to Shoup (1988) if a country has three or more of the above features, then turnover tax is a better option than VAT.

3.4.3.2 Excise Duties

Hines (2007) defines excise taxes as selective taxes on the sale or use of specified goods and services such as petroleum products, tobacco products and alcohol. It is asserted that excise taxes take the form of ad valorem taxes or specified taxes. A specific tax (or unit tax) is defined per unit of the taxed good or service, whereas an ad valorem tax is defined per sales value. According to Bird and Zolt (2003), VAT contributes 40% to the total of consumption taxes and excise taxes are equally important. Nevertheless, many developing countries have moved from using excise taxes and replaced them with VAT where rates varied significantly with the VAT rate or few other rates (Bird and Zolt, 2003). Similarly, Hines (2007) argues that although excise taxes have been around for centuries, their relative significance has declined due to the increased role of income taxes and VAT. Nonetheless, governments still collect sizable taxes.

Irrespective of the changes in the role of excise taxes overtime, Hines (2007) suggests that there are four reasons why excise taxes are used by governments. The first is that excise taxes can enhance revenue generation at lower political or economic cost than other alternatives like CIT and PIT (Hines, 2007). Secondly, in view of the application of the benefit principle of taxation, the design excise taxes impose a burden on those who benefit from government services financed by excise taxes. For instance, taxes on fuel are often justified as user fees for government-provided roads (Hines, 2007). The third reason for using excise taxes is to control externalities of polluting substances, hence, taxes may be levied on ozone-depleting chemicals. (Hines, 2007). Lastly in other instances, excise taxes may be imposed on tobacco and alcohol

to discourage addictive use as individuals might over-consume in the absence of taxation (Hines, 2007).

Tanzi and Zee (2001) criticize the use of excise taxes in that they inappropriately have broad coverage of products. Notably, other consumption taxes should be broadly based to maximize revenue generation with minimum distortion however; excise taxes should be highly selective by targeting a few commodities. The selected goods need to pose externalities in their consumption in order to form a basis for the imposition of excise taxes. It becomes paramount to question the circumstances under which the use of excise taxes would be appropriate in developing countries. Tanzi and Zee (2001) suggest that goods that are excisable are usually few and inelastic in demand, thus a good excise tax system should generate revenue as a by-product from a narrow base and very limited administrative costs. From a theoretical perspective, Ramsey (1927) suggests that higher excise taxes should be imposed on goods and services that are complementary with untaxed leisure (Hines, 2007). Against this background, excise tax systems tend to be progressive in nature.

Gordon and Li (2009) suggest that poorer countries are often unable to employ broad based taxes, hence, they tend to rely more on excise taxes and tariffs to generate revenue resulting in less tax revenue as a share of GDP than in richer countries.

3.4.3.3 Import tariffs

Yonah and Margalioth (2007) concur with the postulations by Burgess and Stern (1993) that indirect tax systems in developing countries need VAT with one or two exemptions and excise taxes supplemented by temporary tariffs to maintain revenue. Although there were proposals to replace tariffs with sales tax in developing countries, it was largely unknown what the economic incidence implications would be given the relative large size of informal sectors. With reference to the SADC Trade Protocol, member states committed to reducing their customs duties and tariffs towards the goal of setting an FTA. However, the validity and applicability of the "revenue-neutral selective reform of tariffs and consumption taxes" proposed by Emran and Stiglitz (2005) is largely flawed by the presence of large informal sectors. This is because in order to move from a tariff to any other consumption tax, there should be considerable feasibility and relatively lower costs to impose the tax.

While import tariffs may be viewed as a supplement within an indirect tax system, they are also barriers to trade. As such, the need for tariff reduction prompted the emergence of the World Trade Organization (WTO) among other reasons. Outside revenue generation, tariffs also seek to protect the domestic industry and to provide remedies to trade distortions. There was a time when import tariffs paid an important role in raising revenue for economic development however; this has changed as tax structures have evolved over time. According to Whalley (2002), it is important to note that tax structure influences the composition and size of trade, meanwhile, the appropriate design of trade taxes should consider other issues in trade as well.

While raising tax revenue may be the primary objective it is critical that import tariffs should be as neutral as possible regarding its effect on resource allocation. From around 1920s, there was a great decline in the importance of tariffs as their share in total tax revenue took a downward trend in developed countries. Gordon and Li (2009) concur with the view that instead of relying more on broad based taxes, developing countries rely on tariffs among other taxes. Likewise, there is more reliance on revenue from tariffs in some SADC countries which include Botswana, Eswatini, Lesotho and Namibia. In this regard, Whalley (2002) suggests that the central issue concerning the design of tariffs in low-income countries is whether there is need to move from using tariffs to other broad-based consumption taxes like VAT as recommended by the World Bank. The draw back on using tariffs is that they distort consumption and production more than any other form of broad-based consumption tax (Whalley, 2002).

Gordon and Li (2009) assert that economic advice often advocates for a stable currency and low tariffs however, developing countries are compounded often by high inflation and high tariffs. Nevertheless, Tanzi and Zee (2001) argue that in view of trade liberalization, reducing tariffs has become very critical. The changes in tariffs should not alter the relative rates of effective protection across sectors, hence, reducing the nominal tariff reductions is likely to reduce short-term tax revenue.

3.4.4 Tax incentives

According to the Trepelkov and Verdi (2018: 5), tax incentives refer to “those special provisions that allow for exclusions, credits, preferential tax rates or deferral of tax liability.” There is a preposition that tax incentives are bad in theory and practice, despite the fact that

almost all the countries use them (Eaason and Zolt, 2002 and Trepelkov and Verdi, 2018). In theory, tax incentives distort investment and in practice, they offer opportunities for corruption and are liable to misuse, thereby becoming ineffective and inefficient (Eaason and Zolt, 2002 and Trepelkov and Verdi, 2018).

3.4.4.1 Types of tax incentives

Some groups receive preferential tax treatment in the form of tax holidays, tax credit, tax exemptions, preferential tax rates and import tariffs, deferral of tax liability and investment allowances. Nonetheless, sometimes it may be challenging to make a clear distinction between provisions in the general tax structure and those classified as special treatment (Trepelkov and Verdi, 2018). According to Zolt (2014), the other forms of tax incentives include preferential treatment for certain sectors of economy, reduced CIT rates, reduced withholding taxes, tax privileged zones, PIT, Payroll and Social Security Reductions, sales tax exemptions and reduced import tariffs and customs duties.

3.4.4.2 Importance of tax incentives

Trepelkov and Verdi (2018) suggest governments have employed tax incentives as a tool to promote specific economic goals. The rationale behind the general use of tax incentives addresses four main issues. These include, the need to subsidize companies when their sectors are not performing well, to create mass economies, target new companies and mobile investments that are subject to tax competition and to correct market inefficiencies which may arise from externalities of particular economic activities (Trepelkov and Verdi, 2018). Additionally, Zolt (2014) asserts that the importance of tax incentives also lies in their ability to promote regional developments by providing locational incentives, promoting specific economic sectors, reducing unemployment and enabling technology transfer among other objectives. Trepelkov and Verdi (2018) affirms that developed countries use tax incentives to foster competitiveness of their firms in the global market, to support export activities and promote research and development. Developing countries arguably utilize tax incentives as a tool to attract foreign investment and promote domestic industries (United Nations, 2018). This is consistent with the rationale behind the establishment of most of the tax incentives in the SADC.

3.4.4.3 Benefits and costs of tax incentives

According to Trepelkov and Verdi (2018), the benefits and costs of tax incentives vary across countries as such their economic impact on economic growth and the development of tax base is varied. Meanwhile foreign investors claim that tax incentives influence their decisions to invest; there is insufficient empirical evidence to validate this claim. This is because tax incentives do not work in isolation but are part of the packages that governments utilize to attract foreign investment. In this regard, it becomes difficult to delineate the true influence of tax incentives (Trepelkov and Verdi, 2018). Further, Trepelkov and Verdi (2018) suggest that the use of tax incentives is justified if they produce positive externalities or correct market inefficiencies. In addition, if tax incentives programmes are well targeted this may result in specific investment projects and thereby yielding increased capital, technology and knowledge transfer, improved employment and the overall welfare in developing countries. Moreover, the benefits that accrue to a specified sector may spillover to other sectors of the economy. Overall, the whole economy benefits from such an investment (Zolt, 2014; Trepelkov and Verdi, 2018).

Zolt (2014) is of the opinion that using tax incentives is symbolic as it signals an ‘investor friendly environment’ to the world. This assertion is underpinned by the belief that tax incentives compensate for inadequate tax systems that have high tax rates, insufficient net operating losses and depreciation provisions. Further, Zolt (2014) suggests that tax incentives may provide compensation for other externalities like bad infrastructure. Nevertheless, there are several costs associated with the use of tax incentives that include enforcement and compliance costs, resource allocation costs, foregone tax revenue, corruption and lack of transparency (Trepelkov and Verdi, 2018). The first major source of foregone tax emanates from specific projects that benefit from the tax incentives. Secondly, potential tax revenue is lost if some investors or local firms shy away from doing business in a country because they feel that the tax incentive favours certain groups or their competitors.

In this regard, it is only logical to offer tax incentives to investors who would otherwise invest elsewhere in the absence of the incentives. It would most probably be detrimental to make offers to investors whose decisions are not influenced by the tax incentives (Trepelkov and Verdi, 2018). However, in the SADC there is limited evidence to suggest that tax incentives are directly offered on the basis postulated by Trepelkov and Verdi (2018). One of the major drawbacks is that there may be tendencies where businesses may disguise their operations to qualify for tax incentives increasing the opportunity cost of tax revenue. For instance, local

firms may decide to route their investments through foreign firms or undertake any action to suit the conditions of the tax incentive regime. Consequently, the erosion of the tax base can become dominant whereas the benefits of introducing tax incentives may not be substantial enough to counter lose. In addition, there may also be tendencies to reduce tax liability on activities that do not qualify for tax incentives, as it is difficult to monitor whether a firm eventually sticks to operations under qualifying projects (Zolt, 2014; Trepelkov and Verdi, 2018).

Most markets in developing countries are undeveloped such that it becomes extremely difficult to warrant that tax incentives would lead to the correction of market failures. The absence of adequate knowledge on the competitive nature of market models compounds the success of using tax incentives. In the same vein, resources are often limited to enforce tax rules and monitor tax incentive schemes effectively. Similarly, the costs of compliance with tax rules is usually a challenge that limits the efficiency and effectiveness of tax incentive schemes especially where small firms are involved (Zolt, 2014; Trepelkov and Verdi, 2018). This may lead to tendencies where governments may end up preferring bigger firms that are fully taxable than firms operating under tax holidays. The policymakers are also at liberty to implement tax policies that may be objective or discretionary and subjective. In turn, this paves way for greater corruption and lack of transparency as officials directly influence the decision when applying tax incentive regimes as favouritism can arise (United Nations, 2018). In this regard, Zolt (2014) emphasizes the relative concern over equity, as other investors may be disadvantaged. In addition, discretionary practices may create opportunities for corruption. The theory underlying the political economy of taxation described in Chapter 5 concurs with the notion of why policymakers as alluded to by Zolt (2014) may choose different tax incentives.

3.4.4.4 Design considerations for tax incentives

In accordance with the assertion by Trepelkov and Verdi (2018), there is vast evidence of policy advice to governments in developing countries on whether to adopt tax incentives and how to best to design them (United Nations, 2000; International Monetary Fund, 2001; Organization for Economic Cooperation and Development, 2007; World Bank, 2009).

Trepelkov and Verdi (2018) asserts that it is crucial to consider issue of tax competition when making attempts to lure investors who would otherwise go to other countries. In this regard, the design of tax incentives should consider the type of investment a country is seeking. Notably, this has considerable implications on current tax systems in the SADC as there is no

conclusive evidence to suggest that individual countries crafted tax incentives in cognisance of tax competition in the region. According to Zolt (2014), considerations should factor in how best governments can target incentives and the nature of the incentive to be granted. Further, governments need to ascertain whether their country has comparative advantage over other countries in the same region (United Nations, 2018). From the previous chapter, the practice of establishing tax incentives in SADC member states seems distant from the postulations by Zolt (2014) and the United Nations (2018).

In order to ensure that tax incentives remain efficient and effective there is need for formal reporting and monitoring mechanisms to ensure the maintenance of compliance with qualifying conditions. Table 5 shows the recommendations of the OECD on improving transparency and governance of tax incentives in developing countries.

Table 5: The recommendations of the OECD on improving transparency and governance of tax incentives in developing countries

(a) Providing a statement to the public on all tax incentives for investments and their objectives within the governing framework;
(b) Delivering tax incentives for investment through tax laws only;
(c) Where possible, it is crucial to combine all tax incentives for investment under the authority of one government body;
(d) Making sure that approval or endorsement of tax incentives for investments is done through the law-making body or parliament;
(e) Enhancing transparency in administration of tax incentives for investment;
(f) Providing estimates of forgone revenue that ascribed to tax incentives for investment and publicly release a statement of tax expenditure;
(g) Making periodic reviews of the continuance of existing tax incentives by assessing the extent to which they meet the stated objectives;
(h) Highlighting the largest beneficiaries of tax incentives for investment by specific provision in a regular statement of tax expenditure, where possible;
(i) Collecting data systematically to underpin the statement of tax expenditure for investment and to monitor the overall effects and effectiveness of individual tax incentives;
(j) Enhance regional cooperation to avoid harmful tax competition.

Source: Trepelkov and Verdi (2018: 33)

Trepelkov and Verdi (2018), suggests that it is also critical to consider the possibilities of round tripping, overvaluation of assets by foreign investors, transfer pricing, abuse of duty-free privileges, asset stripping and ‘fly by night’ operations and double dipping. In relation to foreign direct investment (FDI) flows, round tripping takes the form of domestic businesses channelling domestic funds through offshore centres back into the local economy. In this regard, the investments made do not reflect the benefits of FDI (World Bank, 2017). Munongo (2015) studied the effectiveness of tax incentives in attracting foreign direct investment in the SADC. One of the major conclusions was that the region needs to adopt good governance in order to attract foreign investment. This is consistent with the stock of literature on policy advice towards the use of tax incentives in developing countries.

3.4.4.5 Common abuses

The use of formal reporting and monitoring mechanisms is crucial in detecting tax evasion and tax avoidance as domestic or foreign firms may abuse tax incentives in that regard. The rationale of understanding the common abuses relating to tax incentives is to provide insight to policymakers who may need to ascertain whether it is worthwhile to offer tax incentives. Table 6 shows ten common abuses related to tax incentives as follows:

Table 6: Ten common abuses related to tax incentives

(a) Existing companies reworking their businesses into new entities to qualify for incentives;
(b) National industries restructuring as foreign investors;
(c) Engaging in transfer pricing schemes with associated entities (sales, services, loans, royalties, management contracts);
(d) Creating fictitious investments because of lack of recapture policies;
(e) Schemes to boost up income or defer deductions at the end of a tax holiday length;
(f) Overvaluation of assets for depreciation, tax credit or different purpose;
(g) Employment and education credits, consisting of fictitious personnel and bogus training programmes;
(h) Leakages from export zones into the local economy;
(i) Regional investment incentives and corporation zones diverting activities to outside the region or zone;
(j) Disguising non-qualifying activities or burying them in qualifying activities.

Source: Trepelkov and Verdi (2018: 28)

This study establishes that there is active use of tax incentives in the SADC region as observed as well in the work of Munongo (2015). In view of tax cooperation and coordination, Munongo (2015) concludes that there is no convergence in tax incentive effectiveness in the SADC. To this end, this study believes that the use of tax incentives in the SADC is somewhat distortionary in view of the need to generate tax revenue as well as macroeconomic convergence.

3.5 Challenges of tax policy in developing countries

While theory provides a guide on the elements of a good tax system, in reality policymakers in developing countries face a host of challenges that limit the ability of governments to achieve such tax systems and simultaneously raise adequate tax revenue to meet public spending needs. This section provides insight into some the challenges of tax policy in developing countries.

3.5.1 Substantial employment in agriculture and the informal sector

Many developing countries across the world have experienced an increase in the size of the informal economy. Brautigam, Fjeldstad and Moore (2008) suggest that developing countries often have large agrarian and informal sectors and that it is one of the major structural features that distinguishes developing countries from developed economies. According to Tanzi and Lee (2001), the greater part of the people living in developing countries work or earn a living from agriculture or small businesses where transactions are often conducted in cash. The wages in agricultural sector and the informal economy as a whole often fluctuate and are difficult to observe as recording keeping is rare. Further, the wages or income earned may not be largely spend in big enterprises where recording keeping is a norm, thus this limits the options to use income taxes as well as consumption taxes. Under the circumstances of substantial employment coming from agriculture and the informal sector, the role of income and consumption taxes is demeaned as a means of raising tax revenue for government. Kayaga (2007) suggests that in 1988 the IMF recommended the use of withholding taxes, however, whilst it seems easier to take money from the tax payer straight to government before it reaches the tax payer, this method is constrained in the face of having a large part of the population working in agriculture or the informal sector.

Stuart, Samman & Hurt (2018) regards the informal economy as the new normal economy. However, Grote (2017) cited in Stuart et al. (2018) warns policy makers against the notion of taxing the informal sector at all costs in a bid to provide additional tax revenue. Instead, Stuart

et al. (2018) contend that building a culture of tax compliance among informal workers is more practical and sustainable. Kathage (2018) argues that although some governments perceive actors in the informal economy as tax evaders, study in Uganda showed that 60% of the people in the sector are below the lowest tax threshold. Table 7 shows poverty levels and the size of the informal economy in the SADC in 2018.

Table 7: Summary of the state of poverty and the size of the informal economy in the SADC

Country	Poverty level (2018)	Size of Informal Economy
Angola	40.5	43.96
Botswana	30.3	30.30
Eswatini	63	40.40
Lesotho	57	31.28
Malawi	50.7	38.51
Mauritius	8	22.57
Mozambique	46.1	37.20
Namibia	28.7	28.07
South Africa	16.6	25.94
Tanzania	22.8	52.22
Zambia	60.5	45.32
Zimbabwe	72.3	60.64

Note: The data on the size of the informal economy refers to the size of the informal economy (1991-2015), while the poverty level refers to the portion of the total population that survives below the poverty line.

Source: The World Factbook (2018); Medina and Schneider (2018)

According to the world rankings on poverty and the size of the informal economy, Zimbabwe is ranked second in both cases. In view of tax policy, this has implications on the choice of tax mix that will generate revenue to meet expenditure needs. On average, the greater part of SADC has high levels of poverty and considerable informality in their economies.

According to the Medina and Schneider (2018), Bolivia and Zimbabwe have the largest informal sectors in the world constituting 62.3% and 60.6% of the businesses respectively (Medina and Schneider, 2018). From a critical point of view, these findings have serious implications on tax policy. Likewise, for any developing country that faces a growing informal economy, the conventional tax instruments that are available in developed countries may not be available in the former. Tanzi and Zee (2001), suggest the greatest limitations to taxing the sector largely emanate from the fact that very limited statistics are available due to weak financial limitations faced by tax offices and statistical agencies. Although the informal sector may contribute greatly to over production, each business makes small profits and the geographical location of all players in the sector tends to be large and dispersed (Kayaga, 2007). In this regard, Gordon and Li (2009) suggest that there are extreme difficulties in administering

and enforcing tax payment in the informal economy since the tax base may be understated. In this regard, policymakers may not have enough reliable data to decide whether tax reforms will have a positive impact or not.

Kayaga (2007) suggests that the relative size of the informal economy differs among developing countries, hence prompting distinct tax policy advice to emerge. Nonetheless, there seems to be consensus that the informal sector needs to formalise, however in view of its current state, Kayaga (2007) proposes the use of presumptive taxes as is one available option to tax the sector. Notably, the use of presumptive taxes may be one strategy to tax the informal sector as it eliminates the need for financial record keeping. Instead, tax indicators are developed based on the nature of activity, equipment or geographic location. It is paramount to take cognisance of the fact that whilst income and consumptions taxes makeup the major contribution to total taxes, there are far from adequate in tapping the tax potential in developing countries where the agrarian and informal sectors are large (Kayaga, 2007).

3.5.2 Uneven distribution of income

Bird and Zolt (2014) are of the opinion that in developing countries the poorer have become poorer while the richer have become richer. In essence, this means that the gap between the poor and rich has widened as time has evolved since the 1980's and 1990's. It becomes imperative for developing countries to examine whether tax instruments are the answer to reduce the widening gap of uneven income distribution or to employ other alternative public policy instruments. Nonetheless, critics suggest that income taxes (especially individual taxes) have a limited role in redistributing income in developing countries. This contrasts the common view that progressive tax systems play role in the redistributive of income and wealth (Ishi, 1980). According to Tanzi and Zee (2001), when the rich have political and economic power over the poor, they may advocate for tax policy reforms that will minimize their own tax burden meanwhile increasing that of the poor in order to raise tax revenue for public expenditure.

3.5.3 Limited capacity of tax administration

The limited capacity to tax is influenced by internal and external factors that tax administration authorities face. Tanzi and Zee (2001) assert that the presence of a well-educated and trained tax administration workforce is critical. Likewise, Kayaga (2007) points out that limited capacity may be a result of low literacy among the country's population that may limit the ability of tax policymakers to use an array of tax instruments that may otherwise be prone to misconception of their interpretation. One of the major requirements of operating VAT systems

is that self-assessments need to be undertaken by tax payers. However, effective use of self-assessment requires basic literacy skills. Although tax administration is an entirely different problem with its own principles in taxation, the fundamental point arising from it is that tax policymakers would need to factor in the nature and capacity of their administrations. Over time, most of the member states in the SADC have set up tax authority agencies in order to enhance efficiency in the collection of tax revenue.

When selecting the mix for a tax system, some governments may choose specific tax instruments that may remain unused due to lack of enforcement or limited capacity as well as the capability to administer. This reinforces the notion that comprehensive analysis of tax systems should consider the following rungs: (1) tax rates and tax bases, (2) remittance rules, (3) enforcement rules and (4) bureaucratic organization (Slemrod, 2016). As such, Carnahan (2015) suggests that some countries do not have VAT because of weak administrative capacity, hence, they resort to using other alternative taxes that may perform better under the given circumstances. This reinforces the notion that developing countries should develop tax policy based on what is possible or practical rather than optimal (Tanzi and Zee, 2001).

3.5.4 Aid resource and dependence

Besley and Persson (2014) suggest that one of the major reasons attributing to low tax levels in low-income countries is due to heavy reliance on foreign aid. Consequently, Besley and Persson (2014: 111) argue that in “the standard framework for tax determination, governments are solely responsible for financing their spending needs.” Nonetheless, the share of foreign aid to GDP ratio somewhat exceeds the total tax revenue collected in some countries. As a result, there has been increased concern among the donor community that aid dependency has stalled progress in building robust tax systems in developing countries. Empirical evidence is inconclusive on whether foreign aid has a crowding out effect on tax revenue. According to Mbatia and Ellyne (2017) evidence from 42 Sub-Saharan countries shows that there is a negative relationship between aid given to government and tax revenue performance. The study recommended that the donor community should redirect aid to Non-Governmental Organizations (NGOs) or the private sector (Mbatia and Ellyne, 2017).

3.5.5 Exposure to external political and economic influence

According to Brautigam et al. (2008) developing countries are susceptible to external political and economic influences from aid donors and international financial institutions. Bird (2008) states that the motivation to alter tax structure in developing countries was prompted by the

need to liberalize imports and adhere to the principles of the WTO on increasing competition of foreign investment. Bird (2007) broadly categorises globalization as having had some adverse effects on tax outcomes in developing, owing to the circumstances that emerged from the international environment. Nonetheless, in view of tax policy advice to developing countries from the international community, Bird (2007) argues that it is an important lesson to understand that one cannot sell a good tax policy to one who is unwilling to buy it. The notion raised was that instead of telling policymakers what to do it would be better to assist them in abating the challenges that compromised tax revenue generation.

Williamson (1989) suggests that the Washington Consensus was established to institute economic reform in developing countries that were facing crises using a set of 10 economic policy prescriptions considered to constitute the "standard" reform package. The Washington Consensus was promoted by Washington, D.C.-based institutions such as the IMF, World Bank and United States Department of the Treasury (Williamson, 1989). Tax reform was part of the 10 policy prescriptions, nevertheless, Yonah and Margalioth (2007) argue that the experiences of countries prove that the 1990 Washington Consensus wrong and make no exception to policy advice given on taxation. One of the major criticisms was that the Washington Consensus was a standard economic reform package that lacked relevance to specific contexts found in developing countries. In this regard, Yonah and Margalioth (2007) call for further research to put developing countries into new categories to enable some generalizations on policy advice to become relevant. This rationalises the presence of studies that assessed tax capacity and tax effort in distinct regions of the world that include ECOWAS and EU. This reinforces the need for this thesis as it is of a similar nature, although it is on the SADC.

Ruiz, Sharpe and Romero (2011) suggest that since the 1980's, the IMF and World Bank in have had tax policy as a critical element of their advice. Tax reforms were also increasingly part of the structural and adjustment programmes ran by the IMF and World Bank. Notably, these International Financial Institutions (IFIs) used technical assistance and policy advice to help developing countries to reform their tax systems based on a 'Consensus' tax policy. However, one of the major criticisms of the set of prescriptions in the 'consensus' tax policy is that critics viewed it as a "one size fits all" approach. In order to validate their claim, Ruiz et al. (2011) argue that IFM recommended the adoption of VAT too widely without paying attention to critical factors like political, distributional and administrative context in which tax regime changes would occur. Further criticism claims that the stagnant and low revenue

outcomes in developing countries are due to the policy advice from IFIs that did not take cognisance of the economic conditions in which these countries exist (Ruiz et al., 2011). Although it is debatable, Ruiz et al. (2011) contend that even after a few decades after IFIs offered their advice, no official position has been given by the IMF on criticisms laid against the shortcomings of their tax policy approach to developing countries. Further, it is argued that the undesirable effects are more apparent for developing countries with low governance scores and low absorptive capacity and those supported by IMF programs.

Notably, although this thesis discusses the criticism by Ruiz et al. (2011), the association between the IMF and the Washington Consensus received its fair share of criticism².

3.5.6 Political and social factors

Bird (2008) suggests that ideas, interests and institutions influence tax policy. According to Kayaga (2007), political and social factors are critical in the design of tax policy. Some reforms have not been particularly successful because of restrained political will in all levels of government. Developmental challenges like health, poverty, hunger, famines, corruption, governance and war among others influence the design of tax policy (Kayaga, 2007). Umar, Derashid & Ibrahim (2017) assert that socioeconomic conditions play a central role in the influence of noncompliance in tax revenue generation. Socioeconomic conditions refer to the social and economic circumstances in which the general populace live in. The perception is that governments create these conditions by providing access to quality basic social services such as education, healthcare, public security and the financial condition. Umar et al. (2017) affirm that governments that are more effective in delivering basic social services are more inclined to generating more tax revenue because satisfied citizens will be willing to comply more with tax provisions.

3.6 Selecting the ‘right’ tax system

This section discusses some of the basic concepts considered when choosing the ‘right’ tax system, however, there is need to take cognisance of the need for tax cooperation and tax coordination in the SADC as critical elements for the regions’ economic development.

Besley and Persson (2014) suggest that governments make choices over tax bases, tax rates, administrative structures and several other considerations, however, for low-income countries,

² See Montiel (2007), Ahmed (2018) and Okonkwo and Ononihu (2018) among others.

extending to scope of taxation would require the establishment of progressive institutions. In developing countries, taxation depends on the patterns and forms of production activities. Similarly, tax revenue performance relies on capacity of tax authorities to administer taxes as well as the selected tax rates and tax bases (Ahmad and Stern, 1989). Although Besley and Persson (2014) mention that low-income countries require progressive institutions, this study contends that lessons from the progressive agenda of the 21st century are critical for all governments in the SADC region. Progressive movement must place high value on technological innovation and social innovation without ignoring the regions' past (Stiglitz, 2015).

Literature asserts that economic policy has an institutional dimension and a policy dimension (Miller, 1985; Stiglitz, 2015). This thesis places emphasis on the notion that there is need to understand that tax systems are outcomes of both policy choices and institutional choices. Although the prime objective is to dwell on tax design as a policy issue, this study takes cognisance of some of the main issues relating to institutional choices and tax policy.

According to Ahmad and Stern (1989), the characteristics of an economy determine the potential and actual revenue governments can collect using an assortment of taxes. As such, the distinctive nature of fiscal systems and economies in developing countries tends to be yield a different approach towards making the choice of tax instruments. Consequently, the decision on the balance of taxes hinges on the availability and consequences of imposing selected taxes (Ahmad and Stern, 1989). It is important to note that governments face different options to raise funds to meet their revenue requirement regardless of where it emanates from. (Ahmad and Stern, 1989). This is consistent with the evidence that emerged in the previous chapter on the overview of tax systems in the SADC. In order to provide some position on how to hypothetically design taxes, this study accentuates some of the basic consideration when selecting the 'right' tax system.

The first consideration focuses on the importance of relation between tax mix and the stages of development in developing countries. According to Ahmad and Stern (1989), direct taxes seem to be more prevalent in economies that are still at the early stages of development and become less dominant in later stages of development. However, this is debatable since PIT plays a huge role among OECD countries although social security contributions have become more important. Ahmad and Stern (1989) further suggest four classifications of development that include the traditional stage, transitional (including breaking away from the traditional stage),

adoption of the new stage and the modern economy. From another view, indirect taxes become more significant especially trade taxes depending on the extent of openness of the country (Ahmed and Stern, 1989). This is because of the relative convenience found in monitoring hold-ups and the potential advantages of having high monetization as activities are undertaken. Similarly, domestic indirect taxes become more significant owing to increased domestic production, monetization and the volume of transactions within the country. The classification thus asserts that taxation should move from agriculture to foreign trade, then to consumption and income. Nonetheless, Ahmad and Stern (1989) suggest that it does not necessarily hold that all countries will follow this trajectory.

The second consideration in choosing the right tax system focuses whether the use of direct taxes or indirect taxes is commensurate with prevailing tax bases. The major policy issues arising from selecting the appropriate tax mix stems from the notion that sometimes-using tax ratio averages is insufficient as the choice over to move to direct taxes or indirect taxation must be valid (Ahmad and Stern, 1989). When selecting appropriate tax instruments, it may be necessary to ascertain whether the selected tax mix would correlate with the key principles of taxation governing a countries tax system. This is closely related to ensuring tax compliance which is a critical element for tax revenue generation. In this regard, Ahmad and Stern (1989) recommend the use of indirect taxes in developing countries since effective direct taxation would require appropriate design, administration and implementation. Further, it would take some considerable time to attain a suitable mix of direct taxes. Nonetheless, the limitation of tax administrative capacities in developing countries is likely to be an impediment to the realisation of substantial revenue in the short to medium term (Ahmad and Stern, 1989).

The third consideration focuses on the likelihood and effects of contradictory policies. According to Ahmad and Stern (1989), governments may decide to concentrate their tax policy on growing sectors due to the relative ease of collecting taxes and administrative convenience. However, the long-run effect this may be an impediment to the development of such sectors, ensuing the decline in the growth of tax revenue. Ahmad and Stern (1989) provide an example of the use of PIT in developing countries where employees find difficult to evade tax as they work in sectors where tax information is available. In this regard, Ahmad and Stern (1989) argue that political institutions may not permit the use of more productive bases (for instance land and urban property) of direct taxation that require limited administration costs, fearing that tax will undermine their rent seeking behaviour. In addition, Ahmad and Stern (1989)

assert that it will be difficult to avoid or evade taxation on some productive tax bases, hence, it is probably explains why politicians may reject the introduction of tax reforms.

In view of the role of institutional choices on tax policy, Besley and Persson (2014) argue that high-income countries did not miraculously achieve high tax/ GDP ratios neither was coercion an attributing factor. Instead, economic, political, social and cultural institutions evolved overtime in support of broad tax base and a practical degree of tax compliance. In this regard, SADC member states must be cognisant of the facts that great effort is required if tax cooperation and tax coordination are to play a meaningful role in the economic development of the region.

3.7 Conclusion

The chapter began by elucidating the origins of tax policy in developing countries that has largely been due to the influence of IFIs like the IMF and their conditionality packages. As observed in the previous chapter, SADC member states are not similarly situated hence, there may be need for complementary policy advice that is country specific to augment the effectiveness of standard policy prescriptions. Although, the primary goal of taxation is to raise adequate revenue for public spending, there is need to carefully consider the trade-off between the pursuance of raising tax revenue against other objectives. There is need for further clarity on whether tax policy efforts link with the principles of a good tax system in order to identify existing shortcomings as this is detrimental towards tax compliance efforts. This study does not underestimate the enormity of tax design as it involves a wide range of factors which influence institutional choices and tax policy choices.

CHAPTER 4

OVERVIEW OF TAX SYSTEMS IN THE SADC

4.1 Introduction

In view of the critical role played by taxation in financing public spending, Slemrod (2016) asserts that it is necessary to undertake rigorous analysis of tax policies and tax systems in developing countries. The emphasis on tax policies stems from the notion that they provide a framework for tax systems and the ultimate amount of tax revenue that a country can raise (House of Commons, 2011). However, in order to ascertain the appropriate course of action required to raise adequate or additional tax revenue, there is need for empirical evidence on the outcomes of existing tax systems to inform normative evaluation of tax policies.

Although, economic development is dependent on the existence of an effective tax system, it is important to note that there are numerous economic and institutional factors that limit the amount of taxes that a country can actually raise (Le, Moreno-Dodson & Bayraktar, 2012; Langford and Ohlenburg, 2015). For instance, Newbery and Stern (1987) argue that while some taxes may be feasible to impose, they may come at a huge social cost which is not justified by the productivity of tax revenue, hence alternative taxes may become preferable. In this regard, the substantive aim of this study is to assess the determinants of tax capacity and tax effort in the SADC in view of providing a pragmatic approach to tax design.

This chapter provides an overview of current tax systems in the SADC in order to bring insight into the nature of the context from which the analysis and interpretations were fulfilled. This study adopted the tax policy perspective in assessing tax systems in the SADC in a way that is similar to the approach used by the Organisation of Economic Co-operation and Development (OECD). Following the introduction, this chapter is divided into four sections. The next section focuses on the trends of global taxation. Thereafter, the chapter considers the background of the history, political economy and macroeconomic conditions of SADC. This is followed by a section on the assessment of tax systems in the SADC. The conclusion forms the last section of the chapter ends the chapter.

4.2 Global taxation

Developing countries are distinct from developed countries as they face different economic, social and political conditions and hence, the kind of tax systems they have are also different (Slemrod, 2016). Table 8 shows comparative levels of share of tax revenue in GDP during the year 2000 and 2015. Notably, progress has been made in raising tax-GDP ratios since 2000 in Africa and Latin America and the Caribbean (LAC), while OECD was able to maintain tax revenue levels.

Table 8: Comparative levels of tax revenue of tax-to-GDP in 2000 and 2015

Region	2000	2015
Africa	14%	19.1%
Latin America and the Caribbean (LAC)	18%	23.1%
OECD	34%	34%

Source: OECD, Global Revenue Statistics. (2018a)

OECD (2018a) points out that tax levels increased by more than 5 percentage points in 20 countries, particularly in African and LAC countries. Moreover, 40 countries increased their tax levels by 0 to 5 percentage points, whilst there was a decrease in 20 countries, particularly in OECD and some Asian countries (OECD, 2018a).

According to Slemrod (2016), developing countries collect less tax revenue than their rich counterparts. Although it is difficult to make comparisons, Slemrod (2016) is of the opinion that taxation is less progressive in developing countries than in rich countries, while tax bases are narrow in the former than in the latter. Notably, Slemrod (2016) suggests that since 1984 to 2014, neither the tax mix nor average tax take changed among rich countries. However, the total tax take remained almost the same in developing countries, while, there was a huge shift from trade taxes (41 to 23% of revenue) to general consumption taxes (12 to 29%) and income taxes (24 to 34%). Based on statistics from the International Monetary Fund (IMF) and World Bank for 2014, Slemrod (2016) states that developing countries collected taxes amounting to 16.2% of GDP, while rich countries collected taxes amounting to 27.1% of GDP. Table 9 shows tax structure in developing countries in comparison to rich countries where some of the major taxes are expressed as shares of total tax revenue. With the exception of social security,

developing countries have greater shares of tax revenue from corporate taxes, trade taxes and general consumption taxes, compared to rich countries.

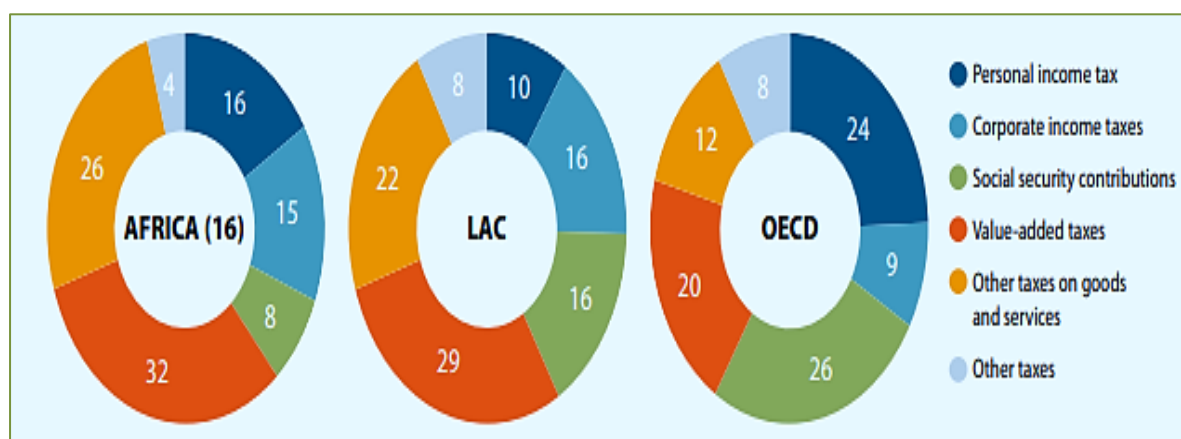
Table 9: Tax structure in developing countries versus rich countries in 2014

	Developing countries	Rich countries
Corporate taxes	16.5%	12.7%
Trade taxes	22.5%	6.6%
General consumption	29.2%	16.6%
Social security	0.3%	23.1%

Source: Slemrod (2016)

The tax mix in developing countries yields greater contributions to total tax revenue, however, the same tax mix yields less contributions to tax revenue in rich countries. Nevertheless, rich countries collect more tax revenue than developing countries. This is probably because of the differences in the stages of development as more is expected from rich countries, which are more industrialized in producing high-value goods. Figure 2 shows tax structures in Africa, LAC and OECD countries.

Figure 2: Tax structures for the Africa, LAC and OECD averages in 2015



Source: OECD, Global Revenue Statistics. (2018a)

The outcomes of choices made through tax policy are reflected in changes in tax structures and resulting tax systems. For instance, tax reform targeted towards reduced reliance on direct taxes in favour of indirect taxes, may lead to the latter contributing more to total tax revenue

than the former. Robinson (2005) suggests that the role of personal income tax is affected by labour mobility and hence it would not be unusual to experience a decline in personal income tax when people migrate to other countries. This may result in government shifting towards a tax mix where corporate taxes contribute more to tax revenue than personal income tax. Value-added taxes contribute 32% to total tax revenue in Africa, while other taxes on goods and services contribute 26%. Cumulatively, Value-added taxes and other taxes contribute 58%. The same taxes contribute 51% and 32% cumulatively in LAC and OECD countries respectively. Notably, from the 16 African countries selected by OECD (2018a), five are members of the SADC.

4.3 Background of the SADC

In view of the substantive aim of this study, this section focuses on elucidating the history, political economy and macroeconomic conditions as critical factors of relevance to fiscal policy, particularly tax policy in the SADC.

4.3.1 Brief history of the SADC

“The Southern African Development Community (SADC) was established as a development coordinating conference (SADCC) in 1980 and transformed into a development community in 1992” (SADC n.d). SADCC formalized a cooperation agenda that already existed since the 1970s between the nine so-called frontline states of Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe (Vanheukelom and Bertelsmann-Scott, 2016). Figure 3 shows a map of the SADC.

Overall, the SADC aims to achieve regional integration and poverty eradication among member states by working together to resolve common problems and issues (SADC n.d). SADC member states are unique because they are also members of other regional groupings like East African Community (EAC), Common Market for Eastern and Southern Africa (COMESA) and Southern African Customs Union (SACU). This implies that a diverse range of rules complicate the operation of fiscal policy and any other areas where cooperation and coordination are requisite (Glenday and Hollinrake, 2005; Rossouw, 2017). Further, Peters-Berries (2010) argues that the presence of overlapping membership of SADC member states is bound to be problematic due to the threat of divided loyalty and economic orientation.

Figure 3: Map of the SADC region



Source: SADC (n.d)

SADC has put in place several legal and institutional instruments to guide and standardize the work of member states. In this regard, SADC protocols represent one form of legally binding documents to which enable member states commit to the objectives and specific procedures stipulated (SADC n.d). Although the SADC has 26 protocols, tax policy related issues are covered in the Protocol on Finance and Investment, which was signed on 18 June 2006, however, it only came into force on 16 April 2010 (SADC n.d).

Through a Tax sub-committee, SADC endeavors to ensure “coordination of taxation policies to the extent necessary to improve efficiency in tax collection, safeguard regional tax bases and reduce obstacles to intra-SADC trade and investment” (Robinson, 2005:735). The Tax sub-committee was tasked to oversee:

- (a) the establishment of a comprehensive SADC tax base;
- (b) the determination of a common policy in respect of tax incentives, especially those aimed to attract FDI into the region;
- (c) the steady elimination of barriers to intra-SACU trade in an attempt to broaden the potential market and stimulate further domestic and foreign direct investment;
- (d) the identification and promotion of areas in which co-ordination of direct taxation would

- significantly enhance the attractiveness of SADC as an investment destination;
- (e) build an institutional capacity in member countries, with particular emphasis on tax policy-making and revenue collection through training institutes and tax seminars; and
- (f) the estimation of the compliance gap in respect of excise duties and introduction of comprehensive programmes to minimize revenue loss from tax fraud.

Chapter 4, Article 5 of the Protocol on Finance and Investment calls on member states to cooperate on taxation matters and to coordinate their tax regimes within the SADC as set out in Annex 3. Further, in Annex 2, the protocol specifies that member states are supposed to put in place a comprehensive SADC Tax Database to enable the public in the region to access tax information. SADC (2006: 45) states that “the developed SADC Tax Database shall, in relation to each State Party, include details in respect of:

- (a) all direct taxes, indirect taxes and levies, including applicable rates, implementation dates, exemptions and allowances;
- (b) all tax incentives offered, including implementation dates and conditions imposed;
- (c) all Tax Agreements and their respective implementation dates; and
- (d) appropriate statistics on revenue collection and the revenue importance of various instruments including:
 - (i) the sales volumes or value of products and services that are subject to Indirect taxes, and the revenue collected from such products and services; and
 - (ii) the revenue collected from direct taxes.”

Unlike other regional groupings where comprehensive data is available on tax systems and tax policy reforms in member states, the SADC is yet to provide a tax database of similar nature. as there are inconsistencies in the functionality of the current tax database. For instance, one cannot reliably get access to the database because of long spans of undue maintenance. OECD (n.d) suggests that statistics on tax revenue form the basis for analysis of tax and customs policies, while comparable and reliable statistics are essential in undertaking assessments and the development of better tax policy. For researchers keen on undertaking tax policy studies in the SADC, there are challenges in reliably obtaining updated, comprehensive and consolidated information on tax revenue. Nevertheless, various sources within member states and other international organizations (such as IMF and the World Bank) provide information on taxation in SADC countries to inform tax policy studies.

In a similar manner to what ECOWAS and the EU have done to enhance regional integration, the SADC established its own macroeconomic convergence criteria to encourage member states to strive for macroeconomic stability by achieving a set standard (SADC n.d). Over the past decade, calls have been made to SADC member states to begin thinking of funding their own programmes instead of relying on international loans or foreign aid.

SADC has made considerable progress in other tax matters (apart from tax policy) like tax treaties and the exchange of information by producing two documents namely, the SADC Model Tax Agreement (2009) and SADC Agreement on Assistance in Tax Matters which was concluded in 2009 but signed in 2012 (Letete, 2018). Further, with the help of the European Union (EU) through the Regional Economic Support (REIS) Programme (2013-17), the SADC now has regional guidelines for VAT, excise taxes and tax incentives (EU-SADC Regional Economic Integration Support, 2018). Notably, SADC now has tax expenditure model, which member states can use to assess the costs of different tax incentive measures. The aim of the guidelines is to provide frameworks for cooperation to empower SADC member states to develop tax systems and regimes that are fair, compatible and that contribute to the economic development of the region. In August 2015, SADC Ministers of Finance and Investment endorsed the progress made at their meeting in Bulawayo, Zimbabwe (EU-SADC Regional Economic Integration Support, 2018).

4.3.2 The political economy in the SADC

Winer, Profeta & Hettich (2013) claim that from historical experiences, it seems that the choice of tax instruments chosen by governments has been influenced more by political factors than economic reasoning. However, Ngo and Njib (2018) affirm that research on the analysis of the political economy on taxation remains scanty in Africa. Hypothetically, if Winer et al. (2013) were right then it may not be prejudicial for researchers to investigate to determine whether political factors have affected tax policy in developing countries. Similarly, the notion arising from Vanheukelom and Bertelsmann-Scott (2016) is that the analyses of the political economy of regional grouping like SADC is relatively novel due to limited access to data, information and previous analyses, including political economy analyses at country and sector levels. Regardless of the above-mentioned challenges, the analysis in Chapter 8 considered the role of the political economy of SADC in influencing tax capacity and tax effort over the period 2002-2016.

This section looks into the state of the political economy in the SADC, while Chapter 5 explores

some of the basic concepts imbedded in the theory of the political economy of taxation in developing countries. From a broader perspective, Vanheukelom and Bertelsmann-Scott (2016) suggest that the analysis of the political economy of the SADC may help to understand why the region has been unable to achieve its objectives on deepening integration. Likewise, it becomes essential to establish whether lack of progress in tax cooperation and tax coordination is related to the political economy of the SADC. In this regard, there is need for enquiry into whether actors and factors of the political economy influence tax capacity and tax effort in the region.

4.3.2.1 Colonial legacies

Mkandawire (2010) and Gardner (2012) state the importance of colonial history in assessing present day tax systems. In the same way, Vanheukelom and Bertelsmann-Scott (2016) suggest that understanding colonial factors may aid in providing an explanation on phenomenon observed in present day tax systems. Botswana, Eswatini, Lesotho, Malawi, Mauritius, Seychelles, South Africa, Tanzania, Zambia and Zimbabwe were colonized by Britain while Angola and Mozambique were colonized by Portugal³. Notably, Namibia had two dominant colonizers namely; the British and the Germans. Ziltener, Künzler & Walter (2013) posit that the dissimilarities in colonial legacies are due to differences in the length, depth and influence of various colonial factors. Further, Ziltener et al. (2013) also suggest that the form of colonial domination experienced is crucial in explaining the differences in political transformation during colonialism. In this respect, Vanheukelom and Bertelsmann-Scott, (2016) claim that in some instances, former colonial ties remain strong as it is observed that Angola takes limited part in SADC processes and tends to focus more on its relationship with Portugal.

The greater part of literature tends to suggest that British colonialism led to better outcomes than other forms of colonialism (French and Portuguese among others); however, the heterogeneity of pre-colonial and post-colonial histories makes it difficult to conclude definitively (Lee and Schultz, 2012). Likewise, Vanheukelom and Bertelsmann-Scott (2016) are of the opinion that the SADC region is heterogeneous because of the influence of different historical factors, including politics. Further, Vanheukelom and Bertelsmann-Scott (2016) argue that the different colonizers imposed different administrative regimes, which profoundly affected the domestic political economies of SADC countries. With the aid of correlations of data on 15 indicators for the political, economic and social impact of colonialism in Africa,

³ Colonial dominance refers to the considerable level of political sovereignty. see Ziltener et al. (2013)

Ziltener et al. (2013) find that British colonialism was less violent and generally less direct, while plantation colonies experienced more investment in infrastructure and more violence upon decolonization. However, Ziltener et al. (2013) conclude that colonial experiences differ in respect of the levels of distortions in countries and regions since violence and political dominance did not essentially lead to economic and social transformation.

4.3.2.2 Political leadership

According to Matlosa, Hamdok, Nodlund & Rukambe (2007), the performance of political parties reflects how visionary leadership is in pursuing democratic processes to bring growth and development in their countries. Nevertheless, the majority of member states in the SADC continue to face challenges with their leadership (Matlosa et al., 2007). In the same vein, Peters-Berries (2010) contends that the greater part of SADC has an authoritarian political culture, which is described as ‘personal rule’. This is “linked to arbitrary decision-making, the abolishment of all systems of checks and balances, disregard for the rule of law, while nepotism and corruption, low development-orientation as well as internal oppression are fostered” (Peters-Berries, 2010: 42). Despite having ascended into power through democratic elections, some presidents became personal rulers like Robert Mugabe (Zimbabwe), Frederick Chiluba (Zambia), Bakili Muluzi (Malawi) or Sam Nujoma (Namibia) among others (Peters-Berries, 2010). Upon independence, SADC member states adopted different ideologies which have subsequently influenced policy formulation and implementation and thus, traces of the use of the old systems are still evident in the present day (Chingono and Nakana, 2009).

Mususa (2018) raises concern over the alarming rate at which nations are shifting towards authoritarianism in the SADC. Examples include countries such as Mozambique, Zambia and Zimbabwe. In this regard, Mususa (2018) argues that the political redistributive agenda is being pushed by self-interests at the expense of pursuing participatory economic models to curb corporate tax evasion and to promote progressive taxation. Similarly, Peters-Berries (2010) points out that tenacity of autocratic leadership structures and autocratic political culture in the SADC is problematic. Consequently, leaders eventually lose control of other parts of their countries or territories and thereby limiting the capability of governments to achieve complete state consolidation. In essence, this implies that the capacity to enhance regional integration is also limited. These experiences have been observed in Angola, Lesotho, Madagascar, Mozambique, Zambia and Zimbabwe (Peters-Berries, 2010). Against this background, it is not surprising that the SADC region is nowhere near democratic convergence as some countries are progressing towards democratic political systems while others are regressing (Peters-

Berries, 2010). In 2008, Mauritius, Botswana, Namibia and South Africa were considered as democratic nations, while Tanzania, Zambia, Malawi and Mozambique were cited as having democratic inadequacies. Angola and Zimbabwe were rated as being under outright authoritarianism (Peters-Berries, 2010). In view of these political differences, this could essentially be one of the obstacles that limit the ability of governments to tax fully or to exert adequate effort to meet the upper bound level of tax collection. Nevertheless, this may have to be tested using multivariate approaches elsewhere.

4.3.2.3 Political parties and the electoral system

Since the 1990s, SADC has politically transitioned towards democratic governance with the fading of the one-party state form of governance (Matlosa, 2003). However, it is difficult to isolate the relative importance of this transition as several factors matter in tax policy. Despite huge differences in the political regimes of SADC member states, there are variances in the degrees of stability and economic development in the region (Vanheukelom and Bertelsmann-Scott, 2016). As suggested by Robinson (2005), the political economy of most SADC members is characterized by centralized systems while others employ authoritarian rule and/or high military expenditures especially in war torn countries such as the Angola. This led to marked differences in political systems of the region by the end of the 1990s since Namibia and South African were moving closer to social democracy while Botswana and Mauritius were closer to the classical systems (Matlosa, 2003). However, since Eswatini was governed by a monarchy and traditionalism its political system remained unchanged (Matlosa, 2003). In this regard, this raises some critical challenges in the formulation and harmonization of macroeconomic policy in general. One major implication of the monarchy rule in Eswatini was that it subsequently led to the ban political parties, thus the governance of the state became free of political party challenges as observed in other member states (Matlosa, et al., 2007).

Matlosa (2003) attributes the establishment of centralized systems to the adoption of the one-party state and authoritarian leadership style in the 1960s. Although Botswana, Lesotho, Tanzania, Zambia and Zimbabwe followed the liberal democracy model there was always a dominant party in the political arena (Matlosa, 2003). In this regard, while other political parties may have been established, there are concerns that the intended objective of ensuring democratic governance in administration remains a fallacy. By 2007, all SADC member states had fully embraced the multiparty system except for Angola, Eswatini and Zimbabwe (Matlosa et al., 2007).

It is believed that the shift towards democracy in the 1990s led to a surge in strong opposition parties as seen in countries like Zimbabwe where the ruling party ZANU-PF won an election by a very small magnitude (Matlosa, 2003). Due to fear of losing political dominance, Robinson (2005), suggests that there have been instances where several heads of states adjusted their country's constitutions in order to lengthen their terms of office. This has taken place in countries such as Namibia, Zambia and Zimbabwe where the need for political survival ultimately led the pursuance of political redistributive agendas. This helps to understand why the leadership of Zimbabwe failed to embrace the two-party system at the expense of losing legitimacy. Serious attempts were made to move back to the dominance of one-party in the governance of the state and against the odds the leadership of ZANU-PF triumphed.

The multiparty system that began in the 1990s remains dominant in the SADC, however, one major challenge arising from the pursuit of liberal democracy is that political participation and stability continue to lack in the process of governance. Overall, the presence of the multiparty system has not led to the desired outcomes. Instead, there has been a surge in inter-party rivalry in some countries such as Zimbabwe and South Africa where opposition parties have expressed their discontent due to the misgivings of the leadership of those in government (mostly revolutionary parties). Table 8 shows comparative data on political stability in 2000 and 2016 as well as recent information on the number of political parties in 13 SADC member states.

In 2000, Angola had the worst case of political instability with an estimate of -2.04, while Seychelles, Botswana and Mauritius were the most politically stable economies with estimates of 1.28, 1.07 and 0.76 respectively. Almost two decades later, Botswana and Mauritius remain as the most politically stable economies and are joined by Namibia. Nevertheless, Mozambique and Zimbabwe show the greatest levels of instability in the region. Although the number of parties in a country may be purported to be reflective of democracy, the largest number of political parties are found in countries which have political instability namely; Lesotho, South Africa and Zimbabwe. On the other hand, the estimates on political stability are negative in countries with the smallest number of political parties (Angola, Eswatini and Mozambique) in the region. Based on the information in Table 8, it is hard to conclusively generalize the nature of the political economy of the SADC. With reference to the Constitution of 2006, there is ambiguity over the status of the ban on political parties in Eswatini. However, the country has four political associations as indicated in Table 10 (The World Factbook, 2018).

Table 10: Political stability and the number of political parties in SADC member states⁴

Country	Political stability (2000)	Political Stability (2016)	Number of political parties (2018)
Angola	-2.04	-0.32	5
Botswana	1.07	0.99	7
Eswatini	0.04	-0.14	4
Lesotho	0.10	-0.24	13
Malawi	-0.33	-0.11	5
Mauritius	0.76	1.01	8
Mozambique	-0.13	-1.09	3
Namibia	-0.25	0.71	10
Seychelles	1.28	0.73	8
South Africa	-0.23	-0.14	13
Tanzania	-0.70	-0.44	8
Zambia	0.03	0.14	5
Zimbabwe	-1.32	-0.62	13

Source: World Bank, Worldwide Governance Indicators (2018); the World Factbook (2018)

The role of political parties as actors in the political economy of taxation depends on the nature and form of legislature in a country. However, it is critical to appreciate that most of the forms of legislature in SADC countries have traces that go as far back as the colonial rule. In this regard, it is not quite clear whether the proponents of the multiparty system appreciated the history and nature of administrative systems in which they hoped that other political players would have a dedicated space. This heightens the need to reconsider the assertion by Mkandawire (2010) and Gardner (2012) that history matters in assessing present day tax systems.

The World Factbook (2018) shows that SADC member states have different types of governments ranging from Constitutional monarchies to Parliamentary or Presidential

⁴ The estimates measure governance performance on political stability and the absence of violence or terrorism in 2000 and 2016. The estimate ranges from -2.5 (weak) to 2.5 (strong).

Republics as shown in Table 11.

Table 11: Type of governments in SADC

Type of Government	Countries
Absolute Monarchy	Eswatini
Parliamentary Constitutional Monarchy	Lesotho*
Presidential Republic	Malawi*, Mozambique, Namibia*, Seychelles*, Tanzania, Zambia and Zimbabwe.
Semi-presidential republic	Angola and South Africa*
Parliamentary Republic	Botswana* and Mauritius*

Source: Thornhill and Dijk (2002); The World Factbook (2018)

Note (*) - Electoral democracy (see Freedom in the World 2017)

Electoral systems play a crucial role in placing politicians into parliament where they are empowered to approve or disapprove policies, including tax policy. It is important to note that electoral systems in the SADC were inherited from colonialism as institutional arrangements left by colonial administrations. According to the Freedom in the World 2017 survey, there are six electoral democracies from the sample employed in this study to represent the SADC region. One of the factors considered as an essentiality of electoral democracies is the existence of a multiparty political system. In addition, major political parties must have public access to the electorate through the media and open political campaigns. Notably, Zimbabwe has heavily controlled media environment where the ruling party seems to dominate rival parties.

The world's best governments are found in Switzerland and New Zealand and followed by other European countries and Canada (World Atlas, 2019). Notwithstanding this, other countries which top the list include Denmark, Sweden, Australia, Norway, United Kingdom (UK), Finland and Luxembourg (World Atlas, 2019). Figure 4 shows the ranking of the world's best governments using the Legatum Index for Government ranking (2018) and the type of government in each case. It is important to note that the majority countries which make the world's best in terms of Government rankings are governed by EU and the United Nations (UN) affiliated leadership. In Switzerland, the people primarily have political power which allows them to freely choose their leaders and exercise their voting rights (World Atlas, 2019).

Figure 4: The ranking of the best governments in the world

Ranking	Type of Government
1. Switzerland	Federal Republic
2. New Zealand	Parliamentary Democracy under Constitutional Monarchy
3. Denmark	Parliamentary Constitutional Monarchy
4. Sweden	Parliamentary Constitutional Monarchy
5. Finland	Parliamentary Republic
6. Luxembourg	Constitutional Monarchy
7. Canada	Parliamentary Democracy under Constitutional Monarchy
8. Norway	Parliamentary Constitutional Monarchy
9. UK	Parliamentary Constitutional Monarchy
10. Australia	Parliamentary Democracy

Source: Authors' compilation from The World Factbook (2018); World Atlas (2019).

A priori expectations about the type of governments in the SADC may lead to the intuition that the differences may hamper harmonisation of political and macroeconomic policies. From Figure 3 and Table 4, it is apparent that countries seldom share the same type of government, however, most of the leading countries in Figure 4 are members of the EU which has been a force to reckon in terms of economic prosperity among the worlds' regions. In this regard, this study contends that there is something unique about the leadership in the leading countries since World Atlas (2019) affirms that being affiliated with EU- and –UN may have a bearing.

Prior to the period analysed in this thesis, many of the countries in SADC had multiparty systems. By 2004 the greater part of SADC had dominant ruling parties that have also dominated legislature with the majority being linked to the executive. Table 12 shows a summary of the last election results of SADC member states before 2005. In principle, this works against vibrant democracy as it becomes difficult to separate executive powers and those

of the majority in legislature (Matlosa et al., 2007). It may not be prejudicial to presume that an executive can make decisions and have them rubber stamped by its majority in public, especially if it is for personal reasons. This presumption comes against the backdrop that some SADC member states have had ruling parties taking centre stage in making drastic changes to legislation which have affected economic policy and foreign policy despite their knowledge of the detrimental effects on the public⁵.

Table 12: The dominance of ruling parties in the legislatures in the SADC region, 2004

Country	Ruling party	Nature of legislature	Size of legislature	Number of seats held by the ruling party	Number of seats held by the opposition party	Percentage of the seats held by the ruling party
Angola	MPLA	Unicameral	220	129	98	53.7
Botswana	BDP	Bicameral	57	45	12	78.9
Lesotho	LCD	Bicameral	120	79	41	65.8
Malawi	UDF	Unicameral	192	49	143	25.5
Mauritius	MSM-MMM	Unicameral	70	58	12	51.7
Mozambique	Frelimo	Unicameral	250	133	117	48.5
Namibia	SWAPO	Bicameral	104	55	17	76.1
South Africa	ANC	Bicameral	400	279	121	69.7
Swaziland	Executive monarchy	Bicameral	85	-	-	-
Seychelles	SPPF	Unicameral	34	23	11	54.3
Tanzania	CCM	Unicameral	274	244	24	89.1
Zambia	MMD	Unicameral	158	127	20	60.8
Zimbabwe	ZANU-PF	Bicameral	150	63	57	53

Source: Matlosa et al. (2007); EISA, (2019)

Despite the existence of contractual agreements and signed Protocols in the SADC; there are many factors limiting implementation at national level (Vanheukelom and Bertelsmann-Scott, 2016). Likewise, tax cooperation and tax coordination are prime to the SADC but it is also possible that some member states are constrained by various factors in the political economy. As afore-mentioned, multiple parties were established in the SADC, however, in practice the greater part of the region is governed by dominant ruling parties in legislature. Pushing for

⁵ Land reform in Zimbabwe, Indigenization and Economic Empowerment Act in Zimbabwe, changes in tax legislation in Zambia, etc.

sound tax policy proposals may be fruitless in systems where political redistributive agendas take centre stage among the executive and members of the ruling party in legislature. This could perhaps be the point of departure between leadership in the top ten of the world's best governments and the SADC.

There has been a growing trend of infighting within parties, factionalism and lack of intra-party democracy in countries conducting general elections (Matlosa et al., 2007). Conversely, some developed countries seem to reduce electoral competition by keeping a few dominant parties, thus creating huge barriers to entry for aspiring politicians who are not affiliated with existing political parties. Although it sounds uncouth to favour such political systems as observed in the United States of America (USA) or Constitutional Monarchies, the extent of conflicts arising from factionalism and intra-party rivalry seems to be stalling progress towards economic and social development of the SADC.

The consequences of infighting within parties, factionalism and lack of intra-party democracy have been evident during the time before and after elections in countries that include Malawi-2004, Lesotho-2007 and Zimbabwe-2008, 2013 and 2018. This is consistent with Matlosa et al. (2007) who points out that the dominance of inter-party rivalry inhibits the formation of mutually beneficial pacts at national level based on common ideology and policy frameworks. Moreover, leadership succession in the region is problematic, as intra-party conflicts have become a generalized trend in the SADC since 2000. Political party rivalry has intensified between ruling parties and opposition parties as the former are rarely willing to engage in meaningful national policy dialogue with the latter. Overall, it is difficult to institute any fruitful tax changes in such an environment, unless the dominant party is willing to implement tax proposals. This is compounded by political parties in the SADC having shown lack of willingness or capability to engage in regional party alliances or coalitions (Matlosa et al., 2007). This calls for urgency to pursue some form of harmonisation in the region's political policies and plans.

4.3.2.4 Political legitimacy and survival

Some political leaders hanker over the prospects of legitimizing their political power through regional integration and thus, they seek for recognition and acceptance (Peters-Berries, 2010). In order to remain visible and accepted, it is possible that leaders in government may follow through the guidelines on tax matters in hope of retaining legitimacy by showing progress towards cooperation and coordination. Nonetheless, the existence of strong and influential

allies in the SADC may constrain participation in SADC processes. For instance, Robinson (2005) suggests that Angola showed less commitment to SADC processes because it focused more on its relations with Portugal and Brazil.

Peters-Berries (2010) argues that because of the authoritarian political culture in the region, ‘personal rulers’ hardly worry about contractual agreements if their personal political survival is at stake. Instead, such ‘personal rulers’ may attempt to use regional integration to protect their political interests. It is possible that some of the allegiance among leaders in the SADC was sealed when revolutionary governments (so-called front line states) came together and formed the SADCC. Although it may seem unusual, the adversities of the war against colonialism have somewhat become a common ground that has fostered strong associations between SADC member states or at least leadership. Nevertheless, many of the leaders of the frontline states have since left office, however, their ideological legacies live on especially within the parties they once led.

On a different note, some ‘personal rulers’ put the region at risk due to lack of commitment and unpredictable behaviour. For instance, Angola’s Eduardo dos Santos neglected SADC for several years, as he did not attend important meetings or sign most of the SADC agreements (Peters-Berries, 2010). It is unclear whether this was driven by the perception that Portugal had more to offer than SADC.

4.3.2.5 Dominance of South Africa

Vanheukelom and Bertelsmann-Scott (2016) contend that the influence of history, geography, economics and politics creates a lasting impact which is difficult to change or impossible to change. Even in the analysis of tax systems, it becomes paramount to bring insight into the realities facing the region and whether they will remain unchanged and the policy implications thereof. According to Peters-Berries (2010), South Africa is a naturally dominant economic superpower in the SADC region because of its economic and political resources. Chingono and Nakana (2009) are of the opinion that South Africa is dominant because most SADC countries depend on its transport infrastructure, while South Africa exports more to the region than it imports. In this regard, Robinson (2005) and Vanheukelom and Bertelsmann-Scott (2016) concur that the dominance of South Africa as an economic and political actor cannot be ignored as this also has implications on the conduct of other member states.

Lessons can be learnt from the hype over “Brexit-no deal” which fundamentally relays the

challenges with having a dominant player in a regional grouping. According to Tetlow (2018), Brexit refers to the “The UK’s exit from the EU marks a step-change in the country’s economic relationship with the bloc”. This entails moving away from close integration and co-operation, while potentially reopening the opportunity to negotiate trade deals directly with non-EU countries”. The UK is one of the strongest economies in the EU and one of the regions’ biggest export markets and source of foreign investment. While the vote of the referendum in June 2016 clearly shows the position of the people of the UK with regards to leaving the EU, there are mixed views on the political and macroeconomic implications for the EU and the rest of the world. Tetlow (2018) suggests that several analyses have been undertaken in a bid to project the effects of Brexit, however, one fundamental change would be the UK’s relationship with other EU countries. From the review by Tetlow (2018) it appears that most of the studies predict negative growth as a result of Brexit.

Peters-Berries (2010) states that the admission of South Africa and Mauritius in 1994 into SADC was necessary to strengthen the new establishment. As a result, Peters-Berries (2010) suggests that other SADC member states are either too small or politically unstable or limited by insufficient political resources to challenge South Africa. In this regard, Vanheukelom and Bertelsmann-Scott (2016) suggest that the dominance of South Africa should be considered in the political economy analysis of the SADC. In view of the need by SADC to achieve cooperation in tax matters and coordination of tax regimes, it would be prejudicial to presume that a level playing field exists in the presence of a dominant member state. This is because it would be somewhat difficult to expect South Africa to downplay its economics and politics at the expense of its development even if it stimulates cooperation. However, this also has policy implications on harmonisation of fiscal policy of the region. For instance, the call to give more attention to export taxes in SADC as an alternative source to complement existing tax structures may not be politically feasible if the imposition of tax is likely to alter export volumes downwards to South Africa (Vanheukelom and Bertelsmann-Scott, 2016)

One of the constructs drawn from the previous chapter was that it is important to determine whether it would suffice to generalize tax policy to all countries in the SADC. However, indications from the discussion of some elements in the political economy seems to suggest otherwise.

4.3.3 Overview of macroeconomic conditions

4.3.3.1 Background

In order to bring more insight into the background of the SADC, this section considers the macroeconomic conditions in the region. Table 13 shows per capita GDP in the SADC (USD per head) for the period 2008-2017. World Bank (2017) categorizes countries into four income groups according to the 2016 (GNI) per capita. The groups are as follows: low income \$1,005 or less; lower middle income, \$1,006–3,955; upper middle income, \$3,956–12,235; and high income, \$12,236 or more (World Bank, 2017).

Table 13: Per Capita GDP in SADC (US \$ per head), 2008 – 2017

SADC Member States	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	4 127	3 186	3 675	4 757	5 275	5 452	5 624	4 314	3 879	4 883
Botswana	5 716	5 263	6 433	7 624	6 990	7 093	7 537	6 570	7 025	7 728
DRC	281	227	296	343	377	406	432	442	464	423
Eswatini	3 177	3 460	4 205	4 518	4 472	4 197	4 014	3 595	3 285	3 795
Lesotho	991	1 000	1 265	1 466	1 410	1 328	1 311	1 214	1 154	1 392
Madagascar	494	436	433	478	467	485	476	387	414	483
Malawi	407	457	492	556	385	341	378	394	315	365
Mauritius	8 026	7 325	8 001	9 199	9 290	9 629	10 154	9 241	9 602	10 453
Mozambique	545	516	466	570	647	662	692	601	413	439
Namibia	4 042	4 258	5 092	5 956	6 046	5 766	5 741	5 144	4 868	5 596
Seychelles	11 405	9 761	11 020	11 736	12 147	14 923	14 700	14 745	15 078	15 486
South Africa	5 793	5 914	7 362	8 059	7 557	6 881	6 483	5 776	5 290	6 183
Tanzania	673	682	720	757	870	958	1 008	927	930	991
Zambia	1 457	1 214	1 548	1 710	1 805	1 923	1 808	1 375	1 315	1 568
Zimbabwe	532	667	815	947	1 076	1 139	1 160	1 153	1 169	1 246
SADC Total	1 912	1 820	2 176	2 441	2 411	2 321	2 271	1 972	1 835	2 095

Source: SADC (2017: 3)

Most of the member states in the SADC region fall under developing countries as indicated in Table 14, which shows income and indebtedness classification of the SADC.

Table 14: Income and Indebtedness Classification of SADC Member States

Country	Income Class (June 2017)	UN Least Developed Country (LDC) as at December 2018	Heavily Indebted Poor Country (HIPC)- 2016	
				Year of Inclusion
Angola	Lower middle	*		1994
Botswana	upper middle			
DRC	Low	*		1991
Eswatini	lower middle			
Lesotho	lower middle	*		1971
Malawi	Low	*		1971
Mauritius	upper middle			
Mozambique	Low	*		1988
Namibia	Upper middle			
South Africa	Upper middle			
Seychelles	High			
Tanzania	Low	*		1971
Zambia	Lower middle	*		1991
Zimbabwe	Low			

Source: World Bank (2017) and United Nations (2016; 2018)

The Economist (2018) contends that around the mid-1990s the larger part of the continent was shut out of the global financial system because of unpayable debts. Consequently, a resolution was made in 2005 for rich countries to forgive the debts (of heavily indebted poor countries) owed to the World Bank, IMF and African Development Bank (AfDB) (The Economist, 2018). Thirty countries were from the African continent. Thereafter, the provision of new loans and improved policies turned the fate many of the heavily indebted economies for the better (The Economist, 2018). Despite such initiatives, some SADC countries like DRC, Malawi, Mozambique, Zambia and Zimbabwe continue to struggle.

Robinson (2005) suggests that tax policy considerations should factor the macroeconomic environment in order to get a comprehensive understanding of the economic disparities in the SADC. Notably, there are huge differences in population size, domestic markets and per capita income while most SADC countries still dependent on primary production and rely on two or

three exports for most of their export earnings (Vanheukelom and Bertelsmann-Scott, 2016). This is consistent with the notion that differences in the political and economic systems of SADC has influenced economic performance (Chingono and Nakana, 2009). Mauritius and Seychelles have some of the strongest economies in the region but are small in term of the land size and population.

Glenday and Hollinrake (2005) assert that the differences in the conditions in which tax policy occurs, results in SADC member states facing different fiscal pressures. In this regard, member states face different capacities to raise tax revenues to meet their public sector revenue demand. Consequently, the choice of taxes is influenced by factors that include the stage of growth, increasing revenue demands, budget deficits, large government debts and the role played by foreign aid in financing public expenditure among others (Glenday and Hollinrake, 2005). Against this background, it becomes imperative to explore some of these macroeconomic variables as they may provide early warning signs that are related to taxation and related matters of concern.

United Nations Economic Commission for Africa (n.d) suggests that the purpose of Macroeconomic Policy Convergence is to stimulate economic growth and development, however, economies have to commit to the set targets to avert macroeconomic instability. Additionally, the essence of having macroeconomic convergence is to balance economies in a region (SADC n.d). Apart from the SADC, other regional groupings such as the EU and ECOWAS have macroeconomic convergence criteria which guide member states towards the achievement of macroeconomic stability. Nevertheless, income convergence requires reforms that boost productivity growth in lagging countries (Franks, Barkbu, Blavy, Oman & Schoelermann, 2018). The Convergence criteria in the EU was set in 1992. ECOWAS was established as a development community by the ECOWAS Treaty in 1975, which was later revised in 1993. In 1999, it adopted its Convergence criteria as part of the, ECOWAS Monetary Cooperation Programme (EMCP). Despite having been formed in 1992, the SADC established its own macroeconomic convergence criteria in 2005 after operating for over two decades without one. The major advantage of having a convergence criterion is that it enables member states to enforce or voluntarily comply with set standards and to assess the extent to which they meet the criteria (Robinson, 2005).

SADC countries adopted a regional integration strategy called the RISDP in 2003, as a development and implementation framework for the period 2005 to 2018 and subsequently set

out convergence criteria for the region (Rossouw, 2017). The SADC macroeconomic convergence criteria have targets for member states as follows (SADC n.d):

- (a) The rate of inflation;
- (b) The ratio of the budget deficit to GDP;
- (c) The ratio of public and publicly-guaranteed debt in relation to GDP; and
- (d) The balance and structure of the current account.

At the time that the RISDP was adopted, none of the SADC member states met the convergence criteria. Nevertheless, Rossouw (2017) asserts that the original macroeconomic convergence criterion of the SADC has since been amended, however, during the course of this study no information has been published in the public domain as the approved criteria. According to Rossouw (2007), heads of states have not yet approved the amendments, hence any analysis of the criteria hangs in between using the original adoption and/or the one with amendments. Rossouw (2007) suggests that the reason behind the amendments was to address the deficiencies in the original macroeconomic convergence criteria. Table 15 shows the original macroeconomic convergence criteria. In comparison to that of the EU and ECOWAS, this study concurs with Rossouw (2017) that there are significant inadequacies in the original criteria for SADC.

Table 15: Original Macroeconomic convergence for the SADC

Criterion	2008	2012	2015
Inflation rate	Single digits	5%	3%
Budget deficit	5% of GDP or less	3% of GDP as an anchor, with a range of 1% on both sides	3% of GDP as an anchor, with a range of 1% on both sides
Government debt	Less than 60% of GDP	Less than 60% of GDP	Less than 60% of GDP
Foreign reserve/ import cover ratio	3 months' import cover	More than 6 months' import cover	More than 6 months' import cover

Source: Rossouw (2017: 6)

Progress has been somewhat slow in the SADC regarding the timelines for economic transition of the region was that SADC. It was anticipated that SADC would be a Free Trade Area by 2008; a Customs Union by 2010; a Common Market by 2015; a Monetary Union by 2016; and a have single currency by 2018. Rossouw (2017) suggests that the SADC’s Committee of Central Bank Governors (CCBG) is mandated to periodically assess macroeconomic convergence in the SADC and inform the SADC secretariat on its findings. In particular, the CCBG Secretariat produces annual reports on the progress made by member states regarding the achievement of macroeconomic convergence goals and uses the structure of targets as amended by Committee of Ministers of Finance and Investment (COMFI) (Rossouw, 2017). Central banks in the region take turns to do the analysis and the latest publication was undertaken by the Reserve Bank of Malawi in 2016, using the following “primary criteria:

- Inflation between 3 percent and 7 per cent by 2018;
- Budget balance at a deficit not exceeding 3 percent of GDP, within a 1 percent band; and
- Government debt at less than 60 percent of GDP.

Secondary criteria:

- Economic growth at 7 per cent per annum minimum); and
- Foreign reserves greater than or equal to 6 months of imports” (Rossouw, 2017: 7).

Table 16: Summary on the attainment of the macroeconomic convergence criteria, 2015

Country	Primary criteria				Secondary criteria		
	Inflation (3 per cent to 7 per cent)	Public deficit (\leq 3 per cent of GDP, \pm 1 per cent variation)	Public debt (\leq 60 per cent of GDP)	Result	Economic growth (\geq 7 per cent)	International reserves (\geq 6 months of imports)	Result
Angola	x	√	√	2/3	x	√	1/2
Botswana	√	√	√	3/3	x	√	1/2
DRC	√	√	√	3/3	√	x	1/2
Lesotho	√	√	√	3/3	x	√	1/2
Madagascar	x	√	√	2/3	x	x	0/2
Malawi	x	√	√	2/3	x	x	0/2
Mauritius	√	√	x	2/3	x	√	1/2
Mozambique	√	x	x	1/3	x	x	1/3
Namibia	√	x	√	2/3	x	x	0/2
Seychelles	√	√	x	2/3	x	x	0/2
South Africa	√	x	x	1/3	x	x	0/2
Swaziland	√	x	√	2/3	x	x	0/2
Tanzania	√	x	√	2/3	x	x	0/2
Zambia	x	x	√	1/3	x	x	0/2
Zimbabwe	√	x	√	2/3	x	x	0/2
Total	11/15	8/15	11/15	30/45	1/15	4/15	6/30

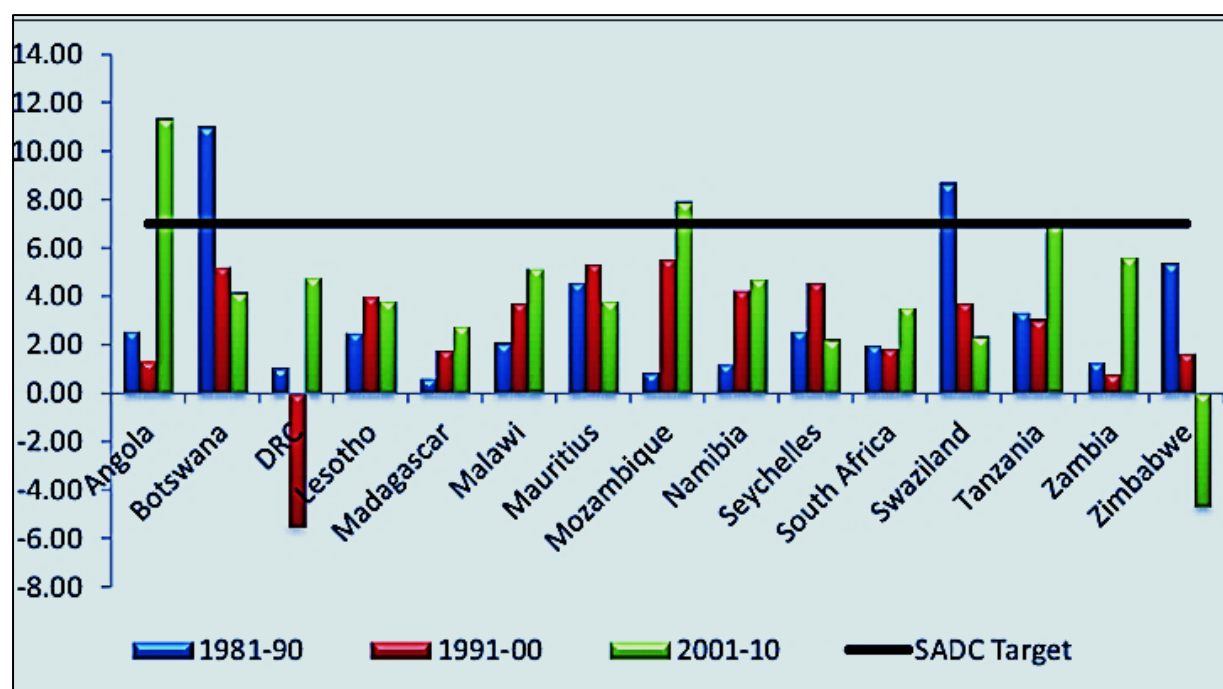
Source: Rossouw (2017: 8)

On average the 2005 results indicate that the region performs satisfactorily in the primary criteria, however, several countries were unable to match the secondary criteria.

4.3.3.2 Economic growth

Figure 5 shows the trends of real growth rates in the SADC. Glenday and Hollinrake (2005) suggest that low-income countries are heavily dependent on indirect taxes, while middle-income and high-income countries tend to rely more on direct taxes.

Figure 5: Trends in the real growth rate in the SADC

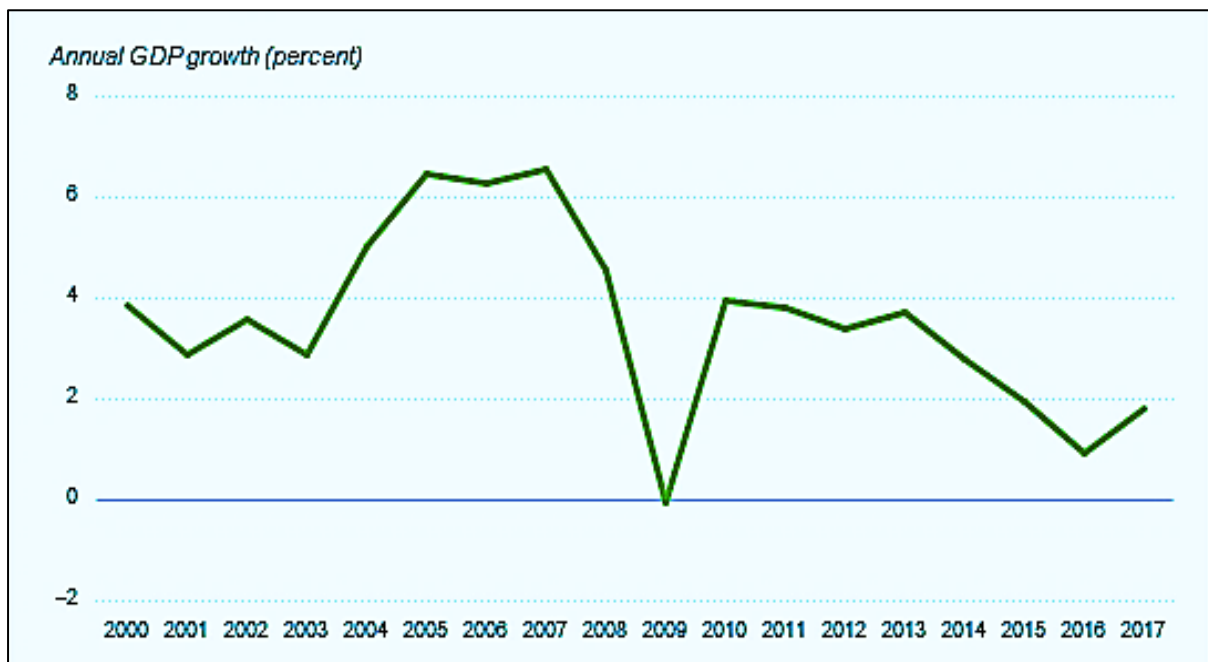


Source: Seleteng and Motelle, (2015)

From the sampled countries analyzed in this study, none of the countries had an economic growth of at least 7% in the assessment made in 2015. From Figure 5, it is apparent that the target for the region was out of reach for most of the member states during the period 1981-1990, with the exception of Eswatini and Botswana. However, all member states failed to achieve the target throughout the period 1991-2000, meanwhile improvements were made during the period 2001-2010 in countries that Angola, DRC, Madagascar, Malawi, Mozambique, Namibia, South Africa, Tanzania and Zambia. Notably, DRC and Zimbabwe were the only two countries that experienced negative growth over the period 1991-2000 and 2001-2010 respectively. The vast differences in the real growth rate reinforce the notion existence of economic disparities in the SADC as proclaimed by Robinson (2005), Glenday and Hollinrake (2005) and Chingono and Nakana (2009).

In view of the need to enhance integration, SADC member states need to cooperate and coordinate their economic policies achieve the regional growth rate target. Indications from Figure 6 shows the regional average real GDP growth rate, which was below the regional target for the entire period 1980-2017. This study concurs with Peters-Berries (2010) who is of the opinion that the overall performance of the SADC is weakened by member states' incoherent policies and unpredictable behaviour which puts the region at risk. With reference to the macroeconomic convergence criteria used by the CCBG in 2016, the SADC as a whole is yet to achieve its target. One of the major policy implications is that, while it is possible generalize some of the policy recommendations, there is need for additional country-specific recommendations because member states face different growth levels. This is consistent with the assertion made earlier in this study by Bird (2008).

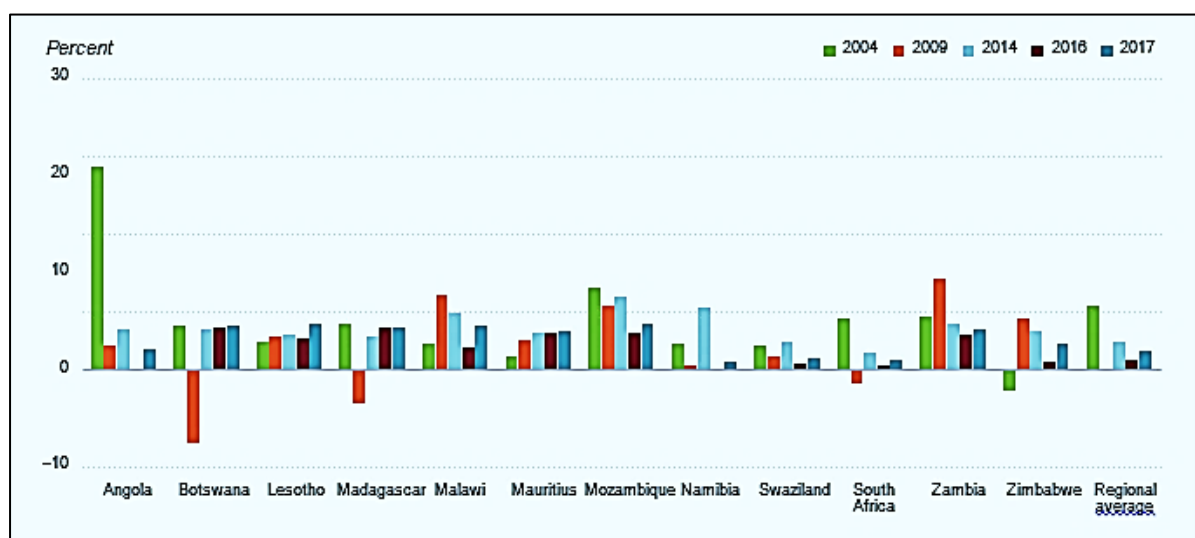
Figure 6: Regional average real GDP growth rate



Source: AfDB (2018)

Figure 7 shows the real GDP of selected SADC member states in recent years. Overall, the region's average real GDP growth rate was positive but relatively lower than in the period before the global financial crisis of 2008-09. Angola, Namibia, Swaziland and South Africa contributed the least to the region's real GDP growth rate average in 2017 while Botswana, Lesotho, Madagascar, Malawi, Mozambique and Zambia had relatively similar real GDP growth rates.

Figure 7: Real GDP growth of SADC member states



Source: AfDB (2018)

According to the theory of taxation in developing countries, real GDP is taken as a proxy of a nations’ tax base, hence as the economy grows it is expected that the tax base widens, creating more opportunities for revenue collection. Nevertheless, it is equally important to understand the sources of such growth in the consideration of tax policy making. Whilst developing countries have been associated with the dominance of agriculture, Table 17 shows that services and industry have become more important in view of their contribution to GDP in the SADC over the period 2000-2016. There are two contrasting view that have attempted to explain the determinants of tax revenue performance; these include structural factors and institutional factors (Maweje and Munyambonera, 2016). Structural factors include the relative size of major economic sectors and demographics. Notably, there has been structural transformation in the SADC towards higher value-added services, particularly in Zambia, Zimbabwe and Malawi as they have significantly shifted from agriculture intensive economies to services (AfDB, 2018).

Table 17: Sectoral GDP shares in Southern Africa, 2000–16 (percent)

Sector	2000-06	2007-09	2010-13	2014-16
Services	47.0	48.6	55.0	57.6
Industry	30.8	31.0	27.3	24.9
Agriculture	22.2	20.4	17.7	17.5

Source: AfDB (2018)

Whilst some studies have incorporated the influence of industry in the determination of tax revenue performance, the analysis of the impact of growth in services is somewhat scanty. Nevertheless, the dominance of the services sector over agriculture is a force to reckon in the consideration of tax policy options as it could be an early warning sign that traditional tax bases are shrinking. In order to ascertain feasible options in broadening the tax base, there is need to obtain insight on the state of sectoral contributions to GDP. Maweje and Munyambonera (2016) are of the opinion that if tax revenue performance is unresponsive to GDP growth, then it is possible that there is ambiguity over the responsiveness of sectoral contribution to GDP. In this regard, providing knowledge on sector-specific tax elasticities offers a practical guide to tax policymakers who seek to institute tax reform (Maweje and Munyambonera, 2016).

In order to understand why tax revenue has become unresponsive to certain structural factors, it may be argued that the relevance some of the conventional explanatory variables have been overtaken by time due to structural transformation. Table 18 shows sectoral growth in the SADC over the period 2000-2016 and indicates the downward trend of growth of agriculture.

Table 18: Sectoral growth in Southern Africa, 2000-16 (percent)

Sector	2000-06	2007-09	2010-13	2014-16
Services	3.7	7.2	6.8	3.9
Industry	4.4	2.0	5.3	3.2
Agriculture	0.9	2.9	1.7	-1.0
Real GDP	3.9	4.6	5.6	3.0

Source: AfDB (2018)

Over the period 2014-2016, engaging in agricultural activity led to negative growth of one percent, while the services and industry sectors contributed 3.9 and 3.2 respectively. This aids to explain why it is crucial to decompose the composition of growth and gain insight into its major sources. While growth figures may entail growth of the tax base, this study posits that the provision of such insight indicates possible areas of improvement in the practice of tax policy in the SADC. Table 19 shows a decline in the regional average of the share of manufacturing GDP to total GDP from 2008 to 2016.

Table 19: Share of Manufacturing GDP to Total GDP in SADC (%), 2008 – 2017

SADC Member States	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	3.5	5.2	4.6	4.2	4.3	4.8	5.2	5.1	5.0	5.0
Botswana	6.4	7.2	7.1	6.4	6.6	6.4	5.8	6.4	5.7	5.6
DRC	23.2	26.5	17.0	16.2	16.4	16.6	16.7	17.7	20.4	20.8
Eswatini	36.1	36.3	34.0	33.3	33.4	31.8	32.9	34.0	33.2	33.0
Lesotho	21.1	17.5	13.2	13.1	12.1	11.8	11.4	12.5	12.0	12.1
Madagascar	14.6	14.4	14.3	14.3	14.3	14.1	14.0	13.8	12.9	13.2
Malawi	12.6	11.2	10.7	10.4	10.1	10.1	10.1	10.2	10.1	9.8
Mauritius	17.2	16.7	15.9	15.7	15.5	15.7	15.3	14.7	14.0	13.4
Mozambique	13.4	11.9	11.3	11.2	10.0	9.5	9.9	10.0	9.6	9.5
Namibia	12.3	14.1	13.5	14.8	13.1	11.9	10.8	10.5	12.0	11.7
Seychelles	10.8	9.2	9.7	9.4	10.3	8.6	7.9	7.2	7.0	7.4
South Africa	16.0	15.0	14.4	13.3	13.0	12.9	13.4	13.4	13.5	13.2
Tanzania	7.4	7.3	7.3	8.1	7.9	6.8	6.0	5.7	5.3	5.9
Zambia	9.0	9.0	8.0	8.0	7.5	6.4	7.3	7.9	8.1	7.9
Zimbabwe	15.9	15.4	12.7	12.3	11.5	11.0	10.4	9.9	9.9	9.3
SADC Total	13.0	13.2	12.3	11.4	10.9	10.6	10.8	10.9	11.2	10.9

Source: SADC (2017: 4)

Overall, all member states show a general decline in manufacturing, however, Eswatini shows dependence on the sector as it contributes over 20 percent to total GDP. The lowest contributions to the regional average emanate from Angola, Botswana, Tanzania and Seychelles. However, growth in these countries is driven by other factors outside the manufacturing industry. Notably, Seychelles is a high-income country, while Angola has a dominant oil industry.

Table 20 shows the manufacturing GDP real growth rate in SADC over the period 2007-2016. Although, the performance of manufacturing industries improved in some countries, it subsequently regressed in others. Botswana, Madagascar, Malawi and Tanzania show a huge decline from two-digit growth rates to single-digit growth rates of 24.9%, 8.6%, 15.7% and 3.6% respectively. As such this is likely to impact negatively on tax revenue sourced from manufacturing industries if these changes progress further and become prolonged. Zimbabwe improved from -8.8 in 2007 to 0.3 in 2016; however, the growth remains very low in comparison to other member states. Like many other macroeconomic trends, the growth rate of manufacturing declined significantly in most of the SADC member states during the global financial crisis of 2008-2009.

Table 20: Manufacturing GDP Real Growth rate in SADC (%), 2007 – 2016

SADC Member States	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Angola	2.0	5.9	6.8	9.6	9.1	9.6	7.7	2.3	-1.1	6.9
Botswana	25.7	-2.6	5.0	3.9	11.4	3.7	6.5	0.5	3.2	0.8
DRC	4.9	2.5	1.8	-35.5	1.8	5.3	10.1	9.9	9.3	8.6
Lesotho	0.5	-2.7	-2.9	0.9	-0.6	-3.6	-2.5	-5.4	20.6	2.0
Madagascar	10.8	3.1	-9.3	-2.4	3.9	2.7	1.4	2.7	3.0	2.2
Malawi	17.1	11.0	29.1	14.4	1.4	-0.9	5.6	6.3	3.8	1.4
Mauritius	2.6	2.9	2.4	1.9	0.7	2.1	4.7	1.8	0.1	0.3
Mozambique	3.1	-2.8	0.0	3.1	2.1	0.1	4.1	2.6	9.0	3.9
Namibia	8.5	4.9	2.1	7.3	5.6	-6.8	4.4	-0.4	-5.6	1.2
Seychelles	3.4	-12.8	-11.2	8.9	13.4	17.2	-12.8	-6.4	9.5	-1.3
South Africa	5.4	2.3	-10.6	5.9	3.0	2.1	1.0	0.2	-0.2	0.7
Swaziland	7.7	1.4	6.6	11.1	2.4	4.1	3.2	5.0	5.0	1.0
Tanzania	11.4	11.4	4.5	8.9	6.7	4.2	6.6	6.8	6.5	7.8
Zambia	4.5	3.4	4.0	4.8	10.6	4.8	6.2	6.5	5.4	2.6
Zimbabwe	-8.8	-2.6	23.2	2.0	13.8	5.3	-0.6	-5.1	0.2	0.3
SADC Average	5.5	2.7	-5.6	4.0	3.9	2.9	3.0	1.7	1.5	2.6

Source: SADC (2016: 3)

In future, the prospects of additive manufacturing such as 3D printing and artificial intelligence should make the SADC region also part of the fourth industrial revolution which can mean more opportunities for government in terms of tax revenue.

4.3.3.3 Government expenditure

Glenday and Hollinrake (2005) suggest that increasing revenue demand influences the choice over what taxes to impose. Assuming two nations (nation A and Nation B) and two periods in which both nations use the same tax mix in period one to meet their revenue needs. The notion raised by Glenday and Hollinrake (2005) arises when nation A is revenue-neutral and continues to pursue its original tax mix, however, if nation B faces an increase in the demand for revenue, it means a new level of tax revenue is set and thus the original tax mix may be inadequate. Rahman and Wadud (2014) assert that the link between government spending and government revenue has implications for the political economy of fiscal policy especially in countries facing budget deficits. Notably, bureaucrats and politicians make the decision on whether to increase expenditure, while politicians will have the ultimate say on whether tax policy should change to meet the new demand from increased expenditure (Kimtai, 2014).

Another dimension offered by Aladejare (2014) is that increases in government spending lead to changes in tax revenue as government continuously increases expenditure in a step-like pattern as explained by the Peacock and Wiseman (1979) displacement theory. Contrary to this, the Spend-tax hypothesis suggests that government spends first and later raises taxes to pay for

that expenditure⁶. The fear of paying more taxes in the future is believed to encourage capital outflow (Rahman and Wadud, 2014). As such, Rezaei (2015) affirms that government determines the level of spending, then tax policy and revenue are adjusted to commensurate the change. In this regard, Lojanica (2015) contends that in order to establish effective fiscal policies, it is necessary to understand and establish the links between government expenditure and government revenues.

In the context of the SADC, the presumption is that revenue is required to spend, hence insight into government spending is critical. Further, in view of a nation's tax base, other forms of expenditure could provide insight into the appropriateness of existing tax choices or tax proposals. Table 21 shows GDP composition by expenditure in the SADC over the period 2000-2015. Private sector consumption has contributed the largest share to GDP moving from 66.9 to 69.6.

Table 21: GDP composition by expenditure in Southern Africa, 2000-15 (percent)

	2000-06	2007-09	2010-13	2014-15
Private sector consumption	66.9	73.4	70.7	69.6
Public sector consumption	17.2	17.5	19.2	23.9
Gross capital formation	18.8	22.5	23.3	23.9
Gross savings	19.4	19.7	17.1	17.7
Exports	42.2	41.0	40.0	38.8
Imports	45.4	53.2	53.2	52.7

Source: AfDB (2018)

Government expenditure grew from 17.2 to 23.9, indicating that both private sector consumption and government expenditure have influenced growth. In a similar fashion, domestic investment and imports show an upward trend rising from 18.8 to 23.9 and 45.4 to 52.7 respectively. Nevertheless, exports were on a downward trend as they declined from 42.2 to 38.8 probably due to the decrease in commodity prices. AfDB (2018) asserts that the decline in terms of trade for countries dependent on one resource destabilizes the fiscal account balance among others. Botswana depends on diamonds, Angola-oil, Zambia-copper, South Africa- gold and Namibia-gold (AfDB, 2018). In this regard, country specific tax policy considerations

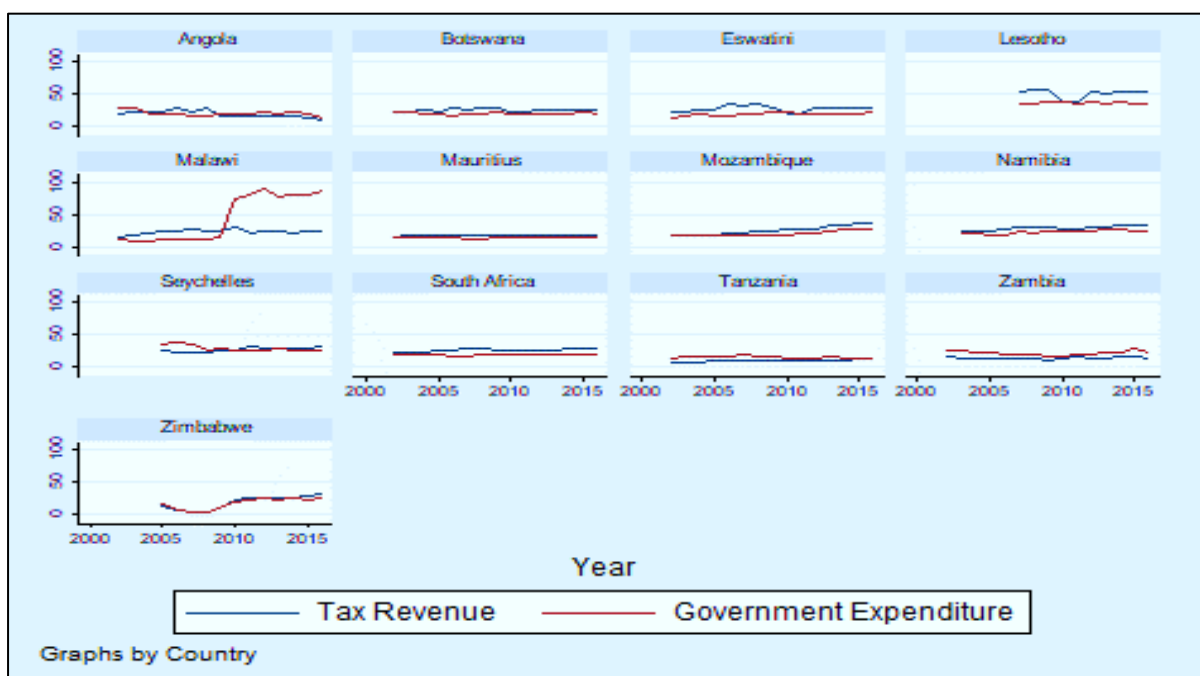
⁶ Peacock and Wiseman (1979) developed the Spending-Tax hypothesis and is also known as the expenditure dominance theory postulated by Barro (1974).

should focus on the feasibility and viability of using tax mechanisms or adjustments in the face of declining terms of trade.

The increase in public sector consumption translate to an increase in the demand for more revenue. However, since tax remains a critical source of revenue for most SADC countries, changes are likely to arise in the tax mix. The expectation is that the 6.7 percent increase in consumption must have been met by a commensurate increase in revenue, in particular tax revenue. Likewise, in countries where revenue demand grew, major tax reforms are expected to have been made to improve tax revenue performance. Kimtai (2014) suggests that even the political majority in parliament can decide to increase expenditure thereby stimulating the need to increase revenue as well. This is representative of the connection between taxation and the political economy as argued by Rahman and Wadud (2014).

Figure 8 shows comparative levels of government expenditure and tax revenue performance in the SADC over the period 2002-2016. Tanzania and Zambia have been unable to meet their expenditure needs from taxes, while the rest of the member states raised enough tax revenue to meet their expenditure.

Figure 8: Comparative levels of government expenditure and tax revenue performance in the SADC



Source: Author’s calculation using World Development Indicators, World Bank (2018)

Angola and Malawi were similarly situated as they did not manage to cover government expenditure from tax revenue in approximately half of the period under consideration in this study. This raises a paradox when considering the definition of tax capacity provided earlier according to Berry and Fording (1997). If governments are raising adequate tax revenue to finance expenditure needs, the paradox arises from the widespread concerns over the inability of developing countries to grow and develop into high-income countries.

According to Cyan, Martinez-Vazquez & Vulovic (2013), there is wide acceptance of the view that if a country is lagging in economic development, then it is almost obvious that more public revenues are required to meet developmental and additional budgetary needs.

With reference to the SADC, it is apparent that the greater part of the region is comprised of developing countries, with some still being classified among the least developed nations. Against this background, there is need to worry about whether taxation in SADC member states will suffice to meet developmental and additional budgetary needs as the region attempts to drive socioeconomic development. However, Chu, Hölscher & Mccarthy (2018) suggest that while increases in government expenditure have detrimental effects on economic growth, a shift from non-productive government expenditure to productive forms of expenditure enhances growth.

In this regard, this study contends that until SADC gets to a point where it is classified as a developed region, the need for additional revenue will continue to be important to drive governments towards productive expenditure. Furthermore, it can be argued that although present day tax systems in the SADC seem to meet public spending needs, there is no empirical evidence to support that the region has tax systems are at the upper bound of tax collection. Hence, it becomes difficult to ascertain whether current tax systems are adequate to meet additional developmental and budgetary needs in view of their recent commitment of member states towards achieving Sustainable Development Goals (SGDs).

Proposals that advocate for changes in government expenditure composition towards productive expenditure, need to be backed by the provision of information on the feasibility of funding options at government's disposal. It is apparent that most of the SADC countries have larger current expenditures compared to capital expenditures as wages and salaries constitute the greater part of current expenditure (AfDB, 2018). This scenario is worrisome because to a larger extent, tax revenue in the SADC has been spent on meeting current needs than on long-term development-oriented goals which would foster sustainable growth and development of

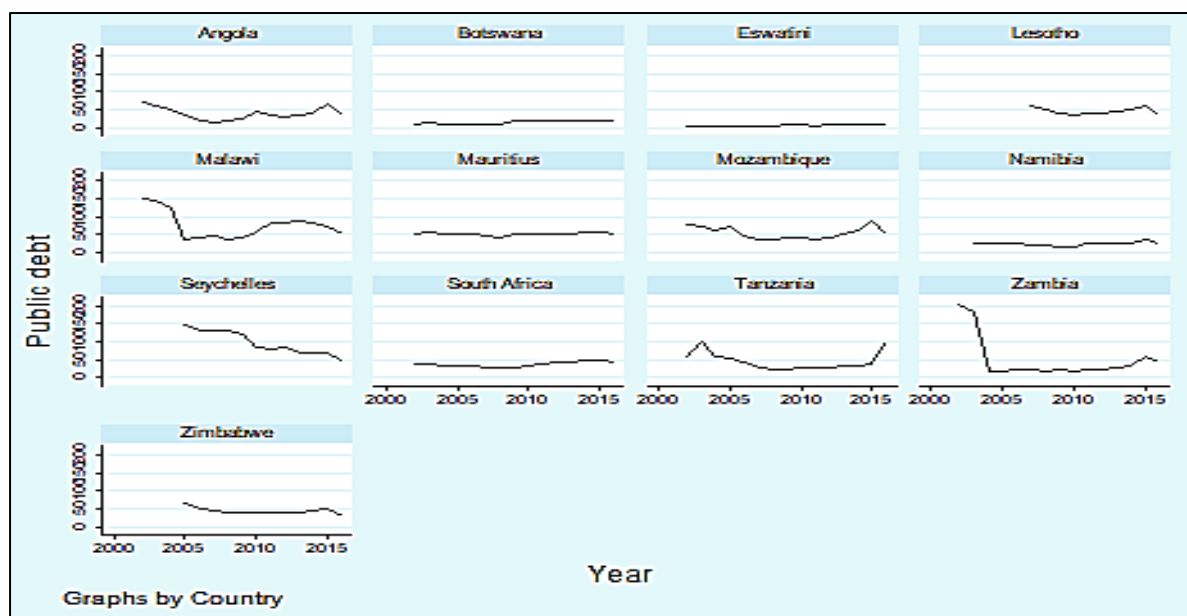
the region. Van der Berg (1991) cited in Robinson (2005) suggests that the bulk of government expenditure in low-income countries is directed toward capital investment in the infrastructure, stimulation of industrial development through export subsidies and other incentives, and the establishment of primary education and health care systems. At that time, this was applicable to most of the SADC countries, particularly, Angola, the Democratic Republic of Congo (DRC), Lesotho, Malawi, Mozambique, Tanzania, Zambia, and Zimbabwe. However, this is contradictory to the present-day scenario where recurrent expenditure remains the biggest component of government expenditure in all the member states. Notably, this is also common in other regional groupings like the Economic Community of West African States (ECOWAS).

4.3.3.4 Indebtedness

Public debt is “the sum of public and publicly guaranteed debt. Public debt is therefore the sum of all domestic and external obligations of the public sector” (AFRODAD, 2014: 10).

Figure 9 shows the level of public debt in the SADC; however, it is important to note that the macroeconomic convergence criteria of the region stipulates that public debt should not exceed 60 percent of Gross Domestic Product (GDP). The link between tax revenue and public debt is explained by the Ricardian equivalence theory which postulates that if public investment is financed through public debt due to a tax cut, then the expectation is that future taxes would rise by the same amount as the public debt so that revenue exceeds expenditures (Kimtai, 2014).

Figure 9: Level of Public debt as a percentage of GDP in the SADC

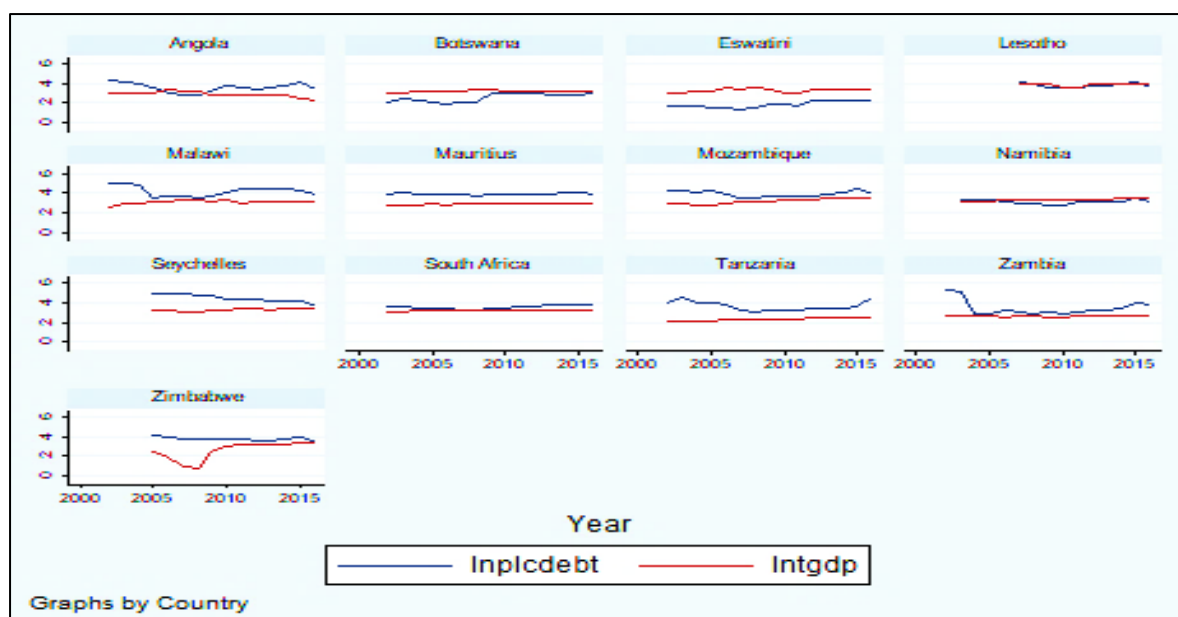


Source: Historical Public Debt Database, IMF (2016)

It is apparent in Figure 9 that there are instances where Angola, Malawi, Mauritius, Mozambique, Zambia and Zimbabwe have been unable to meet the benchmark set by the SADC. When governments resort to public debt as a source of finance for development or public spending, it is most likely that they have limited domestic resource mobilization options. Figure 10 shows the overlay of the level of public debt and that of tax revenue in the SADC over the period 2002-2016.⁷

From the 13 countries used in this study, public debt generally exceeded tax revenue in Angola, Malawi, Mauritius, Mozambique, South Africa, Tanzania, Zambia and Zimbabwe. This implies that the level of tax revenue in each period was insufficient to cover the level of public debt in the same period. From the perspective of the Ricardian equivalence theory, it means that additional tax revenues had to be raised in order to cover public debts from the previous period. However, it is essential to ascertain whether it was possible and realistic to obtain additional tax revenue.

Figure 10: Overlay of the Public debt share and Tax revenue share of GDP in the SADC



Source: Historical Public Debt Database, IMF (2016)

Table 22 shows public debt as a percentage of GDP and the shaded areas indicate the inability to meet the target stipulated in the macroeconomic convergence criteria.

⁷ The use of natural logarithms in this case was necessary to provide a clear presentation upon which to compare the pattern of the two variables in each of the SADC member states over the period of analysis.

Table 22: Public debt as a percentage of GDP for SADC

Country	Public-Debt as percentage of GDP					
	2011	2012	2013	2014	2015	2016
Angola	30.6	27.5	24.5	32.8	47.4	61.9
Botswana	18.1	18.8	18.6	17.5	17.3	16.7
Lesotho	36.9	40.6	41	45.6	48	39.7
Eswatini	14.9	16	17.1	17.8	15.5	18.8
Malawi	33.9	48.1	56.5	48	54.3	52.1
Mauritius	58.7	57.9	60.1	60.7	63.7	64.5
Mozambique	37.5	39.9	53.1	62.4	88.1	130.8
Namibia	25.4	23.7	23.6	23	37.5	40
South Africa	35.1	38.6	41.1	43.8	46.5	49
Tanzania	24.2	22.3	25	25.7	28.9	29.9
Zambia	20.6	25.5	28.7	33.3	55.7	52.7
Zimbabwe	65.5	56.8	58.9	48	50.7	60
SADC Average	36	36.2	37.7	37.9	44.2	48.6
Convergence criteria (2013-18)	Less than 60% of GDP					

Source: SADC Bankers, (n.d)

Kimtai (2014) is of the opinion that the Ricardian equivalence theory explains the relationship between public debt and tax revenue. If public investment is financed through public debt due to a tax cut, the expectation is that future taxes would rise by the same amount as the public debt so that revenue exceeds expenditures. The expectation in SADC would be to see some significant tax changes following the inability to meet the criterion on public debt.

The shaded regions show the years in which member states did not meet the macroeconomic convergence criterion on public debt. Mauritius did not meet the criterion from 2013 to 2016, while Mozambique had its public debt rising from 62.4 percent in 2014 to 130.8 percent in 2016. Although Zimbabwe had public debt levels that were generally above 50 percent, the country did not meet the region's criterion in 2011 and 2016. Nevertheless, the SADC region performed within the prescribed levels of acceptable public debt.

4.3.3.5 Foreign Aid

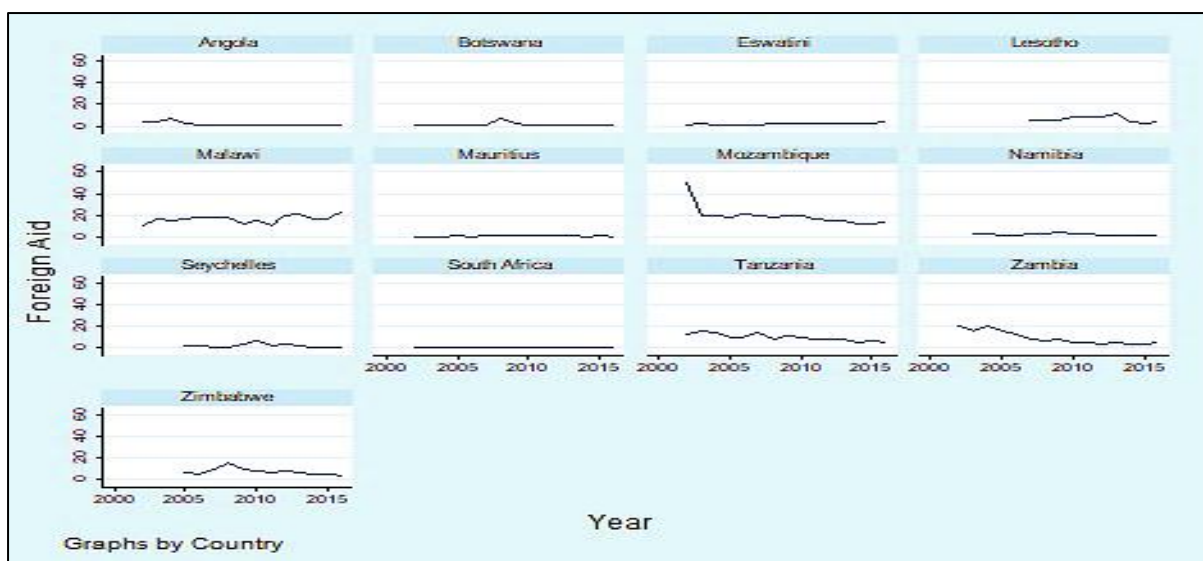
Mascagni et al. (2014) are of the opinion that the prominence of taxation in policy debate is exacerbated by the emergence of factors that Africa faces including; the shifting foreign aid

paradigm, the financial and debt crisis, acute spending needs in developing countries and trade liberalization.

In the context of this study, foreign aid refers to Official Development Assistance as a percentage of GNI. According to the World Bank (2018) this takes into account Mascagni et al. (2014) suggest that some donors regard taxation as the only viable strategy to help developing countries to move away from aid dependency in the long run. Although some development partners committed to supporting developing countries in building effective and efficient tax systems, their role has been somewhat subdued following the advent of the global financial crisis as it largely affected developed states. In this regard, there huge debate over whether foreign aid is helping developing countries to create sound tax policies to build resilient tax systems.

Figure 11 shows aid flows to the SADC region over the period 2000-2016 expressed as a share of Gross National Income (GNI). There is a general decline in aid flows to the SADC region than experienced in decades prior to 2000. However, it may not be preposterous to assert that many governments in Africa are ill prepared to face and accept this fate, even in the long run. Between 2000 and 2005, Mozambique had greater flows of aid compared to all other member states although the period is marked by a general decline. Meanwhile, Angola and South Africa were the least dependent, it is apparent that Eswatini, Mauritius, Namibia and Tanzania also had relatively low levels of aid over the period.

Figure 11: Foreign aid share a percentage of Gross National Income (2000-2016)



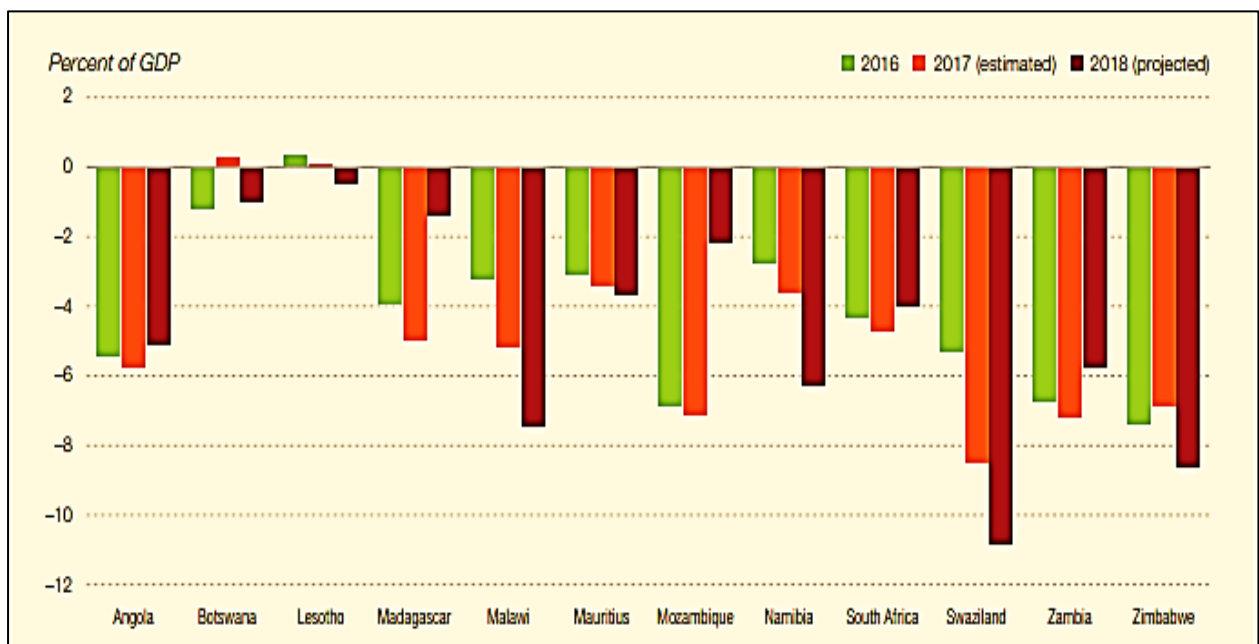
Source: World Development Indicators, World Bank (2018)

Generally, the flow of aid to the SADC has somewhat declined regardless of global concerns over whether rich economies should keep providing aid to developing countries. While the SADC Secretariat cites foreign aid as one of the chief sources of finance for development, the recent trends suffice to ignite new thinking among member states, hence the need for robust tax policies.

4.3.3.6 Fiscal balances

SADC continues to suffer from unresolved fiscal deficits. According to AfDB (2017), the region’s average fiscal deficit was 4.4 percent of GDP in 2016, beyond the 3 percent stipulated as a norm in the region’s convergence criteria. Figure 10 shows fiscal balances in the SADC. In 2017, the fiscal deficit of SADC was estimated to have widened to 5 percent, with Mozambique, Zimbabwe, Zambia and Swaziland above 7 percent of GDP. Botswana and Lesotho returned to surplus, estimated at 0.3 percent and 0.1 percent of GDP (AfDB, 2017).

Figure 12: Fiscal balances in SADC



Source: AfDB (2018)

Regarding the fiscal balance in 2018, nine countries fail to meet the convergence criteria in 2018. The presence of persistent negative fiscal balances is worrying. Further, there is lack of consistency for some member states who managed to meet the target in 2016 and 2017 with the exception of Botswana and Lesotho. According to Rogers (2007), tax policy can be used to reduce fiscal imbalances through the reduction of tax expenditures and adjusting tax rates.

4.3.3.7 Inflation

The SADC faces inflationary pressure as it particularly involves a dominant economy like South Africa, which is a one of the major trading partners for the region. Table 23 shows annual inflation rates in the SADC during the period 2008-2017. The SADC macroeconomic convergence criteria stipulate that inflation should be between 3 percent and 7 percent. Most member states meet the criterion, however, there is lack of consistency in pattern of inflation. One of the major limitations of inflation on tax revenue is that it has corrosive power. In an unfavorable inflationary environment, government can tax today but it will spend when the real value of tax collected has declined. Not only does inflation affect taxes, it also disrupts the flow of economic activity by affecting the production of goods and services. This heightens the need for SADC member states to comply with the region's inflation targets and to be accountable for failing to meet the SADC criteria on inflation. At present, the SADC does not seem to enforce the macroeconomic convergence criteria in ways done by other regional groupings like the EU.

Table 23: Annual Inflation Rates (period average), %, in SADC, 2008 – 2017

SADC Member States	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Angola	12.5	13.7	14.5	13.5	10.3	8.8	7.3	14.3	41.1	29.8
Botswana	12.6	8.2	6.9	8.5	7.5	5.9	4.4	3.1	2.8	3.3
DRC	18.0	46.1	23.5	15.6	22.2	0.8	1.2	1.1	4.8	54.7
Eswatini	12.6	7.6	4.5	6.1	8.9	5.6	5.7	5.0	7.8	6.2
Lesotho	10.7	7.3	3.6	5.0	6.1	5.0	5.4	3.2	6.6	5.3
Madagascar	9.2	9.0	9.2	9.5	5.7	5.8	6.1	7.4	6.7	8.3
Malawi	8.7	8.4	7.4	7.6	21.3	27.3	23.8	21.9	21.7	11.5
Mauritius	9.7	2.5	2.9	6.5	3.9	3.5	3.2	1.3	1.0	3.7
Mozambique	14.5	3.8	12.4	11.2	2.6	4.3	2.6	3.6	19.9	15.1
Namibia	9.1	9.5	4.9	5.0	6.7	5.6	5.4	3.4	6.7	6.2
Seychelles	36.4	34.2	-2.4	2.6	7.1	4.4	1.4	4.0	-1.0	3.5
South Africa	11.5	7.2	4.3	5.0	5.6	5.7	6.1	4.6	6.4	5.3
Tanzania	10.3	12.1	5.5	12.7	16.0	7.9	6.1	5.6	5.2	5.3
Zambia	12.4	13.5	8.2	6.4	6.6	7.0	7.8	10.2	18.2	6.6
Zimbabwe	231000000.0	-7.7	3.1	3.5	2.9	1.6	-0.2	-2.4	-1.6	0.9

Source: SADC (2017: 5)

Zimbabwe had the largest inflation rate in the region in 2008, however, the country's fortunes turned upon the adoption of the multicurrency regime⁸. Zimbabwe abandoned its local currency for a basket of foreign currencies in a bid to stabilize the economy. However, due to suppressed

⁸ The multicurrency regime in 2009 included the adoption of a basket of foreign currencies which included the US dollar, Euro, UK Sterling pound, South African Rand and Botswana Pula, however settlement was to be done using the US Dollar. In early 2014, additional currencies included Australian Dollar, Chinese Yuan, Indian Rupee, and Japanese Yen (Reserve Bank of Zimbabwe, 2014).

demand and the fall of global commodity prices, the country faced negative inflation for 3 consecutive years from 2014-2016. Over the entire period 2008-2017, Seychelles was the only other country that experienced deflation in 2010 and 2016. However, the economies of the two countries are distinct as Zimbabwe is classified as a low-income country while Seychelles graduated to a high-income country.

Hypothetically, End, Tapsoba, Terrier, and Duplay (2015), suggest that deflation would have no effect on tax effort in a proportional tax system because every component of GDP is taxed similarly, hence nominal tax revenue would respond in similar proportions. Nevertheless, there are bound to be distortions in real life. In progressive tax systems, deflation tends to lower tax revenue if tax brackets are not perfectly indexed to inflation. This is because deflation tends to move some tax payers to lower tax brackets. On the other hand, in a regressive tax system, the reverse occurs. Additionally, tax revenue declines during deflation in situations where tax exemptions are widespread because of the increase in costs, which come with the fall in price (End et al., 2015).

Conversely, End et al. (2015) suggest that deflation may also lead to rising tax revenue for some components such as excise duties as they are relatively more price inelastic than income taxes. They tend to slug during deflation, thus raising tax-GDP ratio. Alternatively, consumption may shift to expensive or luxury goods during deflation because prices tend to adjust much quicker than incomes. However, high-scale goods tend to be taxed heavily, hence more revenue is collected (End et al., 2015). The expectation is that some of these theoretical arguments may aid to explain tax revenue performance differences in Zimbabwe and Seychelles during the times they faced deflation.

4.4 Tax systems in the SADC

4.4.1 Introduction

It is a regular occurrence to see economies changing and this ignites subsequent changes in tax systems. Notably, this threatens the stability of tax bases, tax rates and tax administration and the ultimate amount of tax that governments can actually raise. In instances where revenue-neutrality is desired, more stable tax bases are likely to be preferred as it also makes it more practical to implement tax policy and improve the tax system. Slemrod (2016) suggests that there is a widespread acceptance to assess tax systems based on four rungs, which include focusing on (1) tax rates and tax bases, (2) remittance rules, (3) enforcement rules and (4) bureaucratic organization. However, in view of the purpose of this thesis and the need to remain

within the context of tax design, this study focuses on the first rung on tax rates and tax bases. Against this background, the subsequent sub-sections focus on elucidation some of the basic concepts on tax performance, tax rates and tax bases in the SADC.

4.4.2 Tax revenue performance in SADC

This section considers the evolution of tax levels in SADC countries from 2000-2016 as shown in Table 24. Although other regional groupings have a criterion for the tax ration, this is not the case for SADC. Assuming that the macroeconomic convergence criteria on the tax ratio was 20% as found in the ECOWAS, the shaded areas indicates the years in which SADC member states would have meet the criterion. Over the period of selected years in Table 17, Angola, Mauritius, Tanzania and Zambia do not meet the criterion as their tax ratios fall short of the 20% benchmark.

Table 24 : Total tax revenue as a percentage of GDP, 2002-2016

Country	2002	2009	2010	2011	2012	2013	2014	2015	2016
Angola	19.0	17.1	16.9	17.3	16.7	15.5	15.6	12.5	10.3
Botswana	21.7	27.3	23.6	23.2	26.4	25.2	25.2	25.0	26.8
Eswatini	20.8	28.8	19.5	19.6	29.3	28.2	28.3	27.7	29.0
Lesotho	37.2	55.1	37.2	38.2	53.4	51.0	53.0	53.3	54.6
Malawi	13.5	25.0	29.2	20.1	24.9	24.1	22.0	22.6	23.2
Mauritius	16.4	19.1	18.5	18.3	18.9	18.6	18.6	19.3	19.5
Mozambique	18.2	24.4	26.1	27.1	27.5	32.2	32.9	35.5	36.4
Namibia	25.1	29.1	26.1	28.4	30.4	30.6	32.5	33.0	33.8
South Africa	23.8	27.0	26.7	27.0	27.2	27.6	28.2	28.6	28.8
Tanzania	8.0	11.2	11.1	11.2	11.6	12.0	12.1	12.9	13.2
Zambia	15.4	12.2	13.1	15.6	15.0	14.7	15.8	15.7	14.5
Zimbabwe	--	10.8	22.0	24.3	26.3	25.3	25.4	28.1	30.7
SADC	19.9	23.9	22.5	22.5	25.6	25.4	25.8	26.2	26.7

Source: Authors compilation from World Bank, World Development Indicators (2018)

The tax revenue ratio in Lesotho grew over the period 2002-2016 to levels above 50% and experienced an average growth of the tax revenue ratio of 3.23%. The overall growth of tax revenue in the SADC was 4.79% over the period 2006-2016 as shown in Table 25.

Table 25: Average growth of tax revenue in the SADC over the period 2006-2016

Country	Average tax revenue growth rate	Country	Average tax revenue growth rate
Angola	-5.14%	Mozambique	7.03%
Botswana	1.47%	Namibia	2.98%
Eswatini	3.26%	South Africa	1.20%
Lesotho	3.23%	Tanzania	3.26
Malawi	1.23%	Zambia	0.25%
Mauritius	7.76%	Zimbabwe	37.99%
SADC			4.79%

Source: Authors' own calculation from World Bank (2018)

In this regard, the primary motive of this study is to determine whether the tax ratios reach potential levels and whether sufficient effort has been exerted to ensure this.

Angola is the only country that experienced a decline in the average tax revenue ratio over the period however, Zambia also had a low average of 0.25%. In contrast, Zimbabwe's tax ratio grew by an average of about 38%. This reinforces the notion reiterated in the thesis statement that the nature of the tax problem in SADC is not necessarily about the need for tax policy to address low tax ratios but rather for tax policy to address issues centred on tax capacity and tax effort deficiencies.

4.4.3 Evolution of tax structures

The previous section considered the evolution tax levels in SADC countries over the period 2000-2016. When there are changes in tax ratios, it is possible that tax structure would have changed, hence, this section considers the evolution of tax systems in the SADC. Table 26 shows the major tax categories in total tax revenue for selected years over the period 2006-2016.

Table 26: Major tax categories in total tax revenue over the period 2000-2016

Country	Category of tax (% of revenue)	2006	2009	2012	2016
Angola	Taxes on income, profits and capital gains	43.19	54.76	31.92	42.41
	Taxes on international trade	2.25	8.57	2.51	3.44
	Taxes on goods and services	3.55	12.05	3.75	8.06
	Other taxes	1.73	7.15	2.74	8.00
Botswana	Taxes on income, profits and capital gains	25.12	26.47	24.01	29.28
	Taxes on international trade	24.16	26.51	34.19	20.54
	Taxes on goods and services	8.83	13.92	13.31	12.12
	Other taxes	0.06	0.09	0.12	0.10
Eswatini	Taxes on income, profits and capital gains	19.24	25.18	18.64	-
	Taxes on international trade	74.08	63.74	60.97	-
	Taxes on goods and services	2.45	4.14	17.96	-
	Other taxes	0.35	1.11	0.21	-
Lesotho	Taxes on income, profits and capital gains	14.98	16.62	17.87	26.52
	Taxes on international trade	62.01	58.04	47.50	33.93
	Taxes on goods and services	12.17	10.96	13.84	19.00
	Other taxes	1.15	0.95	1.15	2.59
Malawi	Taxes on income, profits and capital gains	-	24.82	35.24	38.25
	Taxes on international trade	-	6.53	6.97	6.87
	Taxes on goods and services	-	29.41	36.71	33.76
	Other taxes	-	0.06	0.15	0.07
Mauritius	Taxes on income, profits and capital gains	17.47	22.16	17.95	19.24
	Taxes on international trade	16.83	2.17	1.85	1.35
	Taxes on goods and services	48.72	50.66	58.48	56.01
	Other taxes	0.55	1.39	1.80	2.48
Mozambique	Taxes on income, profits and capital gains	-	-	29.55	35.22
	Taxes on international trade	-	-	5.48	7.02
	Taxes on goods and services	-	-	34.28	31.06
	Other taxes	-	-	1.57	3.46
Namibia	Taxes on income, profits and capital gains	32.29	33.89	38.26	40.41

	Taxes on international trade	38.11	35.76	36.31	27.59
	Taxes on goods and services	19.16	22.60	18.06	25.07
	Other taxes	0.00	0.00	0.00	0.00
Seychelles	Taxes on income, profits and capital gains	17.32	21.12	27.88	29.44
	Taxes on international trade	40.98	11.90	20.90	5.10
	Taxes on goods and services	5.16	43.78	32.32	48.15
	Other taxes	1.50	-	-	1.39
South Africa	Taxes on income, profits and capital gains	50.51	51.86	49.24	49.29
	Taxes on international trade	4.23	2.70	4.16	3.36
	Taxes on goods and services	34.43	31.51	34.09	33.51
	Other taxes	1.33	2.29	2.16	1.28
Tanzania	Taxes on income, profits and capital gains	-	18.53	24.28	32.5
	Taxes on international trade	-	5.22	5.87	8.93
	Taxes on goods and services	-	31.85	38.62	44.06
	Other taxes	-	7.32	2.51	3.18
Zambia	Taxes on income, profits and capital gains	33.08	44.04	35.42	-
	Taxes on international trade	8.14	8.31	6.69	-
	Taxes on goods and services	35.84	32.30	39.14	
	Other taxes	0.23	0.22	7.21	-
Zimbabwe	Taxes on income, profits and capital gains	-	21.87	32.14	-
	Taxes on international trade	-	41.73	19.49	-
	Taxes on goods and services	-	30.52	35.81	-
	Other taxes	-	-	-	-

Source: Authors compilation from World Bank (2018)

In Angola, income taxes contribute the largest share towards revenue than trade taxes, consumption taxes and other taxes combined. Botswana obtains over 50% of its revenue from income taxes and trade, while trade taxes are quite significant in Eswatini and Lesotho. Namibia is reliant on income taxes and trade taxes just like Botswana. One important factor emerging from the nature of tax structures in Botswana, Lesotho, Namibia and Eswatini is that trade taxes are a crucial element of their tax systems. Notably, these countries belong to SACU which is heavily dependent on South Africa. Nevertheless, South Africa itself does not obtain

significant revenues from trade taxes. In Malawi, income taxes and consumption taxes contribute the largest share to revenue, which is over 50%. This trend is similar to that of Mauritius, Mozambique, South Africa and Zambia. On the other hand, Zimbabwe relies on a combination of trade taxes, consumption taxes and income taxes. Over the period, Seychelles shifted its dependency from trade to taxes on goods and services. The tax mix in Tanzania, Zambia and Zimbabwe shows that indirect taxes have greater contribution than direct taxes. However, Malawi, Mozambique and South Africa rely on direct taxes more than indirect taxes.

In view of SADC's endeavour to harmonize indirect tax policies, this study argues that the diversity of tax structures in the region is one potential hindrance because eight out of the 13 member states rely more on either direct taxes or trade taxes.

Given the background of tax mix in the SADC, potential challenges pose a threat to the establishment of a well-functioning FTA since several member states depend on trade taxes. SADC has advocated for a gradual shift from trade taxes to consumption taxes, however, this is evidently a difficult task. Further, theory postulates that indirect taxes would be ideal for developing countries, nevertheless, Angola is heavily dependent on taxes on income, profits and capital gains which are direct forms of taxation. The next section takes a narrower look into the specific taxes that constitute the greater part of revenues in member states.

4.4.4 An overview of major taxes in the SADC

4.4.4.1 Introduction

Despite the existence of numerous taxes, this study focuses on the major forms contributing to total tax revenue in the SADC. In this regard, the assessment of tax systems will focus on Corporate Income Tax (CIT), Personal Income Tax (PIT), Value Added Tax (VAT), Excise Tax, Import tariffs and Tax incentives. In November 2016, the SADC published VAT and Excise guidelines, which cover design, administration and exchange of information in the areas of VAT and Excise. In that respect, Quak (2018) is of the opinion that SADC has experienced more of tax cooperation than tax coordination through mutual and multilateral assistance in tax matters, tax treaties and double tax agreements. Despite the heterogeneity of definitions of tax bases in the SADC, the purpose of establishing tax guidelines is to pave way for creating an integrated and coherent fiscal policy (Quak, 2018).

The establishment of tax guidelines shows that considerable thought was put in order to progress towards harmonization of indirect taxes and the gradual replacement of trade taxes by

extending the base of indirect taxes (Quak, 2018). Nevertheless, there are no indications of the presence of significant progress towards tax coordination in direct taxes and investment incentives (Quak, 2018). From a broader perspective, the SADC is in pursuit of having its own single currency, Free Trade Area, Customs Union, Common Market, and Monetary Union, where fiscal policy coordination and harmonization is critical. This heightens the need for this study as it aims to provide a pragmatic approach to tax design in the SADC as one of the key elements towards tax cooperation and coordination.

4.4.4.2 Corporate income tax (CIT)

All SADC countries have corporate taxes on profits. According to Robinson (2005), taxes on corporate profits come from corporations and shareholders as corporate income tax and personal income tax on dividends. Notably, corporate taxes are susceptible to double taxation, however, each SADC member state deals with the problem of double taxation differently. Robinson (2005) asserts that corporate profits given to private investors or foreign corporations may be taxed in the country where these profits arise (source) or in the country where the investor resides (residence). Corporate taxes are internationally mobile and compounded by adherence to standards and legislative instruments emanating from regional groupings. In this regard, tax policy efforts may shift towards personal income taxes and commodity taxes that are less mobile.

It is important to note that the tax choices which created present day tax systems are the outcome of tax policy that has evolved over time in SADC member states. Any decision that alters tax structure has the potential to influence the amount of tax revenue that government can actually raise. Robinson (2005) states that the idea of shifting from heavy reliance on corporate taxes to individual taxes was once unsettling in developing countries (such as Zimbabwe and South Africa) because of the growth of consumption taxes and labour mobility. Hence, Robinson (2005) postulated that the role of individual taxes would definitely eventually decline in these countries and is consistent with assertion by Bird and Zolt (2004) who argues that the role of PIT is limited in developing countries. Recent data on the different contributions of various tax heads suggests that the role of PIT has indeed become limited relative as consumption taxes have taken centre stage in countries like Zimbabwe, Zambia and Tanzania.

4.4.4.3 Personal Income Tax (PIT)

In most SADC countries, the taxation of wage or personal income in the formal sectors is much

more effective than that of self-employed and non-wage income as all SADC countries have payroll systems except for Seychelles (Quak, 2018). The main reason for this is the widespread use of withholding taxes for labour income in large-scale corporations (Robinson, 2005). This effectively reduces the number of collection points and essentially transfers the burden of tax collection to the employer. Most large employers find the scheme straightforward to implement and the increased costs – in addition to the normal costs of administering the payroll – are relatively minor. The use of withholding taxes is extensive in the SADC and applicable to different kinds of income, including interest and dividends. Robinson (2005) affirms that if appropriate allowance is made for crediting withheld taxes, the use of banks and corporations to withhold taxes on capital income should result in an expansion of the tax base and improvement of revenue collection. Accordingly, Robinson (2005) suggests that an extensive network of double taxation treaties should exist, however, SADC member states fall short because they have inadequate Double taxation agreements (DTAs) needed to avoid double taxation of individuals and corporations. The growth of the informal sector and lack of financial inclusion in the region are two potential sources which reduce the effectiveness of using PIT in developing countries. These are discussed more in the subsequent chapter.

4.4.4.4 Value added tax (VAT)

According to Glenday and Hollinrake (2005), the primary purpose of introducing VAT was to replace trade taxes. Following trade liberalization, VAT plays two roles that include raising government revenue and replacing import duties. Nevertheless, Glenday and Hollinrake (2005) argue that the adoption of VAT as a substitute for trade taxes in the SADC was compounded by high VAT rates among other factors. All SADC countries have VAT systems except for Angola⁹ (Quak, 2018). Nevertheless, in view of the need for cooperation and coordination, SADC published VAT guidelines in October 2016¹⁰. Notably, these guidelines are challenged by the diverse nature of the political economy and the differences in economic structures of member states. The complication arises from the fact that the differences in tax mix may prompt variations in tax rates and other tax related matters as governments seek to find the most appropriate option to meet national goals. This sounds logical as the direction of tax harmonisation may not always be ‘best,’ hence it may be argued that countries should have room to pursue tax policies that they deem appropriate for their countries. Nevertheless, this

⁹ Angola set to adopt VAT in July 2019 and postponed this to October 2019.

¹⁰ See SADC Guidelines for Co-operation In Value Added Taxes

does not imply that SADC cannot implement the guidelines since some of the circumstances inhibiting harmonisation can be addressed.

4.4.4.5 Excise tax

An important implication arising from theory is that unlike income tax, excise duties are relatively inelastic and hence are an attractive option for governments. While, their use is two-fold, in the SADC more emphasis seems to be placed on revenue generation than behavioural change. The region also has guidelines for excise duties however, this study contends that the political economy and the macroeconomic environment have a bearing on the extent to which cooperation is possible. Cnossen (2006) suggests that excise taxes have always been a traditional source of tax revenue because of the nature of the tax base. Apart from being relatively inelastic, the goods upon which the tax is imposed are widely consumed and lack of substitutes (Cnossen, 2006). The guidelines for co-operation in excise taxes in the SADC region were published in October 2016 and members agreed to harmonise the application of excise tax rates particularly on tobacco products, alcoholic beverages and fuel products. Despite these efforts, significant changes in the supply of the afore-mentioned products may have implications on national policy attempting to avert challenges. For instance, the recent woes in fuel supply in Zimbabwe prompted government to make changes to tax legislation regarding fuel regardless of the implication arising from the regional guidelines.

4.4.4.6 Import tariffs

Following the decision to pursue the establishment of a Free Trade Area, there have been growing concerns over the loss of revenue obtained from import duties.

Filmer and Mushiri (2001) cite that apart from Mauritius and SACU, other SADC member states relied on import duties of 13% to 17% of total government revenues. Mauritius was highly dependent as import duties accounted for 32% of total government revenue, while SACU showed low dependency for import duties accounted for by 3.6% of total government revenue. As such, Filmer and Mushiri (2001) argue that (except for Mauritius) the SADC has never been heavily dependent on import duties as a source of revenue. Table 27 shows a summary of the predicted loss of revenue from import duties as estimated by Filmer and Mushiri (2001).

Table 27: Import Duty Losses Due to the Protocol in selected SADC countries

Percentage Reduction in Import Duties			
	After four years	After eight years	With SADC free Trade
SACU	2.6	3.6	3.9
Malawi	1.5	42.6	50.3
Mauritius	4.7	21.4	23.5
Mozambique	6.4	33.6	34.0
Tanzania	1.5	10.6	12.1
Zambia	22.6	47.7	65.7
Zimbabwe	13.8	37.8	41.9

Source: Filmer and Mushiri (2001)

In view of the full implementation of the SADC Trade Protocol, Filmer and Mushiri (2001) predicted that Zambia and Malawi would face the largest percentage reductions in import duty collections of 66% and 50% respectively. On the other hand, Zimbabwe and Mozambique would experience reductions of 42% and 34% respectively. However, SACU, Mauritius and Tanzania would experience relatively small reductions in duty collections. Nevertheless, Filmer and Mushiri (2001) also focus on the predicted impact of loss of import duty collections in view of total revenue in SADC member states. Given that SADC planned to replace trade taxes with indirect taxes, concerns over lost revenue from import duties may be unwarranted as greater potential lies in using indirect taxes like VAT. Table 28 shows import duty losses relative to government revenues in order to draw relevance to tax policy.

Table 28: Import Duty Losses Relative to Government Revenues in selected countries

Percentage Reduction in Import Duties			
	After four years	After eight years	With SADC free Trade
SACU	0.1	0.1	0.1
Malawi	0.2	6.8	8.0
Mauritius	1.5	6.8	7.5
Mozambique	1.0	5.3	5.4
Tanzania	0.2	1.4	1.6
Zambia	3.2	6.7	9.2
Zimbabwe	2.3	6.3	7.0

Source: Filmer and Mushiri (2001)

Nevertheless, full implementation of the SADC Trade Protocol is yet to occur and thus SADC member states still have trade taxes contributing to total tax revenue although other tax heads like VAT, Excise, CIT and PIT take precedence in terms of their significance.

4.4.5 Current tax systems in SADC

This study asserts that the tax levels experienced by SADC member states are influenced by tax structure. As reiterated in the introduction to this chapter, the role of tax policy is to provide a framework for tax systems to pursue various goals, in particular raising revenue for public spending. In view of the need to provide a pragmatic approach to tax design in the SADC, this section considers current tax systems in member states and primarily focuses on tax rates and tax bases as critical elements of tax design. The aim is to provide insight into the outcomes of tax policy in SADC member states as reflected by their current tax systems. This section briefly considers some key macroeconomic indicators of individual member states as this helps in reviewing each country's position regarding the region's macroeconomic convergence criteria.

4.4.5.1 Angola

Angola attained its independence from Portugal on 11 November 1975. The country is estimated to have a population of 28.4 million people and a 71.1 percent literacy rate. However, 65.5 percent of the total population is estimated to be residing in urban areas. Angola is heavily dependent on oil despite the challenges of declining oil prices over the years. Oil production and its supporting activities contribute about 50% to GDP as well as more than 70% to government revenue and more than 90% to exports. Nevertheless, half of the country's food is imported while most people depend on subsistence farming (The World Factbook, 2018). Table 29 shows some of the key macroeconomic indicators that are critical for macroeconomic convergence in the SADC. However, it is important to note that Angola is regarded as one of the most corrupt countries in Sub-Saharan Africa, particularly, in its extractive industry (The World Factbook, 2018).

Table 29: Macroeconomic indicators in Angola (2015-2018)

	2015	2016(e)	2017(p)	2018(p)
Real GDP growth	3.0	1.1	2.3	3.2
Real GDP per capital growth	0.7	-1.1	0.1	1.0
CPI inflation	10.2	30.2	21.8	19.7
Budget balance % GDP	-3.3	-5.5	-4.0	-2.3
Current account % GDP	-10.0	-11.2	-7.5	-5.1

Source: AfDB (2017: 243)

For the period 2015 to 2017, the real GDP growth fell to 1.1% in 2016 from 3% in 2015; however, the projected growth of 2.3% was still inadequate to meet the SADC criterion of achieving economic growth of 7 percent or greater. On the other hand, Angola did not meet the SADC MEC, which stipulates that inflation figures should range from 3% to 7% by 2018. In 2015 and 2018, the budget deficit falls within the permitted variation of 3%, however, in 2016 and 2017, the budget balance fell outside the stipulations of the SADC macroeconomic convergence criteria. In 2015 the current account deficit was -10%, however, it grew to -11.2% in 2016. Thereafter, it declined to -7% in 2017 and -5.1% in 2018.

Corporate Income Tax

The standard rate of corporate income tax for residents (including Angolan PEs of nonresident companies) is 30%. A reduced 15% rate applies to income exclusively from agriculture, aquaculture, poultry, fishing and forestry, among other things. Special tax regimes apply to Angola for the petroleum and mining sectors. Occasional services provided by non-resident entities are taxed at a 6.5% rate. Payments for services rendered are liable to withholding tax at a 6.5% rate (some exemptions may be applicable to certain services). Income derived from capital investments is subject to investment income tax, which normally is paid through withholding (Deloitte, 2018).

Personal Income Tax

Angola income tax rates for individuals (resident and non-resident) are levied from 0% to 17% and individuals are taxed on Angola source income, however, residence is not defined in Angolan tax law. On the other hand, individuals are subject to separate tax on income from business, employment, investments and property. Notably, employment income is taxed at progressive rates up to a maximum rate of 17% (Musviba n.d). In addition, Deloitte (2018) suggests that payment obtained from employment or self-employment is divided into three groups, that is: employees, independent freelance workers and remuneration from industrial or commercial activities. For independent freelance works, a single rate of 15% is levied on 70% of the income earned.

Consumption tax rates

The standard rate of consumption taxes in Angola is 10% and is levied on the supply of goods and services as well as the import of goods into Angola. However, the tax rate ranges from 2% to 30%, depending on the goods or service. Angola levies a consumption tax, which operates

as an excise tax and a sales tax on the supply and import of goods and services in Angola. There is a reduced rate of two% on essential foods and medical supplies while increased rates of 20% and 30% apply to certain luxury items. (Musviba n.d; Deloitte, 2018) .The consumption tax rate depends on the type of service. For instance, the rate of 5% rate applies to the provision of water and energy, the leasing of certain machinery and equipment, electronic communication and telecommunication services and consulting services while the rate of 10% is applicable to hotel services and other related or similar services and access to shows or cultural, recreational or sporting events (Deloitte, 2018).

Petroleum Industry Tax Regime

Oil companies in Angola are subject to a specific tax regime called the Petroleum Income Tax which is levied on the income obtained from the exercise of petroleum transactions and any other income derived from other activities of a non-commercial or industrial nature. The tax rate is 65.75% for a joint venture agreement and 50% for a cost share agreement. A Petroleum Transaction Tax (PTT) is due on all the income derived from petroleum transactions carried out under a joint venture agreement where the tax rate is 70% (Musviba n.d).

Mining Industry Taxation

In Angola, mining companies are subject to a specific taxation regime called Mining Corporate Income Tax. The tax base is the same as that of corporate income tax with specific adjustments, such as depreciation. The tax rate is 40% and is payable in the same manner as corporate income tax. Further, mining royalties are charged ad valorem on the market value of the annual mineral ore output at various rates between 2% and 5% (Musviba n.d).

Customs and Excise duties

Generally, the importation of products is liable to customs duties that are ad valorem and are applicable to imported products, regardless of their origin. The customs duty rates can vary depending of the classification of the goods (essential, necessary, useful, extra and luxury). In Angola, cross-border transactions involving goods are liable to customs duties, stamp tax, consumption tax and administrative fees (Deloitte, 2018).

Tax Incentives

Angola grants tax incentives to a maximum of ten years (Deloitte, 2018). The Bureau of Economic and Business Affairs (2018) points out that in May 2018, the government of Angola

approved a new private investment law which offers greater tax incentives to companies investing in the national economy. However, the new law does not put thresholds on the minimum investment required to be eligible for tax incentives. Notwithstanding this, the analysis of the new private investment law is outside the scope of this study.

4.4.5.2 Botswana

Botswana is a former British protectorate that attained its independence on 30 September 1966. The country's population is estimated to be 2, 249, 104 and 69.4% of the total population resides in urban areas. It is estimated literacy rate is that 88.5% of the total population. Botswana is heavily reliant on diamond exports, while mining diamond has largely attributed to the expansion of the economy. Diamond mining accounts for 25% of the country's GDP and about 85% of exports and a third of government revenue (The World Factbook, 2018). Table 30 shows some of the key macroeconomic indicators that are critical for macroeconomic convergence in the SADC. The country is considered as one of the least corrupt and desirable places to do business in Sub-Saharan Africa (The World Factbook, 2018).

Table 30: Macroeconomic indicators in Botswana (2015-2018)

	2015	2016(e)	2017(p)	2018(p)
Real GDP growth	-0.3	2.9	4.2	4.5
Real GDP per capital growth	-2.2	1.1	2.5	2.8
CPI inflation	3.1	2.8	3.5	3.7
Budget balance % GDP	-4.7	-0.7	-1.4	-0.8
Current account % GDP	7.8	3.6	7.1	7.3

Source: AfDB (2017: 245)

The outlook for Botswana seems positive as the country was projected to grow by 4.2% and 4.5% in 2017 and 2018 respectively. However, growth was negative at -0.3% in 2015 and rose to 2.9% in 2016. Nevertheless, this remains under the regional target requirement of 7% or greater. Concerning inflation, Botswana did not meet the criterion only in 2016 when its inflation fell to 2.8% from 3.1% in 2015. Nonetheless, the figure is relatively close to the prescribed threshold. The country's fiscal balances for 2016, 2017 and 2018 meet the stipulations of the macroeconomic convergence; however, Botswana had gone over the permitted threshold in 2015 as shown in Table 23. Unlike most SADC member states, Botswana is one of the few countries that experienced current account surpluses over the past few years. In 2015, the current account balance was 7.8%, which declined to 3.6% in 2016. However, there was an increase to 7.1% in 2017 and 7.3% in 2018.

Personal Income Tax

Botswana personal income tax rates are progressive, up to 25% and based on taxable income that includes employment, business income, passive income (such as dividends, interest, royalties among others) and capital gains (Musviba n.d). In a similar manner to other SADC member states, tax on employment withheld at source by the employer under Pay As You Earn (PAYE) salary deduction system (Deloitte, 2018).

Corporate Income Tax

The standard corporate tax rate is 15%, however, other tax rates depend on the type of company. Table 31 shows corporate tax rates in Botswana. Corporate tax is levied on the Botswana-source taxable income of all companies except for those that fall under tax-exempt bodies and small companies that choose to be treated as partnerships or sole traders (Deloitte, 2018).

Table 31: Corporate tax rates in Botswana

Company Type	Rate
Resident companies	22%
Resident companies-approved manufacturing taxable income	15%
Non-resident companies	30%
International Financial Services Centre (IFSC)	15%
IFSC companies-other taxable income	22%
Botswana Innovation Hub accredited company	15%
Foreign dividends	15%
Unapproved pension and provident fund-investment income	7.5%
Selebi Phikwe Economic Development Unit	
First five years	5%
Thereafter	10%
Botswana Development Corporation Limited Group of companies	22%/15%

Source: Deloitte (2018)

Botswana Value Added Tax (VAT) Rates

The standard rate of VAT is 12% and is charged on the supply of goods or services and on the importation of goods or service regardless of the entity. Educational institutions, financial

services, housing rentals, passenger transportation, donations, grants, and the supply of tractors for farming purposes are exempted from tax. On the other hand, zero-rated supplies include exports, supplies of certain foodstuffs, pesticides, fertilizers and farming tractors, and the international transport of passengers or goods, including the provision of insurance and ancillary transport services (Deloitte, 2018). Musviba (n.d) suggests that zero-rated supplies also include services given directly to nonresidents that are unregistered for Botswana VAT purposes.

Customs and Excise duties

Botswana Unified Revenue Services (BURS) (n.d) states that imports from outside SACU are liable for a VAT rate of 12% and tariff rates set out in the Customs and Excise Tariff Schedule. Goods coming from SACU do not pay customs duties; however, goods outside SACU attract a tariff according to the schedule. Botswana uses ad valorem and specific customs and excise duties (BURS n.d).

Tax incentives

Botswana offers Development Approval Order (DAO) Companies that carry out an approved manufacturing business undertaking certain types of manufacturing processes, qualify for a lower corporate tax rate of 15%. Any project that will benefit the economic development of Botswana may qualify, particularly projects in the mining industry, but any project that will generate employment will be considered. The relief can take any form and is negotiable (Deloitte, 2018). On the other hand, Botswana offers several special tax allowances (see Deloitte, 2018:35).

4.4.5.3 Eswatini

Eswatini was under British colonialism and attained its independence on 6 September 1968. Eswatini is estimated to have a population of 1, 087, 200, while 23.8% of the total population resides in urban areas. Additionally, Eswatini has a literacy rate of 87.5%. The country largely depends on South Africa for the greater part of its export and imports. Further, since the local currency is pegged against the South African rand, the use of Eswatini's monetary policy is limited while half of its government revenue comes from customs duties from the Southern African Customs Union (SACU). The largest foreign currency earners include sugar and soft drink concentrate, however, the country experienced drought during the season 2015/2016 which resulted in a decline in sugar exports (The World Factbook, 2018). Table 32 shows some

of the key macroeconomic indicators that are critical for macroeconomic convergence in the SADC.

The fiscal balances in Eswatini are under threat as the country's receipts from SACU are expected to decline because South Africa is calling for a new distribution scheme (The World Factbook, 2018).

Table 32: Macroeconomic indicators in Eswatini (2015-2018)

	2015	2016(e)	2017(p)	2018(p)
Real GDP growth	1.7	-0.6	1.4	2.3
Real GDP per capital growth	0.2	-2.0	0.1	1.0
CPI Inflation	5.0	7.8	7.0	6.4
Budget balance % GDP	-4.8	-12.3	-8.3	-11.3
Current account % GDP	9.6	9.4	8.1	5.8

Source: AfDB (2017: 294)

The economic performance of Eswatini was relatively sluggish over the period 2015-2017 as economic growth lagged behind the SADC target. In 2017, the estimates for GDP composition by sector were 6.5% from agriculture, 45% from industry and 48.6% from services (The World Factbook, 2018). Inflation went beyond the regional target only in 2016, nevertheless, the country continued to face negative fiscal balances outside the stipulated targets. Unlike most SADC countries (except Botswana), Eswatini experienced current account surpluses, which were relatively consistent from 2015 to 2017 as shown in Table 32. Although there was a decline from 8.1% in 2017 to 5.8% in 2018, the current account remained positive.

Corporate Income Tax

The standard corporate tax rate is 27.5% while mining companies are subject to 27% tax on the first SZL 20 000 of taxable income, and 30% on income exceeding that amount. Eswatini's income tax system is source-based and the taxable income is comprised of profits derived from the operation of a business in Swaziland including capital gains (Musviba n.d).

Personal Income Tax

Eswatini employs a source-based system and the country's personal income tax rates are progressive to 33% (Musviba n.d; Deloitte, 2018)

Value Added Tax

The standard VAT rate in Eswatini is 14% although the Minister of Finance announced that the VAT rate would increase to 15%. Zero-rated goods comprise of some basic foodstuffs and direct exports, however, services including financial services, educational services and passenger transport, are exempt. In this regard, a provider of exempt supplies can neither charge VAT nor reclaim input tax suffered (Deloitte, 2018).

Customs and Excise Duties

According to Musviba (n.d) South African Customs Union (SACU) member states (Botswana, Lesotho, Namibia, South Africa and Eswatini) are required to apply similar customs and excise duties. Nevertheless, the SADC also has guidelines for cooperation on excise taxes, which were published in October 2016. There is a potential source of conflict as the arrangements in SACU do not necessarily have to reflect those of the SADC. For instance, the increased need by South Africa to change the revenue-sharing formula in SACU, has practical implications on other members states in ways that reduce the possibility of further co-operation in excise taxation in the SADC. This is consistent with the assertion that multiple membership can be a cause of concern since SADC countries have membership in other blocs (Glenday and Hollinrake, 2005; Rossouw, 2017).

Tax incentives

Deloitte (2018) states that there are certain tax incentives offered to investors who qualify as a “development enterprise,” and this includes a 10% corporate income tax rate for 10 years and an exemption from WHT on dividends for the same period. Further, various capital allowances are offered (see Deloitte, 2018: 315).

4.4.5.4 Lesotho

Lesotho is governed under a parliamentary constitutional monarchy and attained its independence from Britain on 4 October 1966. Lesotho has an estimated population of 1,962,461 while 28.2% of the total population is estimated to be from the urban areas. The country’s literacy rate is 79.4% and is reliant on a narrow base of economic activity, which includes textiles, agriculture, manufacturing, remittances and revenue from regional customs (The World Factbook, 2018).

Table 33 shows some of the key macroeconomic indicators that are critical for macroeconomic

convergence in the SADC. There has been significant growth in the role of diamond mining in the country over the recent years, notably; it contributed about 35% of exports in 2015.

Table 33: Macroeconomic indicators in Lesotho (2015-2018)

	2015	2016(e)	2017(p)	2018(p)
Real GDP growth	2.8	3.1	3.5	4.6
Real GDP per capital growth	1.6	1.9	2.4	3.5
CPI inflation	3.1	6.6	6.7	6.0
Budget balance % GDP	0.6	-3.1	-8.6	-13.1
Current account % GDP	-9.8	-14.8	-14.6	-15.4

Source: AfDB (2017: 269)

The greater part of economic activity in Lesotho depends on South Africa and in 2016; customs revenue from SACU contributed 26% of GDP. Further, the country imports 85% of its goods from South Africa. However, customs revenues are volatile and expected to fall within the next five years (The World Factbook, 2018). The real GDP growth rate over the period 2015-2018 remained below the regional target of 7% although it improved from 2.8% in 2015 to a projection of 4.6% in 2018. The levels of inflation experienced in Lesotho meet the SADC macroeconomic convergence criteria for the entire period 2015-2018.

Although the fiscal balance was within the threshold at 0.6% in 2015, it deteriorated further from -3.1% to -13.1% in 2016 and 2018 respectively. Lesotho faced growth in its current account deficit from -9.8% in 2015 to -14.8% in 2016. Although there was a slight decline to -14.6% in 2017, the deficit plunged further to -15.4% in 2018.

Corporate Income Tax

Lesotho has a special tax rate for manufacturing companies of 10% on profits while that of non-manufacturing companies is taxed at a standard rate of 25% on profits (Deloitte, 2018). Further, the tax rate for income from farming operations is 10% and subsistence farming is exempted from taxation. Taxable income includes gross income less any allowable deductions.

Personal Income Tax

Lesotho has a Personal income tax system based on residency, which is contrary to the situation in most SADC countries. The individual income tax rates are progressive at 20% or 30%. Residents in Lesotho are subject to tax on worldwide income while non-residents are subject to tax only on Lesotho-source income (Deloitte, 2018).

Notably, “a non-resident individual taxpayer who lives permanently outside Lesotho, but who is employed full-time in Lesotho or who is engaged full-time in a business or trade in Lesotho, is subject to tax on his or her chargeable employment income and chargeable business income at the rate prescribed in the Second Schedule.” (Deloitte, 2018: 166).

Value Added Tax (VAT)

The basic VAT rate is 15% while telecommunications and electricity supplies have rates of 9% and 8% respectively. VAT is charged on goods and services supplied within and outside Lesotho, however, limitations apply in respect of input tax deductions (Deloitte, 2018).

Customs and Excise Duties

“Lesotho forms part of the Southern African Customs Union and, as such, the same customs and excise duties as applicable to South Africa apply to Lesotho” (Deloitte, 2018: 168).

Tax incentives

Deloitte (2018) provides tax incentives in Lesotho which include preferential tax treatment for manufacturing offering a corporate income tax rate of 10% on profits. Pioneer companies are granted tax incentives in the form of exemptions from tax and additional allowances for capital and other expenditure in respect of new buildings, machinery and plant, electric power, transportation and water (Deloitte, 2018). Other incentives include capital allowances¹¹.

4.4.5.5 Malawi

Malawi attained its independence from Britain on 4 July 1964. The country has an estimated population of 19, 842, 560 and a literacy rate of 62.1%. On the other hand, it is estimated that 16.9% of the total population resides in the urban areas. Malawi is classified as one of the least developed nations in the world. Agriculture is a dominant economic activity, which contributes a third to GDP and 80% of export revenues. Data on the country’s GDP composition by origin shows agriculture (28.6%), industry (15.4%) and services (56%) (The World Factbook, 2018). Table 34 shows some of the key macroeconomic indicators that are critical for macroeconomic convergence in the SADC. Notably, Malawi has a history of policy inconsistency, fiscal indiscipline and corruption that have attributed to poor economic performance (The World Factbook, 2018).

¹¹ See Deloitte (2018: 171).

The real GDP growth rate in Malawi declined to 2.7% in 2016 from 2.9% in 2015 and rose thereafter to 4% and 5% in 2017 and 2018 respectively. Nonetheless, it remained below the regional target of 7%.

Table 34: Macroeconomic indicators in Malawi (2015-2018)

	2015	2016(e)	2017(p)	2018(p)
Real GDP growth	2.9	2.7	4.0	5.0
Real GDP per capital growth	-0.2	-0.4	0.9	1.9
CPI inflation	21.0	22.6	16.0	9.7
Budget balance % GDP	-6.5	-6.1	-5.6	-3.4
Current account % GDP	-8.2	-13.9	-10.7	-10.3

Source: AfDB (2017: 273)

Regardless of the decline, inflation in Malawi remained above the levels required in the macroeconomic convergence criteria. Inflation went down to 16% and 9.7% in 2017 and 2018 from 21.0% and 22.6% in 2015 and 2016 respectively. Similarly, there was a general decline in the fiscal deficit, however, Malawi did not meet expected targets because the levels experienced were over the 3% variation expected. Malawi experienced growth in its current account deficit from -8.2% in 2015 to -13.9% in 2016, however, there was a decline to -10.7% in 2017 and -10.3% in 2018.

Corporate Income Tax

The basic corporation tax rate in Malawi is 30% for companies registered in Malawi, however, pension funds are exempt from taxation. Malawi uses a source-based income tax system (Musviba, n.d). Table 35 shows corporate tax rates in Malawi. Taxable income is derived from business income, dividends, interest income, royalty income and gains from the sale of property (Deloitte, 2018).

Table 35: Corporate tax rates in Malawi

Company type	Rate
Basic rate	30%
Branches of foreign companies	35%
Pension funds – investment income	15%
Designated priority industries	0-15%

Source: Deloitte (2018)

Personal Income Tax

The first MWK 360 000 of annual income in Malawi is tax free for both employment and non-employment income. Thereafter, the next MWK 60,000 is taxed at 15% and the excess at 30% for non-employment income. The rates for employment income become 30% and 35% for taxable income between MWK 420 001 to MWK 3 000 000 and taxable income thereafter. Residents and nonresidents pay tax only on their Malawi-source income. Taxable income comprises of income arising from sources within Malawi that include employment income, business income, dividends, interest and property income (Deloitte, 2018).

Value Added Tax (VAT)

VAT is charged on taxable supplies of goods and services in Malawi, and on the import of goods, however, certain supplies are exempt. The standard rate of VAT is 16.5% (Deloitte, 2018).

Customs and Excise Duties

In Malawi, customs duty rates vary from product to product. However, for excise duties the Common Market for Eastern and Southern Africa (COMESA) Simplified Trade Regime (STR) allows cross-border traders in the COMESA region to enjoy duty free status when they import goods originating from member states (Deloitte, 2018).

Tax incentives

Malawi has several tax incentives, which include income tax rates between zero and 15% for designated priority industries such as agro-processing and commercial electricity generation and distribution industries (Deloitte, 2018). Further, the rate of mining income tax granted matches the basic rate of 30% or the rate of 35% for branches of foreign companies (Deloitte, 2018). Malawi also offers tax incentives in the form of capital allowances and tax deductibles (see Deloitte, 2018: 190-191).

4.4.5.6 Mauritius

Mauritius got its independence from Britain on 12 March 1968. The country has an estimated population of 1, 364, 283, while 40.8% of the total population reside in urban areas. On the other hand, the literacy rate is 93.2%. The key sectors contributing to the country's GDP composition include services (74.1%), industry (21.8%) and agriculture (4%). Mauritius depends on sugar, tourism, textiles and apparel, and financial services. Further, the country is

moving into fish processing, ICT, education, and hospitality and property development (The World Factbook, 2018).

Mauritius ranks as one of the best destinations for business in Africa as it has attracted over 32,000 offshore business which aim to do business with China, South Africa and India. Nevertheless, the offshore sector is susceptible to changes in tax frameworks (The World Factbook, 2018). There was a slight and consistent increase in real GDP growth of Mauritius from 3.4% to 3.8% from 2015 to 2018 respectively. Nevertheless, although inflation was positive, it did not rise enough to meet the levels expected in the SADC region. Similarly, fiscal balances over the period did not meet the standard of a variation of 3% as shown in Table 36.

Table 36: Macroeconomic indicators in Mauritius (2015-2018)

	2015	2016(a)	2017(p)	2018(p)
Real GDP growth	3.4	3.6	3.5	3.8
Real GDP per capital growth	3.1	3.3	3.2	3.5
CPI inflation	1.3	1.3	2.5	2.7
Budget balance % GDP	-3.5	-3.4	-3.6	-3.5
Current account % GDP	-4.8	-3.9	-4.8	-5.1

Source: AfDB (2017: 276)

The current account shows a deficit of -4.8% in 2015, which declined to -3.9% in 2016. However, there was an increase back to -4.8% in 2017 and a further increase to -5.1 in 2018.

Corporate Income Tax

According to Musviba (n.d), the corporate tax rate in Mauritius is a flat 15% payable by all resident companies and individuals on non-exempt income derived from Mauritius and from other sources. Notably, in the case of a company where the normal tax payable is less than 7.5% of its book profit, the tax payable for that income year is deemed to be 7.5% of its book profit or 10% of any dividends declared in respect of that year, whichever is the lesser. This alternative minimum tax is applicable in certain specific cases.

Offshore companies pay tax at a rate of 15% while offshore International Companies are exempt from tax (Musviba, n.d). Income tax is imposed on a company's profits, which consist of business/trading profits and passive income. Foreign tax paid on foreign-source income may be claimed as a credit against Mauritius tax arising on the same income. A company holding a

Category 1 Global Business License (BBL 1 company) is entitled to claim a credit for the greater of the actual foreign tax incurred or a deemed foreign tax credit equivalent to 80% of the Mauritius tax payable on its foreign-source income, giving rise to a maximum effective tax rate of 3% (Deloitte, 2018).

Personal Income Tax

Mauritius personal tax rate is a flat 15%. Income Tax is payable by residents on non-exempt income derived from Mauritius less allowable deductions. Taxable income includes employment income, pensions, profits from a trade and profession, rents and interest. An individual is taxed on employment income, fringe benefits arising from employment and business income. Investment income derived from outside Mauritius is taxable if it is received in Mauritius.

Dividends received by a resident individual from a Mauritius resident company are exempt from tax in the hands of the recipient, but dividends received from a non-resident company are taxable in Mauritius. Employers deduct income tax from each salary payments of all individual taxpayers. Individuals deriving rental income and or income from business or profession exceeding a certain threshold submit a statement of their income on a quarterly basis. Mauritius residents are taxed on Mauritius-source income and foreign income remitted to Mauritius. Nonresidents are taxed only on Mauritius-source income (Musviba, n.d; Deloitte, 2018)

Value Added Tax (VAT)

Mauritius VAT is charged on taxable supplies (both goods and services) made in Mauritius at a standard rate of 15%. Certain items such as basic foodstuffs and medical and educational services are exempted while exports are zero rated (Musviba n.d).

Customs and Excise Duties

Customs and excise duty is levied on the imports as provided under the Customs and Tariffs Act and applicable rates are in the Integrated Customs Tariffs Schedule (Deloitte, 2018)

Tax incentives

To boost manufacturing, the Schedule of Annual Allowances in the Income Tax Act, provides for accelerated depreciation in respect of capital expenditure made during the period 1 January 2013 to 30 June 2018, as shown in Table 37.

Table 37: Tax incentives in Mauritius

Capital Expenditure	Allowance
Industrial premises dedicated to manufacturing	30% of tax base value
Plant or machinery costing MUR 50 000 or less	100% of costs
Electronic and high-precision machinery (including computer hardware and software) (including computer hardware and software)	50% of costs
Plant and machinery (excluding passenger cars) by a manufacturing company	50% of costs
Scientific research	50% of costs

Source: Deloitte (2018)

4.4.5.7 Mozambique

Mozambique obtained its independence from Portugal on 25 June 1975. The country's estimated population is 27, 233, 789 and has a literacy rate of 56%. On the other hand, 36% of the total population is estimated to be residing in the urban areas. Although Mozambique was one of the poorest economies in 1975, in 1987 its government decided to undertake macroeconomic reforms and to instill political stability in the country. Consequentially, GDP in purchasing power parity terms grew from \$4 billion in 1993 to \$37 billion in 2017. In terms of GDP composition by origin production occurs as follows: agriculture (23.9%), industry (19.3%) and services (56.8%) (The World Factbook, 2018). Table 38 shows some of the key macroeconomic indicators that are critical for macroeconomic convergence in the SADC. It is important to note that the huge debt owed by Mozambique was forgiven under the HIPC scheme (The World Factbook, 2018). This seems to have helped the country to channel its efforts towards economic recovery.

Table 38: Macroeconomic indicators in Mozambique (2015-2018)

	2015	2016(e)	2017(p)	2018(p)
Real GDP growth	6.6	4.3	5.5	6.8
Real GDP per capital growth	3.8	1.5	2.7	4.1
CPI Inflation	3.6	16.7	15.3	8.2
Budget balance % GDP	-2.2	-2.8	-1.3	-1.1
Current account % GDP	-32.3	-31.1	-30.3	-29.5

Source: AfDB (2017: 278)

Although the real GDP growth rate was relatively close to 7% in 2015 at 6.6%, it declined to 4.3% and 5.5% in 2016 and 2017 respectively. However, it was projected to rise to 6.8% in 2018, which is relatively close to 7%. Inflation stood at 3.6% in 2015, which is within the stipulated range; however, it rose to 16.7% in 2016 and late declined in 2017 to 15.3%. Despite the further decline to 8.2% in 2018, it remained beyond the regional target. Although many SADC countries continue to struggle with fiscal deficits, the fiscal balance in Mozambique remained negative but within the 3% variation required stipulated for macroeconomic convergence.

There is a slight decline in the current account deficit; however, Mozambique is a huge net importer as its balance stood at -32.3% in 2015. The current account deficit declined to -31.1% in 2016 and -30.3% in 2017, however, these figures remain high. In 2018, the current account deficit declined further to -29.5%. Over the period 2015-2018, Mozambique experienced the largest current account deficit in the SADC region.

Corporate Income Tax

The standard company tax rate in Mozambique is 32%, although a penalty rate of 35% may be charged on unsubstantiated payments or non-complaint invoice (Deloitte, 2018: Musviba n.d). Further, resident companies are taxed on its worldwide income while nonresident companies are only taxed on their Mozambique source income (Musviba n.d). Taxable income includes all income and gains are included in taxable income (Deloitte, 2018).

Personal Income Tax

Mozambique uses a residency income tax system and the taxable income includes earnings from employment, trade and business, capital gains, real estate and other income. (Musviba n.d). “Employment income obtained by residents is taxed under the Pay-As-You-Earn (PAYE) system. The monthly withholding tax is a final tax and the highest marginal rate is 32%, which applies to monthly income higher than USD 2 300 while non-residents are taxed at a flat rate of 20%. Simplified tax for small taxpayers (ISPC) – Taxpayers can elect for the ISPC regime in place of individual income tax (or corporate income tax) and VAT. The ISPC regime applies to micro-enterprises and small individual taxpayers that carry on an agricultural, industrial or commercial activity, including services, and whose annual turnover does not exceed MZN 2.5 million. The tax payable under the ISPC regime is either MZN 75 000 or 3% of annual turnover” (Deloitte, 2018: 213).

Value Added Tax (VAT)

The standard rate of VAT in Mozambique is 17%, however, banking and certain health, education and philanthropic services are exempt and exports of goods and services are zero-rated. On the other hand, VAT is chargeable on the supply of goods and services in Mozambique, and on imports (Deloitte, 2018).

Customs duties

Customs duties are levied on imported goods at rates ranging from 2.5% to 20%. On the other hand, a specific consumption tax (ICE) Excise duty applies on the consumption of certain goods, produced or imported. ICE is levied on luxury items, such as alcohol, tobacco, perfumes, cosmetics, and jewellery, gold and passenger vehicles. Ad valorem rates vary from 10% to 75% (Deloitte, 2018).

Tax incentives

Tax incentives, include tax credits and the reduction or exemption of corporate tax. Companies that invest in Rapid Development Zones and Industrial Free Zones (in agriculture, mining, oil, tourism and industrial and services projects) may also be granted various forms of tax incentives (Deloitte, 2018).

4.4.5.8 Namibia

Namibia attained its independence from the South African mandate on 21 March 1990. The country has an estimated population of 2, 533, 224 and a literacy rate of 81.9%. Further, 50% of the total population resides in the urban areas. Namibia is heavily dependent on mining (in particular diamonds), which contributes about 12.5% of GDP, while providing more than 50% of foreign exchange earnings. Nonetheless, Namibia usually imports about 50% of its cereal requirements (The World Factbook, 2018).

Table 39 shows some of the key macroeconomic indicators that are critical for macroeconomic convergence in the SADC. Notably, Namibia shares close ties with South Africa as Namibian dollar pegged one-to-one to the South African rand. Further, the country receives 30%-40% of its revenues from SACU, however, the economy is compounded by volatility in the size of Namibia's annual SACU allotment and global mineral prices (The World Factbook, 2018). Namibia experienced declining real GDP growth from 5.3% in 2015 to 1.3% in 2016. Although there was an increase to 2.5% in 2017 and 3.7% in 2018, the levels remained below the regional

target of 7%. Similarly, the fiscal balance was -3.7% in 2015 and increase to -4.7% in 2016 and -6.4% in 2017.

Table 39: Macroeconomic indicators in Namibia (2015-2018)

	2015	2016(e)	2017(p)	2018(p)
Real GDP growth	5.3	1.3	2.5	3.7
Real GDP per capital growth	3.0	-0.9	0.3	1.6
CPI Inflation	3.4	6.7	6.0	5.2
Budget balance % GDP	-8.7	-4.7	-6.4	-4.9
Current account % GDP	-13.7	-9.7	-5.1	-4.8

Source: AfDB (2017: 279)

Despite the decline to -4.9% in 2018, overall, the fiscal balance remained negative and outside the 3% variation expected. Nonetheless, inflation levels were within the prescribed range of 3% to 7%, similarly, there was a declining trend in the current account deficit.

Corporate Income Tax

The general corporation tax rate in Namibia is 32%. Resident and nonresident entities are subject to Namibian income tax only on taxable income arising in, or deemed to arise from, a source within Namibia. Different rates apply to companies engaged in certain activities, as shown in the table above. The rate for registered manufacturing companies is 18% for the first 10 years after manufacturing company status is granted. For companies granted manufacturing status more than 10 years ago, the tax rate is 32% (Deloitte, 2018).

Table 40: Income tax for companies in Namibia

Company Type	Rate
Standard corporate tax rate	32%
Manufacturing companies	18/32%
Diamond mining companies	55%
Petroleum mining companies (oil and gas)	35%
Other mining companies	37.5%
Mining service companies	37.5%/55%
Insurance	32%
Retirement funds	Exempt

Source: Deloitte (2018)

Personal Income Tax

Individual income tax rates in Namibia are progressive to 37%. Resident and nonresident individuals are taxable on all income received or accrued from a Namibian source or deemed source that is not of a capital nature. On the other hand, taxable income is an individual's gross income, less exempt income and deductions (Musviba n.d).

Value Added Tax Rate

The standard rate of VAT in Namibia is 15% while some goods and services are zero-rated, such as direct exports of goods, international transport services, sales of businesses as going concerns, certain services rendered to nonresident persons and sales of some basic food items (Musviba n.d). Further, VAT is levied on the supply and import of most goods and services (Musviba n.d) Deloitte (2018: 230) states that "exempt supplies include medical, dental and hospital services; educational services; public transportation services; financial services; the rental of residential accommodations; and fringe benefits among others."

Customs and excise duties

In Namibia, customs duties are charges on imports from non-SACU countries and the rates depend on the tariff heading of the goods and may vary between 0% and 30%. Further, excise duties are payable by manufacturers and exporters on certain items like alcoholic beverages (Deloitte, 2018).

Tax incentives

Namibia offers considerable tax incentives, which include tax deductions and various tax allowances for registered manufacturing companies (see Deloitte, 2018: 233). Additionally, enterprises in Export Processing Zones (EPZs) are granted total relief from income tax, VAT, customs and excise duties, stamp duty and transfer duty (Deloitte, 2018).

4.4.5.9 Seychelles

There was a long struggle between the British and the French to politically dominate Seychelles however, the latter eventually surrendered in 1814. During colonialism, Seychelles was established as a plantation economy and gained its independence in 1976. The country is considered as the smallest in Africa with an estimated population of 94 633, meanwhile 56.7% of the population resides in urban areas. Seychelles has a literacy rate of 91.8% and is governed as a presidential republic. Notably, GDP per capita of Seychelles expanded approximately

seven times since its independence in 1976 and is the only SADC member state that has achieved the high-income country status.

The major areas of economic activity in Seychelles include tourism and tuna fishing. The tourism sector employs about 26% of the labour force and accounts for approximately 55% of GDP. Although the government has begun to make attempts towards reducing the islands reliance on tourism, the sector predominantly remains the greatest contributor of growth (The World Factbook). Table 41 shows some of the key macroeconomic indicators that are critical for macroeconomic convergence in the SADC.

Table 41: Macroeconomic indicators in Seychelles (2015-2018)

	2015	2016(e)	2017(p)	2018(p)
Real GDP growth	5.7	4.8	3.5	3.3
Real GDP per capital growth	5.1	4.1	2.9	2.8
CPI inflation	4.0	-0.1	2.6	3.8
Budget balance % GDP	3.5	1.0	1.5	1.8
Current account % GDP	-18.4	-14.1	-17.7	-18.0

AfDB (2017:286)

Over the past recent years economic growth in Seychelles has been driven by tourism, fisheries and information and communications technology (ICT). The growth rate declined gradually from 5.7% in 2015 to 3.3% in 2018, hence it fell short of the regional target of not less than seven. Nevertheless, inflation was within the prescribed interval in 2015 and 2018. In 2016, Seychelles went into deflation and bounced back in 2017 with an inflation rate of 2.6%. In generally, the island has had positive budget balances unlike most of the member states in the SADC that have faced deficits. However, the current account was negative and worsening over the entire period 2015-2018.

Corporate Income tax

Seychelles uses a source-based income tax system except for Special License Companies. Taxation of corporations is governed under the Business Tax Act, which considers taxable income as all income derived or deemed to be derived from a source in Seychelles by a corporate entity, which is not exempted. A charge of 25% is levied to companies, government bodies and trusts on the first SCR 1 million and 30% on income exceeding that amount. Additionally, small businesses (with turnover under SCR 1 million) pay a presumptive rate of

tax of 1.5% on turnover instead of a tax on annual income, save they wish to be taxed under the normal regime. A special rate of 25% is applied to telecommunications service providers, banks, insurance companies, alcohol and tobacco manufacturers on the first SCR 1 million and 33% on the remainder. However, companies incorporated in Seychelles and granted a special license (Special License Companies) are subject to a 1.5% tax on global taxable income (Deloitte, 2018).

Personal Income Tax

All individuals whether resident or non-resident in Seychelles are subject to personal income tax on their gross income derived from Seychelles. Income from employment, proceeds from the disposal of business assets, income from the exercise of a business or profession and investment income constitute taxable income in Seychelles. The tax is payable by the employer, along with the monthly remittance of income tax withheld. However, individuals involved in business activities are subject to business tax under the Business Tax Act. Notably, individual income tax is levied on employment income at progressive rates up to 15%, while non-resident individuals/employees are subject to income tax at a flat rate of 15%. Further, tax also is levied on non-monetary benefits paid to the employee at a rate of 20% (Deloitte, 2018).

Indirect taxes

Some of the basic forms of indirect tax in Seychelles include VAT which is levied at a standard rate of 15% on the supply of goods and services and imports. A zero rate is applied to certain supplies. Further, the island uses a trade tax similar to customs duty, which ranges between 0% and 200%. In addition, Seychelles has concessions for imports on certain industries such as the tourism, construction and car hire business.

Excise duty is charged on goods that include petroleum products, motor vehicles, and alcohol and tobacco products imported or produced in Seychelles. There are different rates depending on the type of product. (Deloitte, 2018). Additionally, Seychelles has two types of special taxes that include the Corporate Social Responsibility Tax (CSRT) and the Tourism marketing tax. The former applies when a company makes a turnover of at least SCR 1 million and is levied at a rate of 5%. Likewise, the tourism marketing tax is levied on companies engaged in specific activities at the rate of 5% for turnover of at least SCR 1 million (Deloitte, 2018).

Tax incentives

Deloitte (2018) suggest that there are concessions on business tax depending on the type of industry¹².

4.4.5.10 South Africa

South Africa is governed under a parliamentary republic. The Union of South Africa was established from four British colonies on 31 may 1910, while majority rule was obtained on 27 April 1994. The country has an estimated population of 55, 380, 210 and a literacy rate of 94.4%. In addition, 66.4% of the total population is estimated to be residing in the urban areas. South Africa is well endowed as it has an abundant supply of natural resources; well-developed financial, legal, communications, energy, and transport sectors; and a stock exchange that is Africa's largest and among the top 20 in the world (The World Factbook, 2018). Table 42 shows some of the key macroeconomic indicators that are critical for macroeconomic convergence in the SADC. Notably, the entire SADC region is dependent on South Africa.

Table 42: Macroeconomic indicators in South Africa (2015-2018)

	2015	2016(e)	2017(p)	2018(p)
Real GDP growth	1.3	0.3	1.1	1.6
Real GDP per capital growth	0.3	-0.5	0.2	0.7
CPI inflation	4.6	6.4	6.1	5.6
Budget balance % GDP	-3.7	-3.4	-3.2	-2.9
Current account % GDP	-4.3	-3.9	-3.7	-3.7

Source: AfDB (2017: 289)

In view of its dominant role in the SADC, the real GDP growth rate in South Africa was relatively low and below the regional target of 7%. In 2015, the economy grew by 1.3% and experienced a decline to 0.3% in 2016. Despite the recovery back to 1.1% in 2017, South Africa slightly grew by 0.5% to 1.6% in 2018. Nonetheless, inflation levels attained were within the expected range of 3% to 7%. The country faced negative fiscal balances over the period 2015 to 2018, however, only 2018 had a balance within the 3% variation targeted by the region. Despite facing negative current account balances, these seemed to be relatively consistent and on a decline from -4.3% in 2015 to -3.9% in 2016. Thereafter, the current account deficit declined to -3.7% in 2017 and 2018 consecutively.

¹² See Deloitte (2018: 279) on general investment information relating to concessions on business tax.

Corporate Income Tax

South Africa has a residence-based tax system as residents are taxed on their worldwide income while non-residents are only taxed on their income from a South African source (Santander n.d). Table 43 show income tax rates for companies in South Africa. The standard rate is 28% (Santander n.d; Deloitte 2018).

Table 43: Income tax for companies in South Africa

Companies	Rate
Qualifying companies in SEZs	15%
Qualifying micro businesses (turnover tax)	0% -3%
Qualifying small business corporations	0% - 28%
Gold mining companies	Varies
Long-term insurers	28%/30%

Source: Deloitte (2018)

Personal Income Tax

In South African residents are taxed on worldwide income and capital gains while non-residents are taxed on their South African-source income and capital gains from immovable property located in the country. The standard rate is 18% however, progressive tax rates are imposed in South Africa ranging from 18% - 45%. There is no special expatriate's tax regime as locals and expatriates have the same tax rate (Santander n.d; Deloitte, 2018)

Value Added Tax (VAT)

Since 1 April 2018, the standard VAT rate in South Africa is 15%. Certain supplies are zero-rated, including exports, basic foodstuffs, agricultural goods, the supply of intellectual property to be used outside South Africa and the supply of gold coins issued by the central bank, certain financial services, residential accommodations and public transport. Further, exemptions include financial services, educational services, childcare, donated goods supplied by certain nonprofit organizations, the letting of residential accommodation and immovable property located outside South Africa (Santander n.d).

Customs and excise duties

Customs duties are imposed on imported goods while excise duties and levies are imposed mostly on high-volume daily consumable products such as petroleum, alcohol and tobacco

products. In addition, excise duties and levies are charged on non-essential or luxury items such as electronic equipment and cosmetics. Notably, excise duties are levied on both imported and locally manufactured goods (Deloitte, 2018).

Tax incentives

South Africa offers a variety of grants and tax incentives to pursue a diverse range of objectives. The energy savings tax deductions incentive offers tax deductions to taxpayers that are energy efficient (Deloitte, 2017). On the other hand, the country offers an income tax allowance for industrial projects classified as Greenfield or brownfield projects. The former refers to new projects whilst the latter refers to the expansion of existing projects (Deloitte, 2017). Normal status projects have an allowance of 35% of the cost of new and unused manufacturing assets however, if the project is located in an Industrial Development Zone (IDZ), then the allowance offered is 75%. On the other hand, preferred projects have allowances of 55% or 100% respectively ((Deloitte, 2017).

According to Deloitte (2017), Special Economic Zones (SEZs) in South Africa receive a preferential corporate tax rate of 15% unlike the standard 28% that applies elsewhere. SEZs also receive VAT and duty reliefs as well as an employment incentive were employers deduct the amount of tax incentive from their employees' tax due at the end of the month for those earning below ZAR 6,001 per month (Deloitte, 2017). Further, a rebate is offered on imported goods, raw materials and any material required in the manufacture of goods for export and Headquarter Companies (HQC) are exempted from dividends tax and capital gains tax (Deloitte, 2017).

4.4.5.11 Tanzania

On 26 April 1964, Tanganyika and Zanzibar united to form the United Republic of Tanganyika and Zanzibar which was renamed to United Republic of Tanzania on 26 October 1964. Tanganyika and Zanzibar had obtained independence from Britain on 9 December 1961 and 10 December 1963 respectively. The country has an estimated population of 55, 451, 343 and a literacy rate of 77.9%. In addition, 33.8% of the total population are found in urban areas. The economic growth experienced in Tanzania from 2009-2017 is attributed to the country's natural resource wealth and tourism. Further, although government has presence in sectors such as telecommunications, banking, energy and mining, Tanzania has transitioned into a market economy (The World Factbook, 2018). Table 44 shows some of the key macroeconomic indicators that are critical for macroeconomic convergence in the SADC. Further, the country

depends on agriculture, which contributes a little slightly less than one-quarter of GDP while gold production increased to about 35% of exports over the past few years (The World Factbook, 2018).

Table 44: Macroeconomic indicators in Tanzania (2015-2018)

	2015	2016(e)	2017(p)	2018(p)
Real GDP growth	7.0	7.2	7.2	6.8
Real GDP per capital growth	3.8	4.1	4.1	3.7
CPI inflation	5.6	5.2	5.1	5.0
Budget balance % GDP	-3.3	-3.5	-4.6	-4.6
Current account % GDP	-9.8	-5.6	-7.5	-7.5

Source: AfDB (2017: 296)

From the sample adopted in this study, Tanzania is the only SADC member state that met the regional target growth rate of 7%. In 2015, the real GDP growth rate was 7% and it grew to 7.2% in 2016 and 2017 consecutively, however, it fell to 6.8% in 2018. Notably, there seems to be some degree of consistency in the growth trend of Tanzania over the period 2015-2018. Similarly, the country attained consistent inflation levels within the regional range of 3% to 7%.

In 2015, inflation stood at 5.6%, which declined consecutively to 5.2%, 5.1% and 5.0% in 2016, 2017 and 2018 respectively. Nevertheless, there was an increase in the country's fiscal balances, which were negative and outside the range of 3% variation. In 2015, Tanzania experienced a fiscal deficit of -3.3% which increased to 3.5% in 2016, -4.5% in 2017 and -4.6% in 2018. The current account was also negative for the entire period, however, it declined from -9.8% in 2015 to -5.6% in 2016. Although it increased -7.5% in 2017 and 2018, there was consistency in the two consecutive years. Overall, Tanzania seems to be on a remarkable path to improved economic performance.

Corporate Income Tax

Tanzania has a standard corporate tax of 30% and residents are taxed on worldwide income while nonresidents are taxed on income sourced in Tanzania. Notably, foreign-source income for residents is taxed under the same rules as Tanzanian-source income, although foreign source losses may only be offset against foreign-source income. Branches of foreign corporations are taxed in the same way as resident companies, with an additional tax on branch profits. Table 45 shows income tax rates for companies in Tanzania. Taxable income includes

profits derived from the operation of a business, capital gains, dividends, interest and royalty income (Deloitte, 2018).

Table 45: Income tax rates for companies in Tanzania

Companies	Rate
Standard corporate rate	30%
Newly listed companies on the Dar es Salaam Stock Exchange	25%
Companies with newly established plants for assembly of vehicles and boats	10%
Alternative minimum tax rate on turnover	0.3%

Source: Deloitte (2018)

Personal Income Tax

Individual income tax rates in Tanzania are progressive to 30% while non-resident employees' (with resident employer) income is subject to withholding tax at the rate of 15%. However, the total income of a non-resident individual is charged at the rate of 20%. Further, Tanzanian residents are taxed on their worldwide income while non-residents are taxed only on Tanzanian-source income (Musviba n.d). The total income of a person income from employment, business and investment (Deloitte, 2018).

Value Added Tax (VAT)

The standard rate of Value Added Tax in Tanzania is 18%. Further, exports of goods and professional and communications services are zero-rated. (Musviba, Deloitte, 2018).

Customs and excise duties

Tanzania typically adopted the East African Community (EAC) Customs Management Act and Common External Tariff. Customs and excise duties are levied on a range of goods, at various rates (Deloitte, 2018).

Tax incentives

Tanzania offers several concessions on land, which apply to EPZs, Special Economic Zones (SEZs) and Non-government Organizations (NGOs). The Tanzania Investment Centre (TIC) regime provides for certain tax reliefs and concessional tax rates to qualifying investor under various laws (Deloitte, 2018). Other tax incentives include deductions and allowances (see Deloitte, 2018: 325).

4.4.5.12 Zambia

Zambia attained its independence from the British on 24 October 1964. The country has an estimated population of 16, 445, 079 and a literacy rate of 63.4%. In addition, the urban population is estimated to be 43.5% of the total population in Zambia. Despite strong growth during the decade leading to 2014, the country experienced market-distorting policies in the agriculture and energy sectors (The World Factbook, 2018). Table 46 shows some of the key macroeconomic indicators that are critical for macroeconomic convergence in the SADC. Zambia is dependent on copper as its sole major export (The World Factbook, 2018).

Table 46: Macroeconomic indicators in Zambia (2015-2018)

	2015	2016(e)	2017(p)	2018(p)
Real GDP growth	2.9	3.0	4.2	4.5
Real GDP per capital growth	-0.2	-0.1	1.1	1.4
CPI Inflation	10.0	17.8	8.2	8.0
Budget balance % GDP	-8.7	-10.5	-8.5	-7.6
Current account % GDP	-3.6	-3.7	-3.6	-3.3

Source: AfDB (2017: 300)

Zambia experienced growth from 2015 to 2018, however, the levels of growth still remain below the regional target of 7%. In the same vein, inflation levels exceeded the range of 3% to 7% as the rate grew from 10% in 2015 to 17.8% in 2016. Although there was a decline to 8.2% in 2017 and 8% in 2018, the figures remain outside the regions' target. Further, the fiscal balances were beyond the regional target of a variation of 3% as there was growth from -8.7% in 2015 to -10.5% in 2016. Despite the decline in fiscal balances from -8.5% in 2017 and -7.5% in 2018, the performance remains above the SADC target. The current account deficit experienced in Zambia is low compared to other member states and there seems to be relative consistency over the period 2015-2018.

Corporate Income Tax

The standard rate of corporate tax in Zambia is 35% for companies and branches. Residents are taxable on income received or accrued from an actual or deemed Zambian source. Foreign-source dividends and interest are taxable in Zambia. For nonresidents, withholding tax deducted on their Zambian-source income is the final tax in Zambia. Businesses are subject to corporate income tax on trading profits and other taxable income, such as interest, royalties and rental income. In general, expenses and losses of a revenue nature that are wholly and exclusively incurred for the purpose of the business are allowable as deductions. Table 47

shows income tax rates for companies in Zambia. For other sources, to be deductible, expenses must have been incurred wholly and exclusively in the production of the income from that source. The cost of providing non-cash benefits to employees is not deductible for income tax purposes (Musviba, n.d)

Table 47: Income tax rates for companies in Zambia

Companies	Rate
Standard corporate rate	35%
Mining operations	30%
Public benefit organizations' income from commercial activities	15%
Farming	10%

Source: Deloitte (2018)

Personal Income Tax

Zambia personal income tax rates are progressive to 37.5%. Residents and nonresidents are taxed on income received or accrued from an actual or deemed Zambian source. Further, foreign-source dividend and interest income earned by residents is taxed. Taxable income includes business income, employment income, annuities, interest, royalties and property income. Dividends from companies listed on the Zambian stock exchange are exempt from tax (Musviba, n.d). Deloitte (2018) states that the employer deducts tax monthly on a pay-as-you-earn (PAYE) basis.

Value Added Tax

A standard VAT rate of 16% is imposed on the taxable supply of goods and services and imports of goods in Zambia. On the other hand, exports and international transport are zero-rated, while certain transactions are exempt. Zambia also uses a reverse-charge mechanism where VAT the standard VAT rate is charged on services provided by foreign suppliers to customers in Zambia, by means of a reverse charge (Deloitte, 2018).

Customs and excise duties

The import of goods into Zambia is categorized on the basis of whether they are raw materials, intermediate goods or finished goods, and are taxed at rates ranging from 0% to 25% on the cost, insurance and freight value (or the value for duty purposes). Excise duties are levied on

specific classes of goods manufactured or imported goods at pre-determined rates contained in the Harmonized Commodity Description and Coding System (Deloitte, 2018).

Tax Incentives

Zambia offers a considerable number of tax incentives compared to other member states in the SADC. With the exception of cotton lint, agriculture is taxed at a reduced rate of 10%, while dividends paid out of farming activities are exempt from tax for the first five years from the commencement of business. There is no import duty on irrigation equipment, and reduced duty rates apply on imports of other farming equipment and VAT deferral is granted on the import of some agricultural equipment and machinery among other tax incentives under agriculture (Deloitte, 2018). Zambia grants a variety of capital allowances and various tax incentives in tourism, manufacturing and investment (see Deloitte, 2018: 360-361).

4.4.5.13 Zimbabwe

Zimbabwe attained its independence from Britain on 18 April 1980. The country has an estimated total population of 14, 030, 368 and a literacy rate of 86.5%. In addition, 32.2% of the total population constitute those residing in urban areas. Zimbabwe is heavily dependent on agriculture and mining; however, it is also burdened by a large public and external debt, high government wage bill among several factors impeding growth (The World Factbook, 2018).

Zimbabwe suffered massive economic turmoil during the period 2004-2008 due to hyperinflation. In this regard, the country abandoned its local currency in 2009, and adopted a basket of foreign currencies to restore inflation and encourage economic recovery. Table 48 shows some of the key macroeconomic indicators that are critical for macroeconomic convergence in the SADC. Although the country seeks new loans to resuscitate the economy; International financial institutions want to see serious commitment towards fiscal and structural reforms before granting new loans (The World Factbook, 2018).

The growth rate in Zimbabwe was relatively low and below the regional target. The country faced negative inflation of -2.4% in 2015 and -1.5% in 2016. The deflationary environment was due to suppressed aggregate demand in the country, however in 2017, inflation increased to 1% and 1.7% in 2018.

Table 48: Macroeconomic indicators in Zimbabwe (2015-2018)

	2015	2016(e)	2017(p)	2018(p)
Real GDP growth	1.1	0.5	1.3	0.9
Real GDP per capital growth	-1.2	-1.8	-1.0	-1.4
CPI Inflation	-2.4	-1.5	1.0	1.7
Budget balance % GDP	-2.7	-7.3	-5.0	-4.1
Current account % GDP	-10.7	-9.2	-10.7	-7.7

Source: AfDB (2017: 302)

Despite the fiscal balance, Zimbabwe met the regional target in 2015, as the deficit was -2.7%. Nevertheless, the fiscal deficit grew to -7.3% in 2016 and declined to -5% in 2017 and -4.1% in 2018. On the other hand, the current account balances remained negative throughout the period ranging from -10.7% in 2015 to 7.7% in 2018.

Corporate Income Tax

The corporate tax rate is 25% (reduced from 30% as from 1 January 2010); however, lower rates may apply under incentive schemes. Companies are taxed on Zimbabwe source income and taxable income includes all income received or accrued from sources within Zimbabwe or deemed to be within Zimbabwe (Musviba n.d). Table 49 shows income tax rates for companies in Zimbabwe. With effect from 1 January 2017, a foreign company is subject to tax in Zimbabwe if it carries on business in Zimbabwe through a permanent establishment (PE) (Deloitte, 2018).

Table 49: Income tax rates for companies in Zimbabwe

Company Type	Rate
Basic tax rate	25%
AIDS levy – based on tax payable	3%
Rate including AIDS levy	25.75%
<i>Special income tax rates</i>	
Foreign interest and dividends	20%
Pension funds	15%
Export manufacturing companies	15%-20%
Mining operations - companies and mining trusts (including AIDS levy)	25.75%
Special mining lease operations	15%

Source: Deloitte (2018)

WHT applies on capital gains while Presumptive taxes are levied on certain informal traders, small-scale miners, transport operators, hair salons and operators of water-borne vehicles, among others (Deloitte, 2018).

Personal Income Tax

Deloitte (2018: 362) points out that taxable income in Zimbabwe includes “any Zimbabwe-source interest that is not subject to withholding tax (WHT), foreign dividends and interest where the Zimbabwe tax exceeds the foreign tax paid, rental income and trade income.” “The individual income tax rates applicable to residents and non-residents in respect of Zimbabwe-source employment income are progressive from 0% to 50%. An AIDS levy (surtax) imposes an additional 3% tax on the income tax payable. Taxable income accruing to an individual from any trade or investment is taxed at a flat rate of 25% (plus the additional 3% AIDS levy). A 15% rate applies on the taxable income of individual holding a temporary employment permit for employment with a licensed investor having a qualifying degree of export-orientation (as defined in the Taxes Act). WHT applies on capital gains. Income earned by an individual from mining operations is subject to a rate of 25.75% (including the 3% AIDS levy)” (Deloitte, 2018: 364).

Value Added Tax (VAT)

The standard rate of VAT in Zimbabwe is 15% is imposed on wide range of goods and services supplied by registered operators or which are imported. There is a VAT rate is 0% on some food stuffs while certain supplies are exempt from VAT, such as education, public transport and medical services. (Musviba n.d; Deloitte, 2018).

Customs and Excise Duties

Customs duty is levied on the importation of certain goods, on the value for duty purposes (VDP). The VDP generally is the landed value of the goods plus VAT, where applicable. The standard tariff can vary based on special rates under an agreement or trade bloc membership. As a member of SADC and COMESA, Zimbabwe has a broad range of rebates mainly in respect of certain raw materials, strategic entities and/or sectors and certain types or classes of capital equipment (Deloitte, 2018). Notably, consistent changes are made to customs tariffs and/or rebates in Zimbabwe, depending on emerging circumstances. Notably, there is a rate of 10% excise duty on airtime (including internet) sold by operators of cellular communication

systems and with effect from 1 January 2017, 5% of the excise duty was allocated to the Health Fund levy to fund the purchase of drugs and equipment for government hospitals (Deloitte, 2018).

Tax incentives

Zimbabwe offer various tax incentives, which include rebate of certain duties on all manufacturing industries for imported goods, raw materials and components used in manufacturing or processing or for export. While other member states exempt financial services, Zimbabwe only exempts Building societies and financial institutions providing mortgage finance only for receipts and accruals attributable to the provision of mortgage. Zimbabwe also offers capital allowance and deductions (see Deloitte, 2018: 373).

4.5 Summary of Tax Structures in SADC

International institutions such as the World Bank, IMF and the U.S. Agency for International Development (USAID) have assess the performance of tax systems as well as their capabilities for decades in the absence of a solid international comparator basis (Gallagher, 2005). Against this background, Gallagher (2005) provides a series of indicators and benchmarks that offer an international perspective in assessing tax systems. In this regard, it becomes plausible to set specific targets for performance and reform on the basis of international standards and to monitor of progress over time. Benchmarks are created on the basis of three broad approaches that include: international best practice, a theoretically ideal or perfect tax structure, or the current (status quo) tax system (Gallagher, 2005). The summary of the benchmarking tool developed in this thesis is based on the last approach where a modified mixed criterion was adopted from elements found in Gallagher (2005) and Robinson (2005).

It is important to note that the original macroeconomic convergence criteria do not include cover tax neither do the proposed amendments. In this regard, the original contribution of Robinson (2005) is that the study proposes a secondary criterion that encompasses issues peculiar to tax policy. Table 50 shows a summary the structure of tax systems in the SADC in 2016. Indications are that regardless of the tax revenue levels in the SADC, current tax systems serve recurrent expenditure needs more than those of capital expenditure. In order to move on a path towards meaningful development as stated in Robinson (2005), the need for additional revenue becomes imminent. Since tax is an option for funding development, this heightens the need to assess tax capacity and tax effort in the SADC.

Table 50: Benchmarking tax structures in the SADC region (2015)

Indicator	RC ₁₄	SADC countries ¹³											
		C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	C ₇	C ₈	C ₉	C ₁₀	C ₁₁	C ₁₂
Total tax revenue (%)	20	12	25	27	53	22	19	35	33	29	13	16	28
Trade taxes as a percentage of total revenue (>20%)	N	N	Y	Y	Y	N	N	N	Y	N	Y	N	N
Standard CIT rates (%)	≤35	30	15	27.5	25	30	15	32	32	28	30	35	25
CIT/ Total revenue (%)	≥35	40	28	24	23	39	19	33	34	47	31	36	32
Progressive PIT rate (%)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Provision of tax incentives to attract FDI	n/a	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Indirect taxes are greater than direct taxes	Y	N	N	N	N	N	Y	N	N	N	N	N	Y
Indirect taxes /total revenue (>30%)	Y	N	N	N	N	Y	Y	Y	N	Y	N	N	Y
Basic VAT rate	15	10	12	14	15	16.5	15	17	15	15 ¹⁵	18	16	15
Recurrent expenditure > Capital expenditure	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Wages & salaries/Total spending (<10%)	Y	N	N	N	N	N	N	N	N	N	N	N	N

Source: Author's compilation using Gallagher (2005); Robinson (2005); AfDB (2018)

4.6 Conclusion

This chapter sets out the context in which tax capacity and tax effort were assessed in this thesis. One of the fundamental facts emerging from this study is that tax systems in developing countries are different from those found in rich countries. Additionally, the major forms of taxes are also different. In this regard, this had implications the choice of the theoretical

¹³ SADC countries are written as C_i, where *i* refers to figures 1 up to 12 corresponding to Angola, Botswana, Eswatini, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Tanzania, Zambia and Zimbabwe respectively.

¹⁴ RC refers to the regional comparator developed in this study as the standard.

¹⁵ Note: South Africa changed its VAT rate to 15 percent effectively from 1 April 2018.

framework adopted in this study because to a larger extent, the constructs of theory guiding tax policy in rich countries may not be tenable to the SADC.

Literature asserts that colonial legacies are an important characteristic of the political economy of the SADC, meanwhile some studies tend to suggest that British colonialism was better than that of the Portuguese or any other colonizer. Notably, traces of the administrative structures of colonialism are believed to be engraved in present day economies, including tax systems. Further, the style of political leadership is seen as a critical element of the political economy as democratic rulers are deemed to be more appropriate to preside over nations that seek to grow and develop. Nevertheless, in recent times, there are concerns over the rise of authoritarianism in the SADC regardless of the adoption of multi-party systems. Since, dominant ruling parties have majority seats in parliament, it is possible that they have sufficient power to influence decisions or rubber stamp the decisions of the executive.

The major forms of tax in the SADC include CIT, PIT, VAT, Excise and Import tariffs. Notably, all member states provide several forms of tax incentives mainly to attract FDI. On the basis of overview of the macroeconomy of the SADC, the region still requires great effort to meet its macroeconomic convergence criteria. In comparison to the macroeconomic convergence criteria of the ECOWAS, tax revenue performance in the SADC generally exceeds the standard of 20%, however, Angola, Mauritius, Tanzania and Zambia have generally performed below this threshold.

CHAPTER 5

THE POLITICAL ECONOMY OF TAXATION IN DEVELOPING COUNTRIES

5.1 Introduction

The previous chapter elucidated on some of the key concepts imbedded in the economic and administrative approaches to tax design. Following the discussion of the political economy of the SADC, this study believes that the political economy has practical implications for tax policy in developing countries. Hassan and Prichard (2014) suggest that there is a surge in acknowledgement of the importance of politics in understanding tax policy in developing countries. This is because taxation remains an essential element linking the citizenry and government (Hassan and Prichard, 2014). Gordon and Li (2009), assert that there are perverse tax policies in developing economies because of political economy problems. Di John (2006) arguments Gordon and Li (2009) by suggesting that developed countries are what they are today because of the relative importance placed on understanding taxation, good governance and institutional formation. This implies they had to create institutional state capacities to mobilize resources. The reflection of the interaction between political economy and economic development is highly linked to the public policy choices made by governments. Against this background, it is argued that political institutions are an effective tool that can be used to assess the executive of a country (Ricciuti, Savoia & Sen, 2016).

Literature on the political economy of taxation is still limited in several ways as findings from empirical studies largely remain in conflict. Further, the existence of differences in the methodologies and the samples of countries studied makes it difficult to generalize or compare the findings (Yogo and Ngo Njib, 2018). Notably, Yogo and Ngo Njib (2018) argue that Africa remains almost ignored although some studies have focused on developing countries. Similarly, literature on the political economy of tax reform is mixed probably because studies focus on different methods, emphasis, assumptions and frameworks (Santos and Souza, 2013). Nevertheless, Santos and Souza (2013) are of the opinion that evaluating tax reform on the basis of technical and apolitical factors hinders researchers from fully comprehending the reality tax policymaking. This reinforces the need for this study as it seeks to investigate the influence of the political economy on taxation in the SADC beyond the consideration of technical aspects in tax design.

The central focus of this chapter is to provide insight of some the concepts that underlie the political economy of taxation in developing countries. Guided by literature, this study

acknowledges that policymakers may or may not explicitly follow recommendations from research. Section 4.5 in the previous chapter introduced the two possibilities that are bound to have an effect on tax policy and resulting tax systems. This is set to provide an answer as to why tax policing is perverse as argued by Gordon and Li (2009). There is need to find ways to better understand the changes in tax policy or the apathy in tax systems in developing countries.

Understanding the political economy of taxation is central because it may provide insight into policy implications that would otherwise have been difficult to extract in an analysis involving geographical and historical factors (Ricciuti et al., 2016; Bird and Zolt, 2003). Similarly, Bird (2013) acknowledges that tax policy decisions are not made in a vacuum, hence it is important to have insight into its setting. As such, Santos and Souza (2013) suggest that from the standpoint of developing countries, it is crucial to understand perspectives in the political economy that seek to explain why existing tax systems reflect political preferences that have evolved over time. Literature on the political economy of taxation largely considers how the interests of politicians or lawmakers affect tax reform outcomes. Emphasis is on understanding the role of political constraints in influencing the ability of government to make changes in tax systems.

Against this background, the central focus of this chapter is to explore the theoretical underpinnings that explain how political constraints may influence tax systems in developing countries. The next section focuses on the role of political constraints influencing taxation in developing countries. This is subsequently followed by the conclusion, which ends the chapter.

5.2 Role of political constraints

According to Ricciuti et al. (2016), it is necessary to have sound fiscal capacity in order to foster economic development. In turn, the political economy may influence the capacity to generate tax revenue, thus limiting the power to use fiscal capacity as a panacea for ensuring economic development. Solid political institutions are critical in improving tax systems and important in setting up the necessary machinery to broaden tax bases (Ricciuti et al., 2016). From the previous chapter, the principles of a good tax system are set as a guide to the practice of tax policy, hence creating an association between tax practitioners and tax policymakers. Against this background, this study considers six political constraints, which could restrain the behaviour of the executive, and these include; political philosophy, external factors, electoral support, partisan alliances, elite influence, political legitimacy and political survival.

5.2.1 Political philosophy

Larmore (2013: 3) defines political philosophy as “a systematic reflection about the nature and purpose of political life”. Larmore (2013) asserts that there are two competing views to political philosophy. The first view sees political philosophy as a division in moral philosophy, which seeks to outline the principles of an ideal society. The second view focuses on the political conflict and the need for authority, which result from differences in interests and doing what is right and good. In this regard, the nature of association between humans, relationships and their activities will influence the manner in which they pursue a given set of purposes. In this regard, it is paramount to have knowledge about the aims and practices governing human associations otherwise it becomes difficult to understand the political orientation and purpose they intend to serve. The competing views enable one to place the different conceptions of political philosophy and to show where flaws exist. In turn, government can pursue a set of ideas that it considers adequate to employ in pursuit of its purpose. Some of basic forms of political ideologies include democracy, communism and autocracy.

In view of the role of government in an economy, the existence of debates on the political orientation of leaders has shown that ideology is at the core of both economic and political life (Saksena, 2009). Murphy and Nagel (2002) argue that tax policy is an instrument, which the political system uses in practice to implement how politicians conceive economic or distributive justice. In this regard, it is argued that the principles of a good tax system, which are used to evaluate tax policy, fall short, if political philosophy is not considered. This is because political morality is believed to guide politicians in making choices over a spectrum of possibilities that may be presented in the economic approach to tax design. For instance, while economic theory advocates for a fair and efficient tax system, politicians face constraints in the real world yielding tax policies otherwise not perceived by economic theory. In a democratic system, philosophers do not make public policy instead; politicians who have the influence can be removed from office through elections in constituencies. This reality cannot be ignored as the conception of politicians is set to influence the practical design tax policy. In this regard, Murphy and Nagel (2002) argue for the use of societal fairness as a guide to practical tax policy than tax fairness itself. Murphy and Nagel (2002) seem to suggest that in reality evaluators of tax policy need to figure out how the postulations of the economic approach to taxation fit in well with the political theory governing their settings. However, the argument raised is somewhat inclined towards the notion that priority should be given to political philosophy over the principles of taxation as a guide tax policy. Kordana and

Tabachnik (2003) agree with Murphy and Nagel (2002) that there is less logic to engage in debates on tax policy without considering how the political setting views the concept of fairness and distributive justice in taxation. However, Kordana and Tabachnik (2003) further argue that economic theory will not necessarily become irrelevant as perceived by Murphy and Nagel because there may be instances where the conception of what politicians view as just is indeterminate.

Ricciuti et al. (2016) provides two instances of an autocratic ruler and a democratic system of governance. A rational autocrat will arguably be highly motivated in ensuring tax system effectiveness because of his need to retain power by maximizing long-term income from tax revenue. His interest would be to provide citizens with public goods and services as well as to retain some revenue for his own private benefit (Ricciuti et al., 2016). In instances where democratic systems are in existence, the median voter theory is applicable as it suggests that leaders will be enticed to ensure effective tax systems in order to be re-elected into power (Ricciuti et al., 2016). In this regard, there is no rational to suggest that such leaders would act differently from leaders who are constrained to ensure effective tax systems. This reinforces the proposition that the attitude or philosophical stance of policymakers is an important factor in assessing tax systems. However, since Ricciuti et al. (2016) provide no difference between the expected behaviours of the autocratic leader and democratic leader, this poses a great challenge in coming up with policy implications as a clear distinction is difficult to draw based on the propositions suggested.

In view of the casual relationship between the degree of constraints on the executive and ensuring fairness in the tax system, Ricciuti et al. (2016) suggest that an autocratic system of leadership would yield distinct results from a democratic system. The existence of a fiscal contract linked by transparency and accountability forms the cornerstone of the relationship between government and citizens. Exerting the need for accountability is likely to lead to solid political institutions as lack of willingness to pay taxes and fiscal bargain may limit the ability for government to build resilient fiscal capacity. In this regard, government under constraints is mandated to prove its legitimacy and is likely to be encouraged to ensure fair tax systems. In addition, government is likely to show more transparency to improve or maintain a healthy fiscal contract which minimizes the risk of non-compliance, hence maintaining or improving its fiscal capacity. In this regard, the expectation is that transparency and accountability are likely to yield positive results where the degree of constraints on the executive is high. This is because it becomes difficult for the elite or favoured groups to evade or avoid paying taxes.

Further, tax policy rules become difficult to manipulate in favour of elite groups. However, if the degree of constraints on the executive is low, there is a greater chance that the favoured groups can evade taxes or are favoured by the use of discriminatory tax rules (Ricciuti et al., 2016). This illustration may aid to explain the scenario in Chapter 2 where evidence showed that Switzerland was ranked as the best government in the world in 2018. This is probably because more political power lies with the public, thus creating huge constraints for the executive. Nevertheless, the situation is somewhat different for the greater part of SADC, where electoral freedom is either ranked low or absent. This implies that the public are in a very limited space to constrain the executive towards making tax systems fair.

Bamikole (2012) suggests that it is crucial to examine the opinions of African politicians in relation to the theoretical prescriptions provided under political philosophy. Consequently, it is believed that ideology is reflected in blueprints, although Africa blueprints are criticized for being incoherent as well as inconsistent and of little relevance to the reality on the ground. Though, Bamikole (2012) may sound unsympathetic, this study somewhat concurs with the notion that many of the governments in SADC member states have not adequately to their promised enshrined in various party manifestos. Notably, very few of the SADC member states have made significant milestones towards poverty eradication and economic development since independence. Some countries initially progressed, however, the last decade has seen many countries facing some kind of economic turmoil. Hence, this reinforces the need to investigate whether political institutions have had an effect on tax capacity and tax effort in the SADC.

5.2.2 External factors

According to Santos and Souza (2013), a combination of domestic and international pressures from conditionality packages promoted tax reform in Latin America. Several studies suggest that reform of tax systems in developing countries was largely fostered by the international financial institutions like the International Monetary Fund (IMF) and the World Bank as part of the conditionality packages (Tanzi and Zee 2001; Keen 2012; Ado, Korboe, Williams and Mensah 2010; Reinsberg, Stubbs and Kentikelenis, 2017)). The aim for the tax reforms was to grow revenue and to bring more stability to targeted revenue. Further, it is argued that since the prime goal was to institute reform, there is no reason to suggest that foreign influence had adverse effects to the performance of tax revenue (Santos and Souza, 2013). Nonetheless, this contradicts Damme et al. (2008) who are of the opinion that since these institutions are based

in the US and have more experience as well as success in Europe (or the US), it follows that the origins of their tax policy advice is Eurocentric.

Nevertheless, the Addis Ababa Action Agenda places emphasis on the need for developing countries to receive external support to improve tax capacity. The donor community and other international organizations also acknowledge that there is need to assist developing countries in building strong tax systems. However, political commitment from governments in developing countries is seen as an indispensable prerequisite to improving tax capacity. The call for political commitment should move towards having political support for key enablers aimed at building tax capacity. Such enablers include having a coherent revenue strategy, the presence of strong regional cooperation and support, strong coordination among well-informed providers, the presence of a robust base of knowledge and evidence and strengthened participation in international rule setting (IMF, OECD, UN and World Bank, 2016). This heightens the urgency for macroeconomic convergence in the SADC and a quickened pace towards tax cooperation and tax coordination.

Gunning (2001) suggests that political considerations are at the core of aid allocations to developing countries. Conditioned foreign aid implies that governments are susceptible to negotiating with the donor to institute some kind of reform and subsequently receive aid. Nonetheless, Gunning (2001) concludes that for conditionality to be effective it is necessary but not sufficient for the receiving government to change tax policy in the manner deemed desirable by the donor. Four possible consequences arise when a donor attempts to influence tax policy through conditionalities. Firstly, the motive of influencing tax policy fails if tax reform is not adopted. Secondly, the reforms may be implemented but the credit is not given to the presence of conditionalities placed by the donor because it would have been possible to adopt the reforms even in the absence of aid. Thirdly, it is also possible that tax reform is sustained because of the presence of aid. However, there is risk of reduced credibility in the future if aid runs out meanwhile prompting government to reverse the reform on tax policy. The ultimate effect of conditionalities on aid is perceived to be temporary because of the limited threat that donors may pose if policy reversals are made (Gunning, 2000).

Ado et al. (2010) suggest that in the case of Ghana, the IMF conditionality packages had an adverse effect on the social sectors of the economy. In view of this, the study recommended that the IMF needed to stop attaching specific policy conditions to loans and that in cases where strict fiscal adjustment was a prerequisite, the country's parliament had to approve. In addition,

Ado et al. (2010) recommended the government of Ghana to avoid following some of the IMF recommendations as they were negatively affecting the economy. In contrast, Reinsberg et al. (2017) assert that IMF programs have no effect on tax revenue because countries rarely implement the necessary policies unless they are explicitly required to do so. Further, the failure to adopt tax policies is attributed to lack of capacity or political will. In this regard, tax conditionality is viewed as critical as it may be one of the most plausible ways to force countries to commit towards tax reform with hope of receiving funding. As reiterated before in this study, Keen (2012) argues that there are general principles that apply to tax design in any country and that sometimes a one size fits all approach is appropriate in certain circumstances. This is somewhat consistent with the claim raised in Chapter 4 that despite country specific differences, the main rules of a good tax system are universal although it may be difficult to implement them all in their entirety. Hence, it sound prejudicial to presume that IFIs like IMF are entirely Eurocentric, and have provided advice ill-suited for Africa or SADC. The narrative analysis on legislated tax changes in chapter 8 provides better insight on the extent to which SADC member states implemented tax reforms over the period 2002-2016.

From a political economy point of view, it may not be as simple as choosing other alternative sources of finance as a way of avoiding the IMF conditionality packages. There are many possible reasons why politicians or lawmakers may be unable to make tax reforms just as a benevolent government would. Other huge domestic pressures may require funding thereby prompting governments to perceive the cost of the conditionalities to be minimal, even if it means tax reform. In such a case, external forces become more important than what an economic approach would otherwise perceive as being appropriate. This is commensurate with the notion raised by Murphy and Nagel (2002) the interplay between political philosophy and the economic approach to tax reform is crucial because it brings insight into understanding the setting in which tax systems evolve. The two major forms of external forces identified in this thesis are the IMF conditionalities and external support in the form of foreign aid. Notably, empirical evidence on the influence of foreign aid on tax revenues in the SADC will argue the evaluation on whether political choices on tax policy relate to constraints placed by the international community.

5.2.3 Electoral support

Santos and Souza (2013) suggest that tax policy reflects the ultimate outcome of political operations involving political incumbents. In accordance with the Median Voter Theorem

(MTV), Santos and Souza (2013) argue that the rules of politics in elections will influence the outcome of tax policy. Similarly, Ehrhart (2013) suggests that before elections, governments may make changes in the tax system in order to please the electorate. The theoretical foundations of influencing elections through fiscal policy changes is largely found in literature on the political business cycles and commonly applied to in circumstances where there is hope for democracy. Further, the occurrence of electoral cycles seems to be greater in developing countries because of the high need for politicians to remain in power and a lower share of informed voters in the electorate (Ehrhart, 2013). Nonetheless, empirical evidence seems to suggest that there is no significant relationship between the manipulation of elections and overall tax revenue (Ehrhart, 2013). Notwithstanding this, Ehrhart (2013) argues that this does not necessarily imply that the same follows for specific taxes.

Congleton (2002) suggests that most of the analytical work on public choice uses majority decision-making models; however, in reality the political economy complicates this setting. Congleton (2002) describes the MTV as a simplistic and transparent model that is suited with democratic systems where voters select policymakers and not policies. MTV assumes that the preferences of the group of voters are based on a single dimension (single peaked preferences) and are always increasing or decreasing. For instance, the level of tax revenue becomes the peak that describes the unique dimension upon which voters have to make a preference. The median voter becomes the individual whose preferences lie in between the spectrum of lower peaks and higher peaks. In order to attain the voting equilibrium, the outcome has to have majority voting against all other alternatives at the politicians' disposal. As such, the median voter theorem states that the median voters' preferences or the peak of the median voter should be the voting equilibrium. Hence, the implication is that as long as the median voter gets what they want then anything that influences the median voters' appraisal of the advantages of alternative policies or political candidates will definitely affect the political outcomes. Political candidates are at liberty to choose policy positions that will maximize their share of votes. Theory also suggests that MVT is highly relevant when the election race has two candidates that the electorate can choose. The implication on the candidates is that they are constrained to selecting policy positions that are relatively close to median voter preferred policies (Congleton, 2002). Since SADC countries have multiple parties during elections, this limits the applicability of MTV. Further, evidence from chapter 2 suggests that there has been a surge of political party rivalry and factionalism within parties. Against this background, this study

believes that this pushes some member states away from the possibility of using the MTV to predict political outcomes.

Focusing on another theory, Ehrhart (2013) alludes to the relevance of the opportunistic approach of budget cycles when attempting to draw a connection between electoral support and tax policy in developing countries. Ehrhart (2013) argues that cycles emerge because of the presence of information asymmetry between the politicians and the electorate as the former's capabilities are unknown. In this regard, the electorate has to draw inferences from economic data that is observable and this in turn encourages opportunistic politicians in government to manipulate policy variables in order to make themselves look competent before the elections. Ehrhart (2013) acknowledges that there is no theoretical model to explain the phenomenon of manipulating tax structure for electoral purposes. However, Ehrhart (2013) links the political budget cycle to tax composition by presuming that citizens have preferences over latter because of their perception on willingness and competence of governments to consider their influence in the election. When politicians are able to identify the median voter preference of tax composition, it follows that the political budget cycle of tax composition can be explained based on the claims of the opportunistic approach to political budget cycles.

Based on empirical evidence on the implications of MTV and the political budget cycle of tax composition, Ehrhart (2013) concludes that in developing countries, the electorate is likely to prefer lower indirect taxes relative to direct taxes. This is because the median voter's share of capital is lower relative to the mean capital endowment of the population. However, when applying the political budget cycle, Ehrhart (2013) concludes that cycles will emerge because politicians and the electorate have distinct preferences regarding tax policy. In order to appease companies, politicians may favour lower direct taxes; however, voters will favour lower indirect taxes. If the outcome of the elections is important to the politicians, then lower indirect taxes are likely to dominate the year of elections than non-election years. This illustrates the influence of electoral support in tax policymaking.

5.2.4 Partisan alliances

According to Santos and Souza (2013) the relative power of political parties in parliament is important because it may affect tax reform when disagreements and deadlocks occur. Johnson (2005) suggests that modern democracies involve sharing the duties of decision-making in parliament; however, irrespective of the diversity of legislators it is crucial to have some degree of cooperation in policymaking. Nonetheless, the European Parliamentary Assembly (2010)

argues that the institution of democracy requires a subtle balance between the majority and the opposition; however, it does not imply that political dialogue would be effective. The opposition is defined as political parties that do not constitute the majority, nonetheless, without implying parliamentary opposition. The risk lies in that parliamentary opposition may counterbalanced by the threat of abuse by the majority. It is suggested that government should ensure that a process of consensus building is established especially in areas of national priority. Further suggestions also reiterate the importance for opposition parties to engage in constructive dialogue with government for the benefit of the public. However, Johnson (2005) argues that the strength of legislature depends on the relationship between legislators and the executive. This is because there are instances where the Speaker of Parliament and cabinet ministers are selected from the majority. This kind of union between the executive and legislature is a disservice to developing strong committee systems or sound policy expertise.

In practice, most of the cabinet members are drawn from the legislature. Although SADC has embraced the multiparty system, this study feels that this has not been done sincerely. This is because dominant ruling parties still exist in the region, with reported cases of abuse of electoral freedom. It is hard to fathom why rational citizens would continue to vote for dictators or oppressors and very corrupt governments. This study therefore believes that the majority of the electoral are ill- informed about politics and also that they do not hold sufficient political power to hold the executive and legislature accountable as observed in well governed states like Switzerland. Factionalism, inter-party rivalry and intra-party rivalry threaten the development of sound policies in the region and in individual member states.

As suggested by Ricciuti et al. (2016), it is important to place constraints on the executive so that private interests do not override public interest. In this regard, Johnson (2005) argues that parliament has power to hold the executive accountable, although, it depends on a number of factors including chief among them is the extent of power. Johnson (2005) discusses four categories of parliaments that include rubber stamp parliaments, arena parliaments, transformative parliaments and emerging parliaments. The major distinguishing feature among them is that some have extremely limited independence and power while others are relatively influential and active. The first three form a continuum that moves from limited power to greater influence on government policy decisions. Rubber stamp parliaments form the simplest form of legislature by virtue that they simply endorse decisions made elsewhere in the political system. The executive or parties usually make these decisions and often related to communist

or totalitarian systems. This kind of legislature needs less expert staff and has little internal structure as well as low information needs. Arena legislatures comprise of bodies that engage in real discussions and debates, however, the executive or parties make decisions. The distinction from rubber stamp parliaments is that different perspectives are considered in evaluating policies and plans; nonetheless, the inclination is that they do not reshape or drastically depart from proposed policies. Transformative parliaments tend to reshape policies and represent the diverse interests of society. Similarly, new policy initiatives are made in addition to changing government policies. On the other hand, emerging legislatures relate to those that are in the process of changing from one form to another in order to exercise greater power on government policies (Johnson, 2005). In view of trying to understand why some countries perform well than other in terms of economic growth, this study is of the opinion that the nature of legislature plays a dominant role in policymaking, hence the reason why developed countries differ from developing countries. Further, this study believes that irrespective of sharing the same type of government, the differences arise due to how these states are actually run.

Evidence from chapter 2 shows that in Angola and Zimbabwe, at one time the presidents influenced the change in national constitutions yet sentiments from their governments described the countries as democratic. In reality, there is a disconnection between dictatorship and democracy. In this regard, this study strongly believes that the political economy in SADC plays a huge negative role as it undermines development and poverty reduction in the region owing to poor institutional choices.

5.2.5 Elite influences

Grossman and Helpman (2000) assert that in real societies, special interest groups play an important role that influences the design of economic policy. Jesus (2010) suggests that the power exerted by elite groups in policymaking is determined by factors that include lobbying tactics, resources of association (financial, staff and membership), whether they have technical or directional influence and the nature of the issue at hand. Nonetheless, literature is scanty regarding the measurement of the extent of influence exerted by these groups on the actual policy.

According to Fairfield (2013), elite groups exercise their influence on policymakers by manipulating the investment power and political power relationship. The power to invest is structural while political power is instrumental as such, the former create economic obstacles

while the latter creates political obstacles. Policymakers may worry about the threat of tax reform on investment because it may reduce their profits and incite capital flight to areas where market incentives encourage profit making. In turn, the decline in investment may damage the reputation of politicians in government (Fairfield, 2013). This is because of the adverse and ultimate effect on other economic variables like economic growth and employment (Fairfield, 2013). Further, in some instances the elite groups of individuals or organizations may have informal ties with policymakers and may form the central constituency of political parties (Fairfield, 2013; Santos and Souza, 2013).

Meanwhile, business leaders may be appointed into key government positions thereby providing an opportunity for them to make key economic decisions which favour their businesses. This enables such groups to exercise greater power or lobby for changes in tax policy that favour their interests over public interest (Fairfield, 2013). Besley and Persson (2014) suggest that political control of the wealthy elite is a fact in several low-income countries. Such groups are sheltered by various factors that include military governments, hereditary successions of power and control over political parties among other factors. In the interest of serving these favoured groups, it becomes difficult to use progressive taxation as it will adversely affect the wealthy or at least above-median income groups. The perception of elite groups is important to politicians as long as they exert influence that threatens the political survival of incumbent governments.

Gunning (2000) suggests that a government may select certain tax rates in order to maximize the welfare of elite groups. For instance, in a two period model private agents may decide to invest only if government has announced tax rates and transfer policies. Private agents may decide to invest in one activity from which government will receive tax revenue and obtain foreign aid as well to pay for some government expenditure. The remainder of revenue may then be transferred to elite groups as part of government's expenditure programs to support business, meanwhile they are supporting the favoured groups. Santos and Souza (2013) assert that there are several ways powerful elite groups influence tax policymakers to favour them. Policymakers may be put under pressure to design specific tax instruments or tax incentives. In addition, Grossman and Helpman (2000) suggest that special interest groups may entice policymakers through their willingness to provide campaign material as a tool to influence policy after elections. In other instances, resources of patronage are obtained from the tax system using tax concessions that are awarded politically to favoured companies on a selective

basis. Although, there have been reports of elite influence in almost all of SADC, there is lack of quantifiable data to backup this claim. However, vast media reports are found in the greater part of the region where senior public official or executive party members have been alleged to be involved in underground dealings with the wealthy elite to avert the law and create business opportunities for each other using public office. In spite of the challenge of obtaining admissible evidence that could be used to prosecute law perpetrators, the judicial systems in most of the SADC member states are closely associated with the executive, hence the rule of law may never take its course in a just manner. Instead, there is a tendency to undermine weaker factions or political rivals by targeting them to apply the law selectively.

5.2.6 Political legitimacy

Fabienne (2007) suggests that the conception of political legitimacy can be either descriptive or normative. In the former, legitimacy is refers to people's beliefs about political authority and in other instances political obligations. However, in the latter, legitimacy refers to some standard of acceptability or explanation of political power, obligation and authority. The major distinction between them is that the normative perception is restricted to bringing insight into the actual process of legitimation; however, critics argue that it pays little attention to the historical realization of the process.

In most societies politicians have inevitably made policy decisions and implemented them even if they did not appeal the public. In instances where people had formed negative attitudes towards the resulting policies, eventually people seemed to transform towards acceptance (Jagers, Matti and Nordblom, 2016). Among other reasons, the rationale of political legitimacy would be to invoke support or compliance on specific policies, in this regard, coercing the public to accept ill-gotten leadership or souring leadership is likely to lead to a series of economic and social problems. Fabienne (2007) defines political legitimacy as an asset of political institutions and decisions about laws, policies and political candidates who take up office. Further, legitimacy refers to citizen's support for a policy, order and regime (Hanberger, 2003: 274). In the context of this study, legitimacy focuses on political actions and inactions. Jagers et al. (2016) assert that legitimacy has a close relationship with political power and authority and is quite often considered an essential quality for politicians who do not seek to be removed from power through elections. In most instances, the view is that legitimacy is a prerequisite of political authority for a government that expects citizens to obey (Greif and Rubin 2014; Jagers et al., 2016) As such, the expectation is that high levels of correlation

should exist between political legitimacy and support or voluntary compliance with political decisions. Further, Matlosa (2003) suggests that political legitimacy is required to avert political instability.

Notably, the greater part of the region is compounded by some kind of conflict. In recent times, Zimbabwe has gross regime legitimacy issues. Regardless of reports of gross human rights abuse and lack of rule of law in some parts, the SADC region has somewhat been indifferent to the calls made to resolve conflict in the country and instead unhealed the country's leadership with positions of responsibility. To that end, this study asserts that to some extent it could be true that revolutionary parties or governments remain dominant in the SADC leadership and are often sympathetic to their counterparts, overriding the need to protect their people. Cawthra, (2010) is of the opinion that SADC has always reaffirmed its solidarity to the ruling party ZANU-PF regardless of the damning circumstances surrounding its leadership. It is crucial to note that while regional integration was part of the reason why SADC was established, this study believes that the pursuance of political coalition between frontline states seemed to take precedence. This is because even after 27 years, the SADC has been not yet able to achieve its self-imposed objectives and targets for deep integration (Vanheukelom and Bertelsmann-Scott, 2016). Several studies explored this area that political legitimacy was interrelated with democratic governance and Notably, some studies content that there are extreme cases where democracy is unimaginable while others show have shown progress towards transitioning from autocracy to democracy (Matlosa, 2008; Cawthra, 2010). Nonetheless, SADC is criticised for lack of institutional depth, liaison and cooperation and being unable to work in harmony with the AU and other international organizations.

According to Hanberger (2003), there is a connection between public policy making and political legitimacy. Jagers et al., (2016) assert that since most of public policies are made from the political system, it also follows that policy legitimacy will be dependent on political legitimacy. Although empirical studies on policy have largely focused on the technical and administrative aspects, it is important to consider the political factors governing the emergence of such policies. Similarly, Greif and Rubin (2014) attribute the scarcity of empirical work in economics on the subject to lack of an endogenous theoretical political model. In this regard, Greif and Rubin (2014) developed a conceptual framework for an endogenous political legitimacy model. Although the focus was on understanding the role of political legitimacy on the reformation and origin of the modern economy of England, there is a valuable lesson of

relevance to developing countries that seek to transform their economies. Greif and Rubin (2014) concluded that despite the importance of economic and religious institutions, the way governments obtain political legitimacy has an influence on the type of policies they promote. In this regard, it becomes essential to understand the sources of political legitimacy which include the quality of governance, electoral democracy, economic performance and distribution, values and attitudes (Gjefsen, 2012). Nonetheless, based on various empirical evidence, Rothstein (2009) argues that electoral democracy is not necessarily a key factor in creating political democracy and instead suggests that the effect would be more profound when considering the quality of governance.

In relation to the notion raised by Hanberger (2003), this study similarly argues that policymakers cannot rely on existing political legitimacy because of the general decline in public confidence and evidence of growing corruption as well as lack of governance especially in the public sector. Although leadership may elect to be belligerent, this lack of political legitimacy imposes more constraints or conditions on policymaking, thus making it more difficult to survive in the political arena. Against this background, policymakers would have to engage in a continuous process of legitimizing current policies. Schenellenbach (2005) asserts that there is a close link between tax morale and the public's perception of public policy because the assumption of rationality restrains the taxpayer from compliance if they perceive that tax policy is not what it ought to be. Lipset (1959) contends that the political system should be capable of creating and maintaining the belief that existing political institutions are the most appropriate for society.

5.2.7 Political Survival

In order to attain political survival, leaders identify policy choices on economic variables like tax and spending. The determination to remain in office is reflected by the performance of tax or spending among other variables (de Mesquita, Smith, Siverson & Morrow, 2002). According to Peters (1991), the major puzzle that politicians have is to strike a balance between obtaining the required revenue and desired reactions from the public. Further, it is important to consider the amount of tax to charge citizens and effectively decide on how to raise that money. Arguably, some taxes (income taxes) are more visible to citizens than others (VAT), hence diverse political outcomes may emerge with different influences on the survival of incumbent governments. Further, Peters (1991) suggests that the complexity of trying to survive politically is compounded by the need to make subtle and critical decisions when selecting tax policy. For

instance having numerous taxes at lower rates is likely to generate less political opposition than having a few taxes with higher tax rates.

According to de Mesquita et al. (2002), democracy is good for society, however, it also presents numerous threats on governments that seek to survive. The politician's index of welfare is related to the length of their tenure of office, thus they desire to retain power for as long as they can. Unlike non-democrats, politicians in a democratic system face huge political threats from three distinct sources that include challengers within the existing political arena, revolution from domestic masses and foreign enemies who seek to takeover natural resources or policies. The influence of foreign enemies is similar to the constructs made on the role of external forces in tax reform in chapter 3. Generally, self-interest motivated politicians tend to make decisions that would best minimize risk in anticipation of threats to their political survival. In order to predict potential threats, incumbent governments make policy changes or realign their interests. Electoral competition plays a critical role in the survival of the incumbent if they eventually lose office to a challenger. Polo (1998) provides an explanation using a model with no information asymmetry in presence of heterogeneous voters and two political candidates under majority voting and winner-takes-all- rule. The view is that electoral competition determines the outcome of public choice relating to tax revenue and spending needs.

5.3 Conclusion

The central focus of the chapter was to provide insight into some of the relevant concepts on the political economy of taxation in developing countries. The motivation comes from the fact that in reality, policymakers may or may not explicitly follow recommendations of policy research-hence emphasizing that institutional choices matter in assessing tax systems. Theoretically, decision-making over tax policy hinges on political philosophy of government, political legitimacy, the need for political survival, the influence of partisan alliances and elite groups, electoral support and the influence of external forces. However, this study has been able to relate some of the constructs to drawn from the political economy of SADC discussed in chapter 2. Notably, this study concurs with Vanheukelom and Bertelsmann-Scott, (2016) that SADC has a troubled past shaped by foundational and structural factors which are believed to influence regional integration and other forms of cooperation towards poverty reduction and economic development.

CHAPTER 6

DETERMINANTS OF TAX REVENUE PERFORMANCE IN DEVELOPING COUNTRIES

6.1 Introduction

Given that tax revenue remains an important source of funding for governments in SADC, it becomes imperative to bring insight into the theoretical and empirical factors that influence it. Considerations in chapters 2, 3, 4 and 5 show that tax structures in developing countries is influenced by tax policy decisions on tax progression, tax incidence, tax bases and the role political institutions. In the real world, the outcome of tax policy is reflected by the performance of the tax system and is assessed by evaluating the factors that influence tax revenue changes. Accordingly, the most common and widely accepted measure of tax revenue performance is the tax revenue/GDP ratio. This is a measure of tax effort reflecting the extent of usage of taxable capacity (Ahmad and Stern, 1989). This study concurs with Yonah and Margalioth (2006) that there is need to examine whether a generalized tax policy can be made from the findings of data-driven research based on some form of category of developing countries such as the SADC. In this regard, this study seeks to examine whether empirical findings for the SADC point to that direction. This thesis takes cognisance of the existence of numerous studies that sought to determine the factors influencing tax revenue performance in developing countries. Further, this study notes that existing empirical evidence came from the use different methodologies and diverse samples in an attempt to provide knowledge to enhance the understanding of ideology, practice and role of tax policy in developing countries.

Against this background, the purpose of this chapter is to ascertain the state of scholarship in developing countries regarding the generation of evidenced based research to inform tax policymakers on how to enhance the effectiveness of their tax systems. Following this introduction, four subsections subsequently form the rest of this chapter. The first subsection is a brief overview on the concept of taxable capacity and tax effort. The second subsection explores the theoretical determinants of tax revenue performance in developing countries based on host country characteristics. The next subsection elucidates some of the empirical studies on the determinants of tax revenue performance in developing countries. The last subsection is the conclusion to the chapter.

6.2 Taxable capacity and tax effort

Although numerous studies have been done on to determine the factors that influence tax revenue, some studies argue that tax policy advice should be directed more towards tax effort and tax capacity (Le et al., 2012; Fenochetto and Pessino, 2013; Yonah and Goujon, 2017). There a variety of definitions in public economics, that describe taxable capacity. For instance, Berry and Fording (1997: 158) define taxable capacity as the “capability of a governmental entity to finance its public service.” Ahmad and Stern (1989: 1017) define taxable capacity as “the ability of people to pay tax and the ability of the government to collect; the tax effort reflects the degree to which taxable capacity is used.” Le et al., (2012: 2) describe taxable capacity as “the predicted tax-to-GDP ratio that can be estimated with regression analyses, taking into account a country’s specific macroeconomic, demographic, and institutional features. Tax effort is defined as an index of the ratio between the share of the actual tax collection in GDP and the taxable capacity.”

However, this study considers a much simpler definition where taxable capacity is described as “the ability of individuals and businesses to pay taxes” (Trotman-Dickenson, 1996: 243). Notably, Trotman-Dickenson, (1996) also suggest that it is not the ability of taxing authorities to raise revenue. According to Cyan et al. (2013: 5) tax effort is “the ratio between actual tax collection and potential tax or revenue, serves as an effective indicator and point of departure for tax reforms and as an enduring indicator of the sufficiency of government revenues.”

The central focus of studies on taxable capacity and tax effort has been to understand whether tax revenue performance in developing countries is due to low taxable capacity or that governments are unwilling or unable to use the available tax capacity to raise adequate levels. In practice, the relevance of determining the state of taxable capacity is to inform policy on the extent of effort required in addressing tax revenue challenges. Further, it provides insight into the performance of existing tax bases and far individuals and businesses are able to pay. In reality, sometimes using other alternatives to tax revenue may be desirable if a country has already attained its taxable capacity with limited room to broaden tax bases or shift tax bases.

In this regard, this study explores theoretical and empirical literature on the determinants of tax capacity and tax effort in developing countries.

6.3 Theoretical determinants of tax revenue performance

Von Haldenwang and Ivanyna (2011) argue against comparing country tax ratios based on some threshold values because of differences in the conditions and development levels of individual countries. The argument lies in that there are approaches that are more elaborate which may be used to measure the tax effort by taking account of specific country characteristics, such as per capita income, the trade/GDP ratio or the relative size of the agricultural sector. Von Haldenwang and Ivanyna (2011) also criticize the method of comparing country tax ratios because of the effect of possible changes in country characteristics. There is widespread belief that the structural features of any economy influence tax revenue performance as well as the ability of government to tax (Besley and Persson, 2013). In this regard, this section provides a summary of some country specific factors that affect tax revenue performance.

6.3.1 Size of population

According to Addison and Levine (2012), increasing population is inversely related to tax revenue performance because it is an exogenous variable that does not affect the tax revenues directly but rather through its effect on other endogenous variables like per capita income and agriculture output. Further, there is an expectation that rising populations stimulate growth in tax capacity due to economies of scale in tax collection. In view of constrained physical and human capital as well as the presence of undeveloped technology, a higher population tends to reduce per capita income and thus corrodes taxable bases (Addison and Levin, 2012).

A considerable number of empirical studies have used population density as a proxy to population in assessing its impact on tax revenue performance (Teera, 2003; Mahdavi, 2008; Bothhole, 2011; Addison and Levin, 2012 and Dioda, 2012).

6.3.2 Financial deepening

Financial deepening refers to the extent of financial development in a country. Several studies have assessed the role of financial deepening in economic growth, suggesting that it has a positive influence on long-run growth, capital and productivity (Karimo and Ogbonna, 2017; Donald and Schumacher, 2007). Well-functioning financial institutions provide an alternative avenue for acquiring finance for public spending through borrowing (Donald and Schumacher, 2007). In this regard, financial deepening is expected to negatively affect tax revenue performance if public debt is taken as an easier and feasible option to cover public spending.

However, Karimo and Ogbonna (2017) assert that financial deepening is an engine driver of growth as it promotes productive activities through the provision of credit. In this regard, financial deepening is expected to positively influence taxable capacity due to its effect on growing productive tax bases.

6.3.3 Economic development

According to Alfirman (2003), some of earliest and earnest efforts on the design of the systematic relationship between revenue share and the stage of development follow the work of Williamson in (1961) and Lotz and Morss (1967). The latter developed a model which suggests a significant positive relationship between the tax revenue performance to GDP ratio and per capita income. Similarly, Calitz et al. (1999) asserts that the level of development is a critical factor for governments to raise adequate revenue to finance public spending. Hypothetically, rising per capita incomes tend to drive urbanization and non-agricultural activities (Besley and Persson, 2013). This in turn means that more economic activities will fall in the formal sector facing increased exposure to observation by government. This has an ultimate effect on the options available for fiscal capacity and consequences for taxes that are observable (Besley and Persson, 2013). Nonetheless, the potential to widen the tax net implies increasing tax revenue performance.

6.3.4 Agriculture

According to Harque (2012) the share of agriculture to GDP is a proxy for stage of development because it is expected that higher levels imply a larger subsistence sector, less industrialization and lesser opportunity to collect taxes. Gupta (2007) also asserts that there are demand and supply factors which influence the impact of agriculture on tax performance which may include politically infeasibility to tax. However, a positive relationship may be realized when there is a significant share of agricultural exports.

Addison and Levin (2012) suggest that although the greater part of SSA has a large share of agriculture to GDP. There is widespread consensus that agricultural activities are difficult to tax in low-income countries especially given the dominance of small-scale farming. Complications arise because tax officials are unable to observe the tax base as agriculture predominantly remains informal. In this regard, the expectation is that a negative relationship exists between the share of agriculture sector and tax revenue performance as well as tax effort. (Teera, 2003; Agbeyegbe, Stotsky & WoldeMariam, 2004; Gupta, 2007; Addison and Levin, 2012 and Karagöz, 2013).

6.3.5 Trade Openness

In the wake of globalization, many economies have increasingly liberalized trade. Openness measures the share of international trade in GDP and is an indicator of liberalization in the economy (Ghura 1998). Literature considers the international trade sector in developing countries to be the most monetized sector of the economy. In this regard, trade taxes in Sub-Saharan Africa seem relatively easier to collect; consequently leading to heavy reliance as observed in SACU member states. Against this background, import and export shares could be important in explaining variations in tax revenue performance in the SADC. A considerable number of studies suggest that openness has a positive impact on the tax revenue to GDP ratio (Stotsky and WoldeMariam, 1997; Ghura, 1998; Tanzi and Zee, 2001; Agbeyegbe *et al.*, 2004 and Addison and Levin, 2012). Conversely, Imam and Jacobs (2007) and Bird *et al.* (2008) suggest a negative relationship while Karagöz (2013) argues that this result could be because only a few taxes are directly affected by openness.

6.3.6 Changes in tax base

Bird (2007) suggests that the breadth of the tax base is the main link that relates the level of tax revenue and tax structure. According to Carnahan (2015), tax bases in developing countries are under threat from various potential sources. Similarly, the Trepelkov *et al.* (2017) asserts that it is critical for developing countries to protect tax bases against erosion. Hence, changes in the structure of the economy may prompt governments to restructure and expand tax bases (Besley and Persson, 2014). To some extent governments fail to respond to tax base changes in both the long run and short run and this subsequently affects tax revenue performance (Bird 2007). For instance, the rise in informal activity is likely to impact negatively on the base for PIT as such activities fall outside the radar of observation by tax officials.

Governments may shift to other tax bases that may seem to be relatively cheaper to administer as economies grow or shrink. Tanzi and Zee (2001) suggest that upon the recommendations of the IMF, many developing countries shifted from their traditional taxes and introduced VAT because of its potential to generate more tax revenue. In this regard, changes in the tax base may prompt government to make decisions that include expansion of use, addition, reduction or removal of certain taxes in its endeavour to meet its revenue requirements. Notably, one of the key recommendations from literature is that governments in developing countries need to broaden their tax bases in order to enhance tax revenue (Alm *et al.*, 1991; Tanzi and Zee 2001;

Bird, 2007, Aizenman and Jinjara, 2009; Besley and Persson, 2014 and Trepelkov et al., 2017).

6.3.7 Foreign aid

Fjeldstad (2013) suggests that the motivation for donor assistance has been to strengthen tax systems in developing countries. In the wake of the global financial crisis, there were increasing concerns raised on whether donor support was delivering the intended results or not. The intention of donor support appears to reflect the need for improved mobilization of tax revenues, however, net foreign aid has a negative impact on the total tax revenue (Ahmed and Mohammed 2010; Gupta et al., 2003; Thornton, 2014). In contrast, Gupta (2007) contends that foreign aid improves tax revenue performance and is supported by Morrissey and Clist (2010) who argue that the effect of foreign aid on tax revenue in developing countries has been positive since a break point was reached in the mid-1980s. Amid concerns that foreign aid crowds out domestic tax revenue, Clist (2016) suggests that a wide spectrum of studies have used econometric approaches indicate a positive relationship between foreign aid and tax revenue. However, criticism has largely been placed on studies that suggest a negative relationship because it is believed that they associated with the presence of potential biases. Notwithstanding this, McGillivray and Morrissey (2013) and Morrissey (2015) conclude that the results from studies that have estimated the effects of foreign aid on tax revenue largely remain mixed.

6.3.8 Inflation

The GDP deflator is used as proxy of a country's macroeconomic status and according to McMahon and Schmidt-Hebbel, (2000) higher inflation rates may demoralize the public to pay taxes. Nonetheless, inflation is also calculated using changes in the Consumer Price Index (CPI). High inflationary pressure affects the tax-paying capacity of the taxpayers, hence a negative relationship is expected for the tax-GDP ratio. These assertions are consistent with Agbeyegbe et al. (2004). However, Imam and Jacobs (2007) suggest that inflation is an insignificant determinant of tax performance because it affects few taxes directly. According to the "Tanzi effect", the notion that real tax proceeds are eroded by higher inflation, may fail to hold in most circumstances, hence inflation should be expected to positively affect most taxes.

6.3.9 Corruption

Bird, Torgler & Martinez-Vazquez (2008: 64) define corruption as “the exercise of public power for private gain.” Ajaz and Ahmad (2010) describe corruption in tax administration as one of the institutional problems affecting the process of tax revenue generation. Notably, corruption is as social issue seems to be relatively easier to deal with than the complications of restructuring tax handles. According to Besley and Persson (2013) if political turnover is considerable then corruption may hinder the process of building effective tax systems. Bird et al. (2008) suggest that it is possible that developing countries fail to meet their tax revenue needs because those who dominate political institutions may not be willing to increase taxes. In this regard, if taxpayers feel that their country is rampant with corruption, and then there is increased likelihood of not complying with tax obligations (Bird et al., 2008); Ajaz, and Ahmad, 2010). This in turn will result in declining tax revenues.

Several empirical studies suggest that corruption negatively affects tax revenue generation in developing countries (Gupta, 2007; Imam and Jacob, 2007; Ajaz and Ahmad, 2010).

6.3.10 Political institutions

Besley and Persson (2013) cite the importance of considering both economic and political factors in the analysis of taxation and development. In this regard, Besley and Persson (2013) consider political institutions and the extent of political instability as being key drivers of investments of fiscal capacity. In chapter 5, literature suggests that political constraints determine tax policy choices, which may result in changes in the tax structure, thereby, affecting the level of taxation. In this regard, the role of political constraints is a key determinant affecting changes in tax rates, tax base and tax structure as those with political influence become the choice architects of tax policy. In this regard, institutional choices tame tax policy considerations. In view of tax effort, political institutional choices may affect tax effort negatively especially in instances where tax incentives are employed to promote the interests of elite groups, thus chewing into existing tax bases.

6.3.11 Size of the informal economy

Besley and Persson (2013) consider informality to be the other side of tax avoidance and in some instances; the choice to remain outside the formal sector is influenced by the need to avoid certain regulations. The informal economy is also known as the underground/hidden/shadow economy and is largely facilitated through the “cash economy.” Normally, such

economic activities include wage work and underreporting of income that occur to avoid government regulation and taxation (Schneider, 2009; Harque 2012). Further, the shadow economy restricts revenue collection as shadow economic activities usually take place outside the radar of the taxing authority. This is largely consistent with literature that suggests that the size of shadow economy adversely affects tax revenue collection (Schneider, 2002; 2010; Bahl, 2003; Mazhar and Méon, 2012; Kodila-Tedika and Mutascu, 2014).

In this regard, Besley and Persson (2013) argue that an increase in the size of informal sector tends to narrow the tax net, thereby adversely affecting tax take. Notably, Dreher and Schneider (2010) affirm that corruption and the shadow economy are complements in low income countries.

6.4 Approaches in assessment of tax revenue performance

This section focuses on reviewing some of the approaches used in assessing tax performance and is followed by a review of some data-driven researches that have examined the determinants of tax revenue performance in developing countries. The aim of this section is to explore some of the common methods that have used to assess tax revenue performance in order to ascertain what remains unresolved and where the field of enquiry stands. This is viewed as an important step leading to the development of an appropriate methodology to assess tax capacity and tax effort in the SADC over the period 2002-2016.

6.4.1 The standard approach

According to von Haldenwang et al. (2016), the standard approach was developed to model the revenue to GDP ratio as explained by variables that are selected as proxy to tax base and the structure of an economy. This is relatively the most common approach found in literature (Ndiaye and Korsu, 2014).

Kloeden (2011: 3) suggests that the tax-to-GDP ratio is the most commonly used comparator of tax system performance because of the common availability of revenue and limited availability of other comparable indicators. Although Yogo and Ngo Njib (2018) affirm that there is scanty work in Africa on the effect of the political economy on tax revenue generation, there is empirical evidence that indicates that some studies have modified the standard approach to include the influences of political factors.

6.4.2 The stochastic frontier approach

According to Kumbhakar and Lovell (2000), the stochastic frontier approach (SFA) originates from two similar papers- Meeusen and van den Broeck (1977) and Aigner, Lovell and Schmidt (1977).¹⁶ Langford and Ohlenburg (2015: 8) suggest that there is general consensus in literature “that a stochastic tax frontier should be defined and estimated conditional on the prevailing state of a set of ‘structural’ economic, demographic and institutional factors, with ‘effort’ capturing factors more immediately under government control.” Nonetheless, Langford and Ohlenburg, (2015) assert that there is ambiguity over the term “structural.” Further, there is also ambiguity over the modeller’s selection of variables, hence their choices have an effect on the interpretation of tax capacity and tax effort in the place or region studied. In this regard, Langford and Ohlenburg (2015) suggest that the modeller should clearly state the assumptions made in building tax capacity and tax effort estimates. Likewise, this study made assumptions in chapter 1 to guide the selection of variables as well as placing emphasis on drawing attention on structural and institutional factors that seem to be reflective of the reality in the SADC.

Garg, Goyal & Pal (2014) assert the SFA as an extension of the regression approach. In a similar nature to the production function, the stochastic tax frontier measures the maximum revenue that can be attained from the tax base along with other determinants of tax revenue performance. In this regard, “the difference between the actual revenue and the maximum revenue indicates the tax effort of that unit as well as policy issues” (Garg et al., 2014: 10). Langford and Ohlenburg (2015) argue that the traditional or standard approach to assessing tax performance falls short as it provides no measure on the extent to which additional tax revenues may be raised. In this regard, Langford and Ohlenburg adopted the SFA to estimate tax capacity in 85 non-resource rich countries.

When using panel data, the basic econometric model of Aigner et al., (1977) is specified as:

$$\frac{T}{Y_{it}} = f(\mathbf{X}_{it}; \boldsymbol{\beta}) \cdot \xi_{it} \cdot e^{v_{it}} \quad (1)$$

T refers to the observed tax revenue (T) to GDP (Y) ratio for country *i* at time *t*. $f(\mathbf{X}_{it}; \boldsymbol{\beta})$ “is an expression for the ‘production function’ by which a vector of inputs \mathbf{X} are transformed into tax revenues, in line with parameter vector $\boldsymbol{\beta}$ ” (Langford and Ohlenburg, 2015:8).

¹⁶ See to Kumbhakar and Lovell (2000),

“This production function is interpreted as defining the maximum tax to GDP ratio that could be achieved if policy were set to raise maximum potential revenues, the policy were perfectly enforced, and there were no random shocks to collections” (Langford and Ohlenburg, 2015: 8). The notation, ξ_{it} refers to the “tax effort for country i at time t , and is restricted to values between 0 and 1” (Langford and Ohlenburg, 2015:8)

Brun and Diakite (2016) describe the SFA model by Kumbhakar, Lien & Hardaker (2014) as being more relevant with more realistic and robust predictions than models used in previous studies on tax potential and tax effort. Similarly, Garg et al. (2014) acknowledge that the original model by Aigner et al. (1977) has gone through numerous variations in the form of different structures of the efficiency term and distributional assumptions. For instance, Garg et al. (2014) apply a model that assumes the efficiency term to be linear function of a set of explanatory variables while the distribution is assumed to be truncated normal. Nonetheless, the use of SFA in estimating tax effort still remains limited (Garg et al., 2014)

6.4.5 Vulnerability of tax revenue

Undoubtedly, there are substantial empirical studies on the determinants of tax revenue performance in developing countries. Nevertheless, Yohou and Goujon (2017) argue that in view of connecting the achievements of countries and their policies, such literature tends to be detached from the concepts of taxable capacity and tax effort. In this regard, Yohou and Goujon (2017) affirm that there is scanty empirical evidence that considers the effect of structural vulnerability on tax effort. The methodology available in literature indicates limited deviation from the standard approach; however, vulnerability indicators were incorporated into specified models to ascertain the effect on tax revenue performance. Vulnerability is defined as exogenous shocks.

According to Von Haldenwang, Morrissey, Ivanyna, Bordon & Von Schiller (2013) there are specific shocks that affect tax revenues, hence this affects the capacity of government wither the effects of shock and maintain public spending. Similarly, Yohou and Goujon (2017) suggest that the vulnerabilities affect tax revenue indirectly or directly, while, von Haldenwang et al. (2013) argue that the specified shocks that influence tax revenues are beyond the general influence of shocks on economic growth. For this reason, von Haldenwang et al. (2013) highlight why it is necessary to consider studies that attempt to estimate the influence of vulnerability. Normally, a country faces a combination of shocks on the economy, country specific characteristics and to the capacity of political administrative factors to respond to

changing circumstances of structures of tax revenue (Von Haldenwang et al., 2013). Notably, the assessment of vulnerability and resilience of tax revenues is scanty in developing countries, particularly in Africa. In view of informing tax policy and related efforts towards enhancing the ability of governments to absorb external shocks, there is need for evidence-based research. (Von Haldenwang et al., 2013). Similarly, Agence Française de Développement and United Nations Development Programme (AFD and UNDP, 2016) suggest that despite the need to provide funding to finance SDGs, Least Developing Countries are extremely vulnerable to external shocks. In this regard, AFD and UNDP (2016) assert that Asian LDCs have made better progress on social indicators by addressing vulnerabilities more than African LDCs, some of which include SADC member states such as Angola, Lesotho, Madagascar, Malawi, Mozambique, Tanzania and Zambia (UNCTAD, 2017).

Rustomjee (2016) suggests that some countries have undertaken macroeconomic reforms (including tax reform) as a way of breaking out of their vulnerabilities and enhancing resilience against external shocks. However, the majority remain unsuccessful. Following the argument on why it is paramount to ascertain whether taxable capacity is attainable in developing countries or regional groupings like the SADC. The consideration of the assessment of vulnerabilities and resilience factors on tax revenue complements efforts to inform policymakers on addressing tax policy and related efforts. According to Rustomjee (2016), different countries are confronted by the presence of inherent vulnerabilities and disproportionate exposure to external shocks. Rustomjee (2016) asserts that small states in the Caribbean have responded to vulnerabilities by undertaking to improve tax revenues as part of their packages on macroeconomic reforms.

6.5 Empirical review of the determinants of tax revenue performance

This section explores empirical evidence from studies that employed either one of the methods described in section 6.4 above in assessing the determinants of tax revenue performance. Notably, the use of proxies to tax base and economic structure is consistent with the underpinnings of theory as discussed in section 6.4. Although tax design involves tax structure, tax base and tax rates, indications are that even the most desirable model cannot simply focus on tax design elements alone. In this regard, more studies have begun to consider the influence of political factors on tax revenue performance. Though the focus of this review broadly considers empirical evidence from studies on developing countries, the study concentrates

more on Sub-Saharan Africa or selected groups of countries within it. The intent is to bring the context of the empirical review as close to the setting in which the SADC is situated.

This section has two subsections. Firstly, the study provides an overview of the state of scholarship regarding the assessment of tax revenue performance in developing countries prior to 2008. Secondly, the study focuses on some empirical studies undertaken within the last decade as a way of bringing insight into the progression of enquiry on the assessment of tax revenue performance. Critically, the aim of the review is identify the contribution of existing empirical evidence and to ascertain its standing in view of the need to build robust tax systems. Therefore, the review provides a guide about the some of the approaches used in conducting assessments tax revenue performance and tax effort.

6.5.1 Empirical evidence on the standard approach

Selected studies prior to 2008 era

Ghura (1998) focuses on assessing the influence of economic policies and corruption on tax revenue performance in SSA. The study was undertaken against the background that despite the vast nature of empirical evidence on assessing the determinants of tax revenue, little attention had been given to the role of economic policies and corruption. Guided by theory, Ghura (1998) employed a model that controlled for elements of the tax base as traditional determinants of tax revenue performance and modified it to include economic policies and corruption. The analysis involved the use of unbalanced panel data from 39 countries over the period 1985-1996. The empirical framework had the tax revenue-to-GDP ratio as the dependent variable, while, the explanatory variables included: per capita income, the share of agriculture in GDP, openness, a dummy variable for an oil producing country and another dummy variable for a country without oil but with the mining sector contributing more than five percent to GDP, the percentage change in the real effective exchange rate, a dummy for the implementation of structural reforms, the human capital index (HCI), corruption using the corruption index from zero to six, external grants to GDP, the change in external debt-to-GDP ratio and the percentage change in terms of trade.

The regression results indicate that the tax-to-GDP ratio increased following a decline in inflation, declining corruption, rising income, rising human capital and the implementation of structural reforms. Nonetheless, exchange rates were statistically insignificant in explaining changes in the tax ratio. In addition, the share of agriculture negatively affected tax revenue

performance, whilst openness had a positive impact. Further, the existence of oil and non-oil mining sectors also induced increases in the tax-to-GDP ratio. In this regard, Ghura (1998) proclaims that income and elements of the tax base are important determinants of tax revenue performance. This is consistent with the underpinnings of theory and empirical evidence (Alfirman, 2003; Gupta, 2007; Steenekamp, 2007; Bird et al., 2008 and Besley and Persson, 2013).

Ghura (1998) concludes that among the economic policy related variables, inflation has the greatest impact on the tax ratio whilst the degree of openness and the share of agriculture in GDP have the greatest impact on tax bases variables. Ghura (1998) recommends that for a given tax regime and rate, economic policies that promote a non-inflationary environment are desirable and that structural reform and reduced corruption would increase tax revenue. Notably, Ghura (1998) acknowledges that lowering inflation and reducing corruption may be unrealistic in the face of resistance from those with political influence. Thornton (2008) suggests that since corruption adversely affects tax collections, policy changes should turn to the use of indirect taxes. Nevertheless, Ghura (1998) cites that low development, informality and the dominance of agriculture in most SSA countries constrain policymaker's efforts to improve tax revenues.

Adam, Bevan & Chambas (2001) suggest that when economic policy focuses on reducing inflation sometimes it undesirably results in the misalignment of exchange rates, thus affecting tax revenue performance. In order to validate this claim, Adam et al. (2001) investigated the effect of exchange rate misalignment on tax revenue performance and employed panel regression for 22 countries in Sub-Saharan Africa over the period 1980-1996. The 22 countries were either in the CFA zone or non-CFA zone category. One of the major points of departure from Ghura (1998) is that, Adam et al. (2001) estimated four tax shares (income taxes, domestic indirect taxes (sales and excise taxes), trade taxes and total taxes) instead of aggregated total tax revenue. The motive of separating indirect taxes from trade taxes was an attempt to capture the theoretical considerations on the importance of understanding the distinctions between taxes on tradable and non-tradable goods. However, in practice this is rarely maintained as domestic taxes are levied on top of the explicit trade taxes on traded goods (Adam et al., 2001: 11). Nonetheless, the vector of explanatory variables in the model by Adam et al., (2001) includes other factors considered by Ghura (1998) and modified to include real exchange rates and aid.

Although there were improvements in the methodology and the time span of the data set, Adam et al. (2001) suggest that there were two major constraints in conducting the empirical analysis. Firstly, there was insufficient information on the evolution of tax structures, hence the basis of the analysis was on crude rudimentary tax yields. Adam et al. (2001) acknowledge the limitation of being unable to directly control for changes in tax regimes, however the use of panel regression permits the control of unobserved time-invariant country specific characteristics. Secondly, Adam et al. (2001) suggest that the different institutional elements in the CFA zone makes it difficult to generalize the net effect of tax revenue productivity in the region as a whole. Notably, the findings indicate that if one narrows their perspective to focus on revenue productivity then increased exchange rate misalignment has adverse effects however, the cumulative poor performance of tax revenue in CFA countries is affirmed to arise from the evolution of environmental and structural factors that are country specific. Similarly, Ghura (1998) suggests that real exchange rates are insignificant in the determination of tax revenue performance. In this regard, Adam et al. (2001) affirm that concern over exchange rate misalignment need not be central to the cumulative story on the evolution of tax revenue performance.

Similarly, Agbeyegbe et al. (2004) dwell on trade liberalization, exchange rates and their effect on tax revenue performance. Notably, most elements of economic policy are rarely implemented in view of inducing changes in tax revenue. However, the consequences are felt differently for economic growth and development. Notwithstanding this, Agbeyegbe et al. (2004) acknowledge that it becomes difficult for policymakers to forecast fiscal outcomes due to the uncertainty of the effects of trade liberalization and exchange rates. Notably, Agbeyegbe et al. (2004) pursue a similar path of enquiry to that of Adam et al., (2001) by empirically assessing the impact of exchange rates, inflation and trade liberalization on tax revenue performance. Further, some of the traditional factors in Ghura (1998) are also used. Agbeyegbe et al. (2004) employ panel regression using data from 22 countries in SSA, over the period 1980–1996 and suggest that trade liberalization is not strongly linked to total tax revenue and that exchange rate appreciation and higher inflation had a negative impact on tax revenues. In this regard, Agbeyegbe et al., (2004) conclude that trade liberalization and other supportive monetary policy measures will result in perverse tax performance. Further, this result tends to affirm the fears of countries that have been reluctant to undertake trade liberalization as they dreaded the consequences it would have on tax revenue (Agbeyegbe et al., 2004).

Gupta (2007) is another relatively common study on the determinants of tax revenue that focused on developing countries by using a broad dataset of 105 countries over 25 years. The major contributions by Gupta (2007) were that a broader dataset was employed and that the methodology rectified some econometric issues that other studies had neglected. Further, the model used by Gupta (2007) was modified to include variables that include political stability, corruption, economic stability, government stability as well as law and order.

The outcome of the empirical analysis shows that per capita GDP, agriculture share in GDP, trade openness and foreign aid, significantly affect tax revenue performance of an economy. However, corruption, political stability, share of direct and indirect taxes also affect tax revenue. Gupta (2007) divided his sample in three groups according to the level of income and found that foreign aid had a significant positive effect on tax revenues in low income countries but not in middle or high income ones. A negative relationship was established between tax revenue and corruption for the middle and low income countries, while political stability is set to grow tax revenue in low-income and middle-income countries. There was negative relation between indirect taxes and total tax revenue suggesting that overall tax revenue as a share of GDP tends to be lower in the presence of a relatively high level of taxes on goods and services. In conclusion, Gupta (2007) recommends that aid flows should be increased to low income countries and that political stability should increase whilst efforts are made to curb corruption. Further, Gupta (2007) suggests that there is need for change in the incentive structure of tax officials as well as lowering the opportunities for corruption in tax administration.

Mahdavi (2007) uses unbalanced panel data from 43 developing countries for the period 1973-2002 to investigate the determinants of tax revenue performance. The findings indicate positive correlation between tax revenue and openness of the economy, the literacy rate and GDP per capita growth rate. It also emerges that an increase in foreign aid, an aging of population, an increase in population density and in inflation negatively affect tax revenue. However, the following variables were found to be insignificant in explaining tax revenue performance: the share of agriculture on GDP, female labor force participation, economic volatility, civil liberties and political rights. The results indicate mixed responses to the predictions of theory and those of other studies. For instance, Bird et al. (2004) focuses on the determinants of tax revenues of 110 developing countries for the period 1990-1999. The outcome of the empirical analysis shows positive significance for per capita GDP and the indices of civil liberties and

political rights, political stability, rule of law and relative absence of corruption. In addition, the degree of inequality, the size of the shadow economy and the regulation of entry are negatively related with tax revenue. However, trade openness was statistically insignificant, while demographic growth and the share of agriculture in GDP relate to lower levels of tax revenue.

Selected studies in the post-2008 era

From the period 2010-2018, scholars have continually made enquiry into the determinants of tax revenue performance using the standard approach. Although different and improvements are noticeable in the methodologies employed, the constructs emerging from these studies seem to largely conform to those of prior work. The motivation of most of the studies done in 2010 and beyond do not seem to significantly differ from those provided in prior work.

Botlhole (2010) focused on determinants of the tax-GDP ratio in SSA for the period 1990-2007, using an unbalanced panel data set which covers 46 SSA countries. In a similar fashion to prior work, Botlhole (2010) adopts explanatory variables from empirical literature to include: urban population, shadow economic activity, inflation, resource revenue, institutional quality, and share of agriculture in GDP, share of services value in GDP, share of industry value in GDP, ratio of exports plus imports in GDP, and ODA as well as foreign aid in GDP. One of the major notable differences is in the introduction an interaction term between resource revenue and the quality of institutions otherwise not prescribed by empirical literature. The findings show that the quality of institutions and resource revenues are strong determinants of tax ratio, and that the interaction term significantly affects the tax ratio. Therefore, when countries improve their quality of institutions, more tax revenues could be raised from resources.

Similarly, Mkandawire (2010) differs from prior work by investigating the relationship between tax efforts and colonial heritage in Africa. The reason for enquiry was motivated from observing that regional differences contributed to the variances in taxation, thus Mkandawire (2010) attributes colonial heritage to be the root cause. This idea is consistent with Gardner (2012) who asserts that history matters in assessing present day tax systems. Mkandawire (2010) uses standard measures of tax effort in panel regression estimation and divides colonial Africa based on how they got into the colonial system. The outcomes indicate that African countries and others with similar colonial histories have higher levels of 'tax effort' that vanish

when the colonial factor is controlled. In terms of robustness, Mkandawire affirms that these results hold under different model specifications.

In order to explore whether there are differences between analyses carried out in different regions of developing countries, this study also considered Dioda (2012). The research was centered on investigating the structural determinants of tax revenue in LAC over the period 1990-2009 for 32 countries using the standard model. The enquiry was motivated following the observation that there were low tax revenues in the LAC region compared to other regions. Dioda (2012) emphasizes the importance of political and historical variables to understand regional differences in tax revenue. The results show statistical significance for: civil liberties, female labor force participation, the age composition of the population, the degree of political stability, the level of education, the population density and size of the shadow economy. Notably, these results are consistent with the findings of prior work such as Mahdavi (2007) who apparently used a mixed sample of developing countries. In this thesis, it is difficult to compare the results with other studies on SSA because of the variations in model specification and methods employed thereof.

In another study on SSA, Addison and Levin (2012) considered the determinants of tax revenue using 39 countries over the period 1980-2005. The major contribution was to analyze how the determinants affected tax structure by considering international trade taxes, indirect taxes and domestic direct taxes and controlled for unobserved country-specific effects. Nevertheless, the findings of the work are highly consistent with those in previous studies.¹⁷ Similarly, Drummond et al. (2012) obtains results in line with those of previous studies. The similarities extend further to include the work of Yaya (2015) who considers the role of institutional factors and economic structure in the determination of tax revenue performance in the West African Economic and Monetary Union (UEMOA). Likewise, Gaalya (2015) uses similar methods to ascertain the impact of trade liberalization on tax revenue performance during the period 1994-2012 in seven countries that included the following: Uganda, Burundi, Kenya, Rwanda, Tanzania, Sudan and DRC.

In the context of the SADC, the determinants of tax revenue or tax effort have been assessed using familiar methods (Glenday and Hollinrake, 2005; Garikai, 2009; Ade, et al., 2018). While

¹⁷ See Addison and Levin (2012)

Glenday and Hollinrake focuses on the possibility of indirect tax harmonization in the SADC (in particular VAT), Garikai (2009) dwelt on tax buoyancy in the SADC. In this regard, Ade et al. (2018) worked on one of the most recent studies on deterring tax revenue by employing panel data from 15 SADC countries over the period 1990-2010. This was motivated by the fact that African countries (including the SADC) are looking for solid additional ways to mobilize tax revenue to meet set targets. In this regard, Ade et al. (2018) argue that there is scanty theoretical and empirical literature on tax revenue performance or tax effort on regional groupings in Africa. The major objective of their study was to determine the extent of tax harmonisation (various tax regimes, tax rates, tax policy regulations) and co-movement for all the 15 SADC countries.

The contribution by Ade et al. (2018) is on understanding how changes in FDI flows paired with tax rates and tax policy harmonisation affect tax revenue performance. Of interest, the study determines the level of causality between FDI flows and taxation (CIT rates, VAT rates and tax harmonisation variables) and provides two sets of empirical findings for comparison. In the first case Ade et al. (2018) determine whether the relationship between FDI and existing tax rates is better at enhancing tax revenue in the SADC. The other scenario considers the relationship between tax revenue performance and the interaction of FDI and the tax policy harmonisation measure (TPHM). The outcome shows that more revenue is collected when FDI interacts with the presence of tax harmonization. In this regard, the research reiterates the need for the SADC countries to develop policies aimed at collectively expanding their corporate tax base in order to accommodate the relatively low optimum CIT rates. Further, Ade et al. (2018) suggests that the adoption of an optimum VAT rate by all SADC member countries will offset the effect of politically determined individual country rates. Hence, Ade et al. (2018) posit that tax harmonisation is feasible in the SADC.

6.5.2 Empirical evidence on the stochastic frontier approach

According to Ndiaye and Korsu (2014: 1) the “Economic Community of West African States (ECOWAS) has a criterion on tax revenue under the convergence criteria of the ECOWAS Monetary Cooperation Programme (EMCP), which states that tax ratio (as a percentage of GDP) should be at least 20 percent.” Nonetheless, Ndiaye and Korsu (2014) affirm that many countries have been unsuccessful in meeting this requirement. In an effort to understand the

state of tax efforts in member states, Ndiaye and Korsu (2014) make an enquiry to ascertain which countries were performing below their capacity and those that were operating above their tax potential given the nature of the economies. The motive behind the investigation was also to proffer guiding principles for fiscal policy operations. Two critical issues emerge from the considerations by Ndiaye and Korsu (2014) which heightens the need to understand why some countries have not able to reach the requirement. Firstly, the inability for countries to meet the set standard can be attributed to low capacity to generate tax revenue. Secondly, it is possible that a country could have attained the maximum capacity to meet required revenue needs but may suffer from lack of willingness to make public investments in generating tax revenue (Ndiaye and Korsu, 2014).

Notably, the dimension pursued by Ndiaye and Korsu (2014) is relatively less prevalent in literature compared to studies that focus on determining the factors that influence tax revenue performance. Ndiaye and Korsu (2014) argue that in order to guide poor tax revenue performing countries, it is crucial to understand where a country stands in view of its tax capacity and tax effort if the appropriate mix of fiscal policy is to be advanced. For instance if maximum tax capacity is attained and yet a country continues to face high fiscal deficits, then tax reform may not be the appropriate remedy but instead government should work on reducing the deficit through expenditure rationalization. On the other hand, if a country operates below its taxable capacity then it would be appropriate to suggest tax reforms to increase tax revenue and the overall reduction of the fiscal deficit (Ndiaye and Korsu, 2014).

The theoretical and empirical implications of the nature of the dimension of the work by Ndiaye and Korsu (2014) is a point of departure from the huge stock of literature that assessed tax revenue performance by regressing some explanatory variables against the tax-revenue to GDP ratio. Nonetheless, Ndiaye and Korsu (2014) are not the first authors to empirically assess tax capacity and tax effort. Le et al. (2012) argue that the use of the tax-GDP ratio as a benchmark to compare countries with different economic structures, demography and institutions may lead to distortions of the true picture. However, Ndiaye and Korsu (2014) argue that the use of panel data methods would suit assessments that use the tax – GDP ratio because it is based on the concept of averages and is more appropriate if applied to the stochastic frontier tax function. Against this background, Ndiaye and Korsu (2014) employed the stochastic frontier tax function to assess the effect of GDP per capita, openness, the share of agriculture to GDP, proportion of urban population, financial depth (M_2/GDP), inflation and the literacy rate on tax effort.

The study used aggregated data from 2000-2010 for all ECOWAS member states and five non-ECOWAS countries. The rationale for including the latter was that the benchmark of performance in the analysis would be set based on the best performers in SSA than the ECOWAS region. The selected countries had tax effort in excess of the ECOWAS benchmark of 20 percent of GDP. Ndiaye and Korsu (2014) also focus on the various forms of tax revenue that many previous studies had not considered. The findings indicate that all the countries in the study performed below their tax capacity during the period 2000-2010. Further, direct tax effort is adversely influenced by the share of agriculture to GDP and positively by the literacy rate. In addition, trade tax effort is affected positively by GDP per capita, openness, financial deepening and the literacy rate. In addition, Indirect tax effort is explained negatively by the share of agriculture in GDP and positively by financial deepening and the literacy rate. In summary, positive influence on total tax was due to the following: the proportion of the urban population, financial deepening, GDP per capita and openness of the economy and literacy rate. However, the inflation rate was insignificant in determining any of the tax ratios (Ndiaye and Korsu, 2014). In some instances, the method pursued by Ndiaye and Korsu (2014) allowed more elaborate and specific recommendations to be made to ECOWAS countries instead of generalizing all aspects of the results.¹⁸

Similar studies to the above mentioned include Le et al. (2012) and Fenoehietto and Pessino (2013). Le et al. (2012) conducted a cross-country analysis using data from 1994-2009 to estimate tax capacity and tax effort. The sample of countries included 110 developed and developing countries. Notably, Le et al. (2012) concur with the conclusions raised in the vast majority of literature that the key determinants of tax revenue performance are country specific macroeconomic factors, institutional factors and demographic factors. In this regard, Le et al. (2012) call for the exercise of caution when advice is offered to specific countries because the findings on cross-country analysis cannot be extensively generalized to meet the needs of every country. Consequently, Le et al. (2012) view their study as complimentary but not a substitute to detailed tax system analysis in individual countries. On these grounds, Le et al. (2018) conclude that the design of tax reforms should be country specific.

Fenoehietto and Pessino (2013) affirm that by using the stochastic frontier approach to estimate taxable capacity and tax effort, it becomes possible to tell which countries are near their tax capacity and whether there is room to increase tax revenue. To validate their affirmation,

¹⁸ See Ndiaye and Korsu (2014: 21)

Fenochietto and Pessino (2013) provide empirical evidence based on 113 countries. Hence, both Le et al. (2012) and Fenochietto and Pessino (2013) attest that only a few studies have focused on tax effort relative to the use of the standard approach that focuses on the tax-GDP ratio.

In conclusion, the use of the stochastic frontier approach makes it more plausible to provide guidance to countries with different levels of tax capacity and tax effort (Le et al., 2012). This is the major flaw of the standard approach as it uses averages. In addition, there is wide consensus that tax revenue, as a source of public finance remains indispensable in developing countries. Therefore, there is need to use improved empirical methods that capture the differences in country characteristics (Le et al., 2012). Consequently, it becomes plausible to move closer to resolving practical tax policy challenges based on data-driven research findings that show increased relevance to the problems at hand.

6.6 Vulnerability factors affecting tax revenues

This study note that there is limited empirical literature on the effect of vulnerabilities on tax revenue¹⁹. In a recent study, Yohou and Goujon (2017) use the standard approach, however they modify the model to include economic vulnerability and human assets vulnerability as additional variables. Similarly, Morrissey et al. (2016) employ the same model and modify it to include three variables which include exchange rate pressure, terms of trade and intensity of natural catastrophes. Notably, the rational of assessing vulnerability is to determine the influence of exogenous shocks on tax revenue. Methodologically, the variables reflecting the influence of exogenous shocks are allowed to be non-linear in order to capture a more solid impact. In this case Morrissey et al. (2016), separated lower-income and higher income countries to adequately capture the differences in vulnerabilities. The findings show that lower income countries are vulnerable to shocks from terms of trade that is associated with the greatest revenue loss. However, democratic countries seem to be less vulnerable to revenue losses due to shocks than non-democracies whereas revenue in resource rich countries is more vulnerable to shocks (except natural disasters) than non-resource rich countries. Further, the findings show a negative relationship between manufacturing exports and revenue in lower income countries. (Morrissey et al., 2016).

¹⁹ See von Haldenwang et al. (2013) and Morrissey, Von Haldenwang, Von Schiller, Ivanyina & Bordon, (2016)

6.7 Conclusion

The central focus of the chapter was to discuss theoretical and empirical literature on the determinants of tax revenue performance in developing countries, particularly in Africa. This was done in view of providing insight into the foundations upon which empirical studies have been undertaken. The standard approach remains a dominant method of assessing the determinants of tax revenue performance, however, other methods have begun to gain ground such as the SFA. Notably, though the concept of vulnerability is different in terms of its policy implications, the methodology of assessment is imbedded in the standard approach. In this regard, the literature review of this study situates the SFA as an approach that brings more relevance to evidence-based planning in tax policymaking. Although proponents of the SFA cite more relevance in their approach, there is no evidence of criticisms sufficient enough to falsify the standard approach. Hence, the latter remains a sturdy approach to in assessing tax revenue performance. This is because the underlying concepts in the standard approach also feature in empirical studies that have used the stochastic frontier approach as well as in those that have assessed vulnerability of tax revenue.

In summary, existing theory and empirical evidence provide a guide to the formulation of the methodology of this thesis. In a similar fashion, this study is guided by the notion that there are relatively limited studies that have incorporated the political economy into the analysis of tax revenue performance in Africa. Further, this study concurs with the few existing studies that employed SFA that it is essential to use methods that move researchers towards proffering more relevant and practical advice to tax policymakers. Although the method is scanty in Africa, its use reinforces the pursuance of the purpose of this study, to proffer a pragmatic approach to tax design in the SADC. In this regard, this study draws from some of the major concepts and perspectives in chapter 3, 4, 5 and 6 to develop a methodology that will be adequate to yield results upon which practical tax policy advice can be made in SADC, in relation to tax capacity and tax effort.

CHAPTER 7

RESEARCH DESIGN AND METHODOLOGY

7.1 Introduction

This chapter considered theoretical issues and practical matters employed in the selection of the research approach in this study. This was done in order to select a research approach that would enable the achievement of objectives of the study. According to Creswell (2014), the overall decision on the choice of research approach depends on the philosophical assumptions that a researcher brings to the study, the procedure of inquiry (research design), and the nature of the research problem as well as the methods used in collecting, analyzing and interpreting data.

7.2 Selection of the research approach

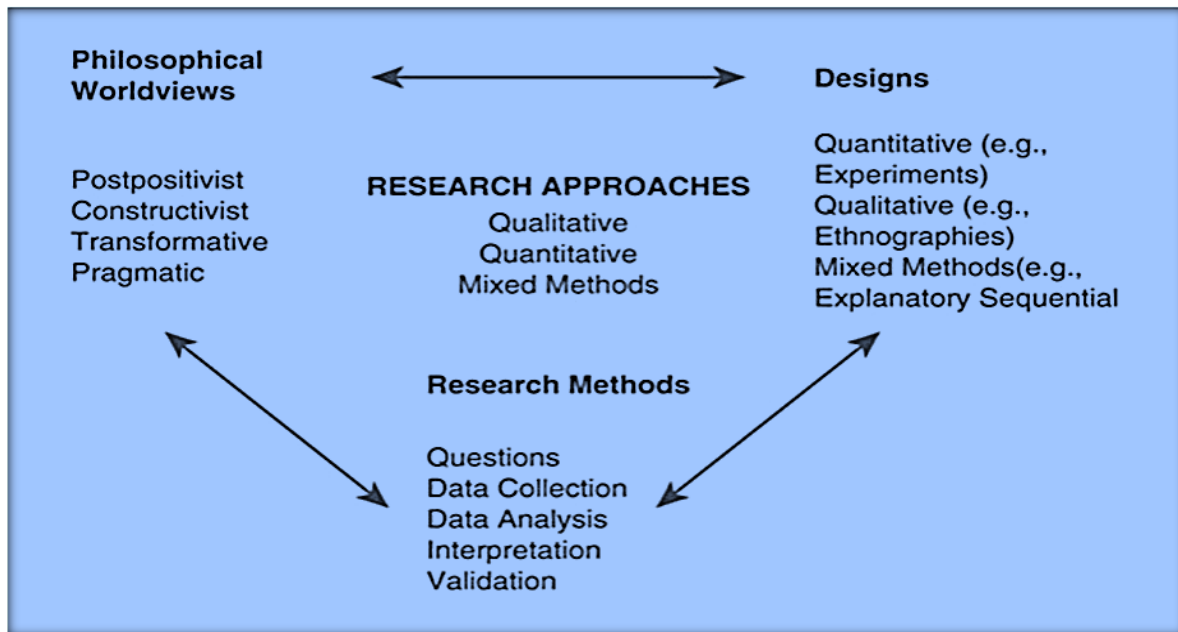
7.2.1 Overview of the research approach

According to Creswell (2014), there is need to establish some form of interaction between the philosophical assumptions brought to the study, the research design and the research methods. The research design needs to link to the philosophical assumptions and in turn; the research method should ensure that the approach translates to practice (Creswell, 2014). Figure 13 shows a framework for research that shows the interplay between research philosophy, research design and research methods.

Apart from Creswell (2014), Saunders, Lewis & Thornhill (2009a) use the research onion framework to show the various phases involved in developing a research strategy. The research onion has six layers that aim to guide researchers into developing effective methodologies (Saunders et al., 2009a). These layers include considerations on the research philosophy, research approaches, strategies, choices, time horizons, techniques and procedures. Although Creswell (2014) suggests a similar conduct of research, this study found the method by Saunders et al. (2009a) to be relatively easier to follow due to the simplified presentation of the research onion. Nonetheless, both Saunders et al. (2009a) and Creswell (2014) influence the approach pursued in this study to come up with empirical evidence that forms the basis of the conclusions and recommendations in Chapter 9. Figure 13 and Figure 14 provide a

summary on the formulation of a research strategy as postulated by Creswell (2014) and Saunders et al. (2009a) respectively.

Figure 13: A framework on the interaction between research philosophy, research design and research methods



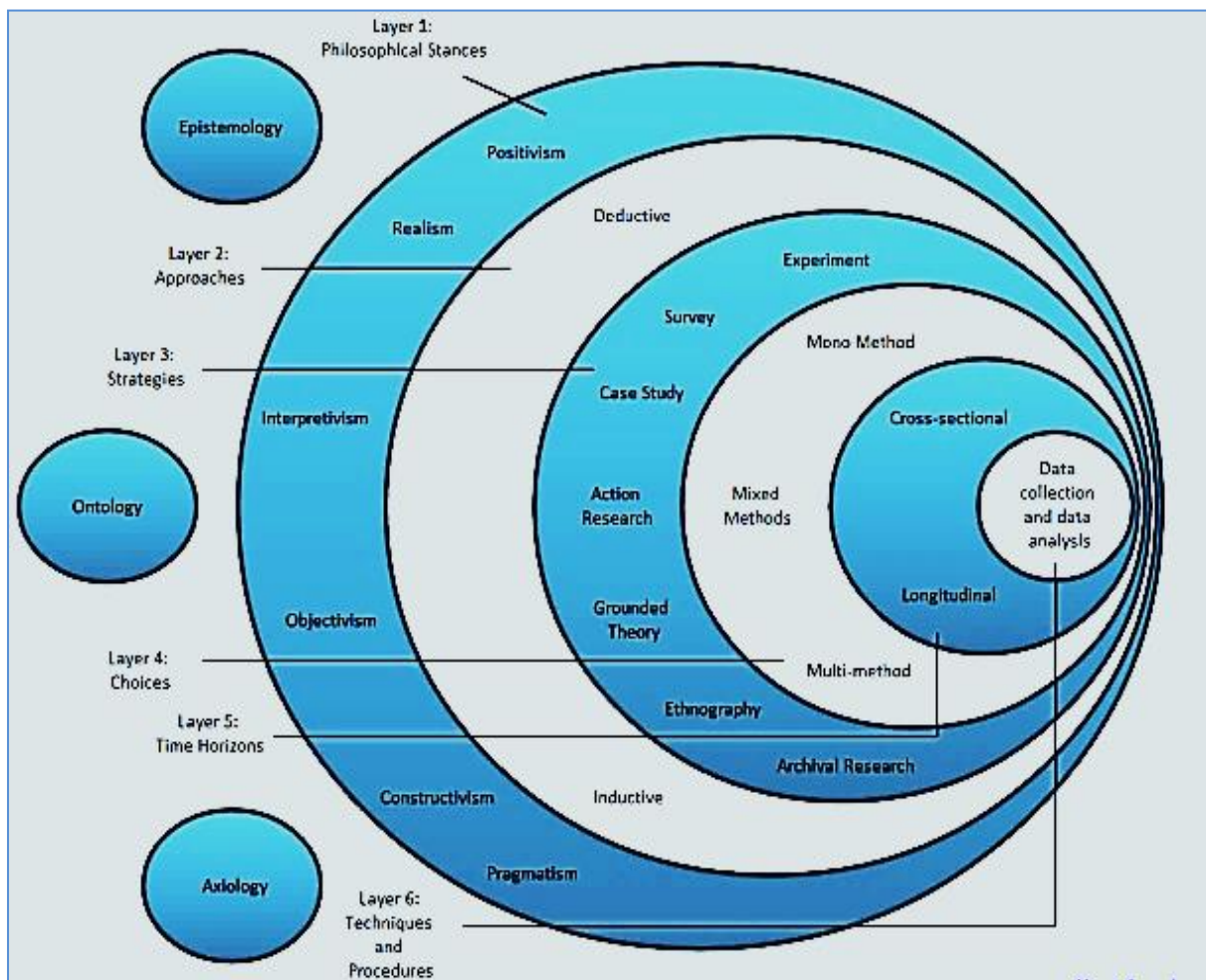
Source: Creswell (2014: 35)

Research philosophy refers to “a basic set of beliefs that guide action” and synonymously referred to as the worldwide view or research paradigm (Creswell, 2014: 5). When researchers identify a research philosophy they deem appropriate for their study, there is need to define the basic ideas behind the philosophy (Creswell, 2014). In addition, it is also important to highlight how the research philosophy shapes the research approach (Creswell, 2014). These suggestions bring more clarity on the orientation of the whole process upon which empirical evidence arises to generate knowledge for policy action. Further, Creswell (2014) suggests the need to select a research design that relates to the research philosophy. Here, Creswell (2014: 8) defines research designs as the “types of inquiry found within qualitative, quantitative or mixed methods approaches that provide a specific direction for procedures.” In this regard, researchers need to select the type of study to be pursued from the research design approaches. In simpler terms, research designs are synonymous with strategies of inquiry (Creswell, 2014). Creswell (2014) considers research methods as the forms of data collection, analysis and interpretation of findings. Notably, Creswell (2014) provides distinctions that may aid in the selection of a research approach. The summary shows the different typical scenarios on the use

of a diverse range of research philosophies and strategies in relation to qualitative, quantitative or mixed methods approaches.

This study adopted the research onion framework in order to determine the appropriate research approach. This process is defined through movement from the outer layers to inner layers as illustrated in Figure 14. However, this study further adopted the extension by the University of Derby (n.d) which includes the assumption that distinguishes research philosophies, otherwise absent in the original framework by Saunders et al. (2009a). Consequently, the research onion makes it possible to enhance the understanding of how the selection of different data collection methods relates to the series of stages through which the methodology of study can be explained (Saunders et al., 2009a).

Figure 14: The research onion framework



Source: Saunders et al. (2009a); University of Derby (n.d)

7.2.2 Philosophical assumptions

According to Saunders et al. (2009b), there is need to first distinguish research philosophies in order to ascertain the most appropriate philosophy for a given study. In this regard, Saunders et al. (2009b) suggest the use of the different research assumptions to make a distinction between research philosophies. In general, three different assumptions surface in literature and these include ontology, epistemology and axiology (Saunders et al. 2009b; Scotland, 2012 and Wallace and Wray, 2016). The subsequent subsections briefly define each assumption and its classification as well as the implications it has on the study methodology.

7.2.2.1 Ontology

Wallace and Wray (2016: 92) define ontology as “the study of reality, being and existence.” Accordingly, the fundamental problem is to determine what exists, consequentially ontology is a descriptive form of assumption (Wallace and Wray, 2016). In view of the implications for study methodology, ontological assumptions have an influence on what can be studied (Wallace and Wray, 2016).

7.2.2.2 Epistemology

Epistemology refers to “the study of the nature and scope of knowledge and what counts as acceptable knowledge in a field of enquiry” (Wallace and Wray, 2016: 92). The fundamental problem is to determine how we can gain knowledge of what exists. As a result, this assumption takes a descriptive form like ontology (Wallace and Wray, 2016). In view of the implications for the study methodology, epistemological assumptions influence the methods that can be used to generate knowledge and the sources, thereof (Wallace and Wray, 2016).

7.2.2.3 Axiology

Wallace and Wray (2016: 92) define axiology as “the study of judgements about values.” This assumption takes two forms of fundamental problems that include; the determination of what is right or wrong on what exists and what is right or wrong about the manner in which research is undertaken on what exists (Wallace and Wray, 2016). In this regard, axiological assumptions are classified as value assumptions. In view of the implications for the study methodology, axiology detects what is worth studying to make an impact and to whom. Further, it also influences how people involved are affected and treated (Wallace and Wray, 2016).

7.2.3 Research Philosophy

According to Saunders et al. (2009b: 124) research philosophy refers to “a system of beliefs and assumptions about the development of knowledge.” This is similar to the definitions by Creswell (2014), Wallace, and Wray (2016). In order to select the most appropriate research philosophy, Wallace and Wray, (2016) suggest that there is need to check the assumptions behind each philosophical position. Hence, Saunders et al. (2009b) argue that the differences in the assumptions; ontology, epistemology and axiology matters. This is because noting the differences would aid to delineate the manner in which an aspect of the world is seen. Saunders et al. (2009b) warn against selecting a particular philosophy based on lack of understanding of other theories. As such, Saunders et al. (2009b) provides some insight into five major research philosophies that include positivism, critical realism, interpretivism, postmodernism and pragmatism.

In view of the overall purpose of this study to proffer a practical approach to tax design in the SADC, this study adopted the philosophy of pragmatism.

According to Saunders et al. (2009b: 143) pragmatism “considers theories, concepts, ideas, hypotheses and research findings not in an abstract form, but in terms of the roles they play as instruments of thought and action, as well as, in terms of their practical consequences in specific contexts.” In relation to this study, the investigation of tax capacity and tax effort in the SADC associates well with pragmatism. In addition, Saunders et al. (2009b) asserts that reality is of substance to pragmatists because ideas and knowledge need to have a practical effect to facilitate and ensure that actions undertaken are effective. In this regard, chapter 2, 3, 4, 5 and 6 centrally draw from ontology and epistemology as it was fundamental to bring insight into the state of theory and empirical evidence on taxation in developing countries. Insight into the state of taxation in the SADC was a critical in view of the need to proffer practical tax policy advice.

The review of literature of this study articulates on how developing countries ought to tax and how important it is to establish the state of taxable capacity and tax effort. However, this study still required the use of methods that were appropriate to generate empirical evidence to transform the ideas from literature into matter usable for practical action. Notably, Saunders et al., (2009b) assert that pragmatism should start with establishing a research problem and then endeavor to contribute practical solutions that inform future practice. The research problem of the study is that the extent of tax capacity and tax effort is unknown in the SADC, while, some

countries have perverse tax policies, which affect the performance of tax systems. Further, there has been an upsurge in calls from the donor community, IFIs, the United Nations as well as the AU to strengthen the capacity of states to improve their tax systems and subsequently improve the contribution of tax revenue to overall government revenue. In this regard, this study aimed at investigating the evolution of existing tax systems in the SADC in order to understand what exists, to assess whether SADC countries have attained their respective tax capacities and the extent of tax effort in the SADC. These outcomes were essential in generating knowledge for policy action.

As suggested by Saunders et al. (2009b) this thesis takes cognizance of the fact that in reality, problems need to be addressed from a multi-dimensional perspective. Similarly, tax problems in developing countries arise from economic, administrative and political influences. From the perspective of pragmatism, taking a broader view to the analysis of taxable capacity and tax effort was deemed to be more appropriate.

7.2.4 Research approach

Following the selection of the research philosophy from the outer layer of the research onion, this study considered the research approach that is in the second layer. There are two main approaches include the deductive approach and inductive approach. According to Al-Zefeiti and Mohammad (2015), the deductive approach focuses on the use literature to identify theories as well as ideas that the researcher will test using data. Conversely, the inductive approach encompasses collecting data and developing a theory based on the results of data analysis. Therefore, Saunders et al. (2009b) argue that the major difference is that the deductive approach starts with theory obtained from literature that enables one to design a research strategy to test theory. In contrast, the inductive approach begins with collecting data to investigate a phenomenon and generate theory.

The focus of the research approach in this study primarily focuses on the starting from theory in order to investigate whether the postulations of theory resonate with empirical evidence found in the SADC. Against this background, this study adopted the deductive research approach as it connects with pragmatism on the use of objectivity in making an analysis while an inductive approach relies on subjectivity in assessing the results for theory development (Saunders et al., 2009b). The logic of the deductive approach is that if the hypothesis of the study is true, consequently, the conclusion must also be true. Additionally, the deductive approach enables movement of generalizations from the general to specific (Saunders et al.,

2009b). For instance, by employing the deductive approach it is possible to ascertain whether the propositions on taxation in developing countries apply in regional groupings like the SADC. In conclusion, this placed this study in a position to falsify or verify theory based on empirical evidence.

7.2.5 Research strategy

The third layer of the research onion encompasses the research strategy that defines how a study intends to undertake a study. There are different approaches in this layer include experimental research, surveys, action research, grounded theory, ethnography and archival research.

Vogt, Gardner & Haeffele (2012) define archival data as pre-existing data that is already present before a current researcher takes action. Accordingly, archival data is appropriate for literature reviews as well as secondary data analysis and is available in the form of published textual material like textbooks, magazines, newspapers and scholarly journals (Vogt et al., 2012). In addition, archival data may be in the form of governmental or public official records, depositories of data and internet sources (Vogt et al., 2012). In this regard, this study adopted the archival research strategy because the fundamental problems of ontological and epistemological assumptions are better answered with pre-existing data. For instance the question of what exists is answered by the literature review on taxation in developing countries and the question of how to get knowledge about what exist, say in the SADC emanates from empirical evidence based on secondary data from the region. This is augmented by Vogt et al. (2012) who are of the opinion that it is more appropriate to use archival data if it is possible to use it to answer research questions than to collect original data for the same purposes.

7.2.6 Research choice

The fourth layer of the research onion considers the research choice, which involves making a decision to use qualitative, quantitative or mixture of the two. The options at the researcher's disposal include mono-methods, mixed methods or multi-methods (Saunders et al., 2009a). According to Al-Zefeiti and Mohammad (2015), the determination of the research method depends on aspects that include the topic, research questions and objectives. In the simplest form, qualitative designs involve the use of non-numeric data while quantitative designs involve the use of numeric data. In the context of this study, an enquiry into the factors influencing tax performance does not tell the entire story or provide enough evidence to inform policymakers. This is because it would remain unknown whether a country has attained it

taxable capacity and whether government has put maximum effort in collecting tax revenue. However, the measurement of taxable capacity for the SADC provides indications on the position of each country. Together these elements offer a more practical foundation to proffer solutions on the future practice of tax policy. In practice, knowing the state of each country's tax system enables more pragmatic advice to be given for future practice

In this regard, the purpose of using mixed-methods is to gain a more comprehensive understanding of a studied model and to complement the weaknesses of a qualitative or quantitative approach (Al-Zefeiti and Mohammad, 2015). In addition, Hahs-Vaughn and Onwuegbuzie (2010) suggest that the optimal sampling design when using mixed-methods depends on time horizon. In this regard, the classification of sampling designs depends on whether the qualitative and quantitative elements arise simultaneously or sequentially. The sampling designs also depend on the relationship between the qualitative and quantitative samples that is whether they are identical, parallel, nested or multilevel²⁰ (Hahs-Vaughn and Onwuegbuzie, 2010).

7.2.7 Time Horizon

Hahs-Vaughn and Onwuegbuzie (2010) allude to the importance of time horizon in the research approach, while Al-Zefeiti and Mohammad (2015) suggest that time horizon relates to the research choice. Saunders et al. (2009a) defines time horizon as the time framework in which the research is to be completed and thus articulates on the nature of the periods in which data was collected. Time horizon is classified as cross-sectional and longitudinal. The purpose of this study focuses on informing tax policymakers on practical solutions to improve future practice. In this regard, cross-sectional analysis is less appropriate as the analysis of policy requires the use of repeated periods to ascertain whether there is correlation between observations and changes in variables over different periods.

7.2.8 Techniques, Procedures and Research Instruments

The last layer of the research onion focuses on data collection and analysis. In line with the use of the archival design, this study used secondary data to measure taxable capacity and tax effort in the SADC.

²⁰ See Hahs- Vaughn and Onwuegbuzie (2010: 5)

7.2.8.1 Research Questions

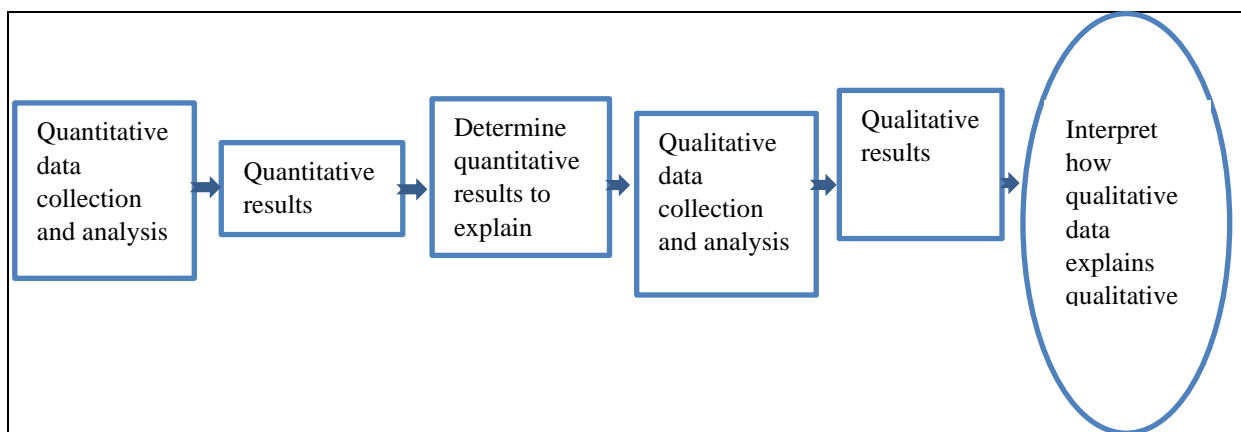
To reiterate, the following research questions are being investigated in the SADC context.

- (1) What factors influence tax capacity in the SADC?
- (2) Are tax systems in the SADC countries operating below or above their potential?
- (3) What is the ranking for SADC member states in terms of tax effort?
- (4) Have there been significant changes in tax legislation in the SADC over the period 2002-2016?
- (5) What corrective measures can help to direct tax policy design in the SADC?

7.2.8.2 Procedure

This study adopted the mixed-methods approach and selected the explanatory sequential design. The selected sampling design portrays phase one as one in which the collection and analysis of quantitative data precedes the second phase of quantitative data collection and analysis (Creswell and Clark, 2017). The purpose is to use qualitative results to help in elucidating and interpreting the findings of the quantitative study (Creswell and Clark, 2017). Figure 15 provides a diagrammatic representation of the concept in an explanatory sequential mixed method design.

Figure 15: Explanatory Sequential Design



Source: Creswell (2013)

7.2.8.3 Data collection and data analysis

The study employs mixed methods because it uses both qualitative and quantitative data. Data sources include World Development Indicators, African Development Indicators and African Economic Outlook. Table 51 shows a summary of the description of variables used in this study and the sources of data thereof.

Table 51: Description of Variables and Sources

Variable	Measurement	Source of Data
Economic growth (pgdp)	GDP per capita (constant 2010, USD)	World Development Indicators (2018)
Openness (open)	Imports and exports of goods and service (% of GDP)	World Development Indicators (2018)
Inflation (infl)	Measured in consumer prices (annual %)	World Development Indicators (2018)
Foreign Aid (foraid):	The share of foreign aid to GDP (%)	World Development Indicators (2018)
Financial deepening (fid)	Measured as the ratio of broad money to GDP (%)	World Development Indicators (2018)
Population (pop)	Measured by ratio of urban population to total population (%)	World Development Indicators (2018)
Corruption (corr)	Measured by the control of corruption index.	World Governance Indicators (2018)
Government Effectiveness (geff)	An estimate that measures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.	World Governance Indicators (2018)
Political instability (pol)	An estimate that measures perceptions of likelihood of political instability/ politically motivated violence	World Governance Indicators (2018)

Source: Compiled by Author

Despite the existence of numerous developing countries in the world, this study focused on the SADC region in order to move to a more specified context. The selected sample comprises of 13 member states of the SADC from which longitudinal/ panel data was derived for the period 2002-2016.

The appropriateness of using secondary data is justified by the existence of already documented reports and studies that would not require the collection of information on each country. This research extracted information that has already been collected by other institutions and researchers. Data is generally available and accessible and the sources of such information/data include: archival material, government statistical material like central statistical office statistics and annual reports, scientific publications and data files from past research. This solidifies the rationale of using secondary data.

7.3 Assessing taxable capacity and tax effort in the SADC

It is important to note that there are endogenous and exogenous factors that influence a country's ability to reach its tax frontier or maximum level of tax. In view of providing practical solutions that may assist tax policymakers, this study considered that governments only have control over endogenous factors, thus less attention was given to exogenous factors. Therefore, this study departs from assessing vulnerability as the policy implications are beyond the control of government.

7.3.1 Stochastic Frontier Analysis (SFA)

7.3.1.1 Introduction to Stochastic Frontier Models

The stochastic frontier models were simultaneously produced by Aigner, Lovell and Schmidt (1977) and Meeusen and Broeck (1977). The models focused on formulating and estimating technical efficiency in production functions. Hypothetically, every production function has a maximum level of output given a set of inputs. In this regard, the production function has a boundary or 'frontier' where deviations from it are interpreted as inefficiency. (Cornwell and Schmidt, 2008). Equation 1 illustrates a scenario where a firm seeks to maximize production of an observable output (Y_i), while employing observable inputs (vector x_i) and marginal products (vector β).

$$Y_i = \alpha + \beta x_i + v_i - u_i \quad (1)$$

In addition, v_i is a zero-mean, symmetric error while the salient feature of the model is non-negative error, u_i , representing unobserved inefficiency. The deterministic portion of the specification, represents the frontier of maximal output for a given set of inputs x_i . The symmetric error, v_i , causes the frontier to be stochastic. The one-sided inefficiency term, u_i , can only reduce output and represents departure from this frontier (.

The essence of applying stochastic frontier analysis in research is that it allows models with the frontier concept to be estimated to determine inefficiency. Although the stochastic frontier model was primarily used to estimate technical efficiency in production functions, for over 40 years its application has been extended to other areas such as taxation.

This section provides insight into how the model of this study was specified and took note of some of the methodological advances in Stochastic Frontier Models (SFMs). In this regard, this study attempted to reduce the shortcomings of previous models that failed to account for country heterogeneity, persistent efficiency and transient efficiency. Although the use of SFMs is common in studies that investigate tax effort in production, its relative application to tax revenue assessment is what limited, particularly in Africa. Notably, the standard approach to assessing tax revenue fell short as it negated the role of tax effort and its determinants. Instead, the standard approach captured the resulting effects in the disturbance term, thus being unable to extract policy implications relating to the extent of tax capacity and tax effort.

The first generation of SFMs added time-invariant tax effort (persistent efficiency). This major contribution arising from this was that the results had implications that permitted policymakers to restructure or reorient tax systems in the long-run as empirical evidence could not account for the short-run. This led to the development of the second generation of SFMs that focused on disentangling persistent efficiency from time- varying/decaying tax effort (transient efficiency). This subsequently enabled researchers to provide empirical evidence to support long run and short-run improvements to tax systems.

These methodological advances enabled this study to pursue a more elaborate inquiry on taxable capacity and tax effort in the SADC outside the domain of the standard approach that is largely abundant in literature. Unlike the standard approach which is one dimensional, this study adopted a four component panel data SFM with determinants of tax effort as described in Kumbhakar et al. (2014), Lai and Kumbhakar, (2016) as well as Kumbhakar et al. (2017).

This gives this study an edge in providing more substance to proffering practical solutions to the SADC on how to improve their tax systems (if feasible).

Firstly, the study begins with a tax function and adds a new term for tax effort. This implies that the actual tax revenue is less than the maximum tax attainable. This study follows the panel version of the stochastic production frontier model by Aigner et al. (1977). The specification of Aigner et al. (1977) can be modified to represent a stochastic tax revenue function as follows:

$$Y_{it} = \alpha + \beta x_{it} + v_{it} - u_{it} \quad (1)$$

Where,

Y_{it} , represents the log tax revenue to GDP ratio for country i at time t ;

x_{it} , is the vector that represents variables affecting tax revenue for country i at time t ;

β , is a vector of unknown parameters,

v_{it} , is the disturbance or error term. It is a random (stochastic) variable that captures aggregate effects of unobservable independent variables that are exogenous and beyond the control of government; v_{it} can be positive or negative and so the stochastic frontier outputs vary on the deterministic part of the model. In essence, $\alpha + \beta x_{it}$ represent the deterministic component, meanwhile, v_{it} reflects noise and u_{it} represents efficiency.

u_{it} , represents the relative level of efficiency that is required to produce the maximum level of tax collection. It is a non-negative random variable associated with country-specific factors that contribute to country i not attaining its tax capacity at time t . This represents the deviation of tax revenue from the tax frontier, which is caused by factors that are generally within the control of government. Notably, $u_{it} = Z_{it}\delta$ where Z_{it} is the vector of variables that influence tax effort of tax systems and δ is the vector of the unknown parameter to be estimated.

This study adopted the standard assumptions of zero mean, homoscedasticity and independence was assumed for elements of v_i . In addition, u_i 's were assumed to be identically and independently distributed non-negative random variables, while v_i and u_i are independently distributed. Notably, this study incorporated distributional assumptions in the estimation of the parameters because of the presence of random errors in the model. In general, the probability distribution of errors take the form of the half-normal (truncated at zero) distribution, exponential distribution as well as the gamma distribution.

The analysis sought to predict and measure efficiency effects by using the tax effort, defined as the ratio between actual tax revenue and the corresponding stochastic frontier tax revenue (tax capacity). Consequently, this measure of tax effort has a value between zero and one.

$$\begin{aligned}
 TE_{it} &= \frac{T_{it}}{\exp(\alpha + \beta^T \mathbf{x}_{it} + v_{it})} \\
 &= \frac{\exp(\alpha + \beta^T \mathbf{x}_{it} + v_{it} - u_{it})}{\exp(\alpha + \beta^T \mathbf{x}_{it} + v_{it})} \\
 &= \mathbf{exp}(-u_{it})
 \end{aligned} \tag{2}$$

7.3.1.2 Choice of functional form of the model

Bezaf (2011) suggests that since SFA is a parametric approach, hypothetically there is need to assume a specific functional form of the model. Bezaf (2011) argues that if an inappropriate functional form is selected it would ultimately influence the outcome of estimated results from which practical advice would be based. Alternative production functions include Cobb-Douglas, Constant Elasticity of Substitution (CES), Translog, generalized Leontief, normalized quadratic and its variants (Bezaf, 2011). Nevertheless, Coelli, Rao, O'Donnell & Battese (2005) and Bezaf (2011) assert that the Cobb-Douglas and Translog stochastic frontiers are the most common functional forms found in empirical studies on frontier analysis. In this regard, Bezaf (2011) recommends that the Likelihood ratio test should be employed to select the most appropriate model. However, Umar, Girei and Yakubu (2017) suggest that the choice of functional form for efficiency analysis should be based on convenience, meeting selection criteria premise on the value of variance-parameter and objectives of the study.

Muwanga (2017) suggests that the Cobb Douglas function is limited because of several restrictions which include the existence of presumptions of constant returns to scale and unitary elasticity of substitution between input pairs. However, the Translog function does not assume perfect or smooth substitution between inputs and accommodates the transition from a linear relationship between the output and the inputs to a non-linear one (Muwanga, 2017). Therefore, the Translog function assumes stable but flexible non-unitary elasticities of substitution. Nevertheless, the usefulness of the Translog functional form is limited by the explosion of the number of parameters due to the increase in the number of inputs, leading to harmful multicollinearity which demeans the precision of estimators (Muwanga, 2017). This can be overcome by limiting the number of explanatory variables to those that are

important to output behavior or to increase the sample size. Against this background, Muwanga (2017) is of the opinion that the choice of functional form should be based on the theoretical consistency, domain applicability, flexibility, factual conformity and computation facility. In the context of assessing tax capacity and tax effort in the SADC, the choice between the Cobb Douglas function and the Translog specification was made using the Log-likelihood Ratio test. The test statistic is based on the likelihood ratio, which is the maximum value of the likelihood function for restricted production function to the maximum value of the likelihood function for the unrestricted one. The null and alternative hypothesis are provided as follows:

$$H_0: \beta_{ii} = \beta_{ij} = 0 \quad (3)$$

$$H_1: \beta_{ii} \neq \beta_{ij} \neq 0 \quad (4)$$

Where H_0 and H_1 are the null and alternative hypothesis, while $\beta_{i/s}$ and $\beta_{j/s}$ are parameters of the restricted and unrestricted models respectively. The Log-likelihood test was as an appropriate method to compare the two models since the Cobb-Douglas function is nested in the Translog function. Rejection of the null hypothesis signifies that the Translog function is the appropriate model while failure to reject the null implies that the Cobb Douglas model is appropriate. Nevertheless, Muwanga (2017) argues that the requirement of selecting an appropriate functional form are rarely met by one form.

7.4 Specification of the model

7.4.1 The Stochastic tax frontier model

In the context of this thesis, the Cobb –Douglas stochastic tax frontier was specified as follows:

$$\ln tgd p_{it} = \beta_0 + \beta_1 \ln pop_{it} + \beta_2 \ln fid_{it} + \beta_3 \ln pgdp_{it} + \beta_4 \ln open_{it} + \theta_i + v_{it} - (\tau_i + \varphi_{it}) \quad (5)$$

This study employed the Likelihood ratio test to decide between the Cobb- Douglas stochastic frontier model and the Translog stochastic frontier model and selected. In this study, the variables employed in explaining tax capacity differ from those explaining tax effort in order to avoid estimation problems.

7.4.2 Dependent Variable

Several studies have measured tax revenue capacity as the predicted ratio of tax revenue collection in GDP (Le et al., 2012; Fenochietto and Pessino, 2013; Ndiaye and Korsu, 2014; Langford and Ohlenburg, 2015).

7.4.3 Explanatory Variables for Estimating Tax Capacity

Table 52 provides a brief summary of variables considered in this study. It is impossible to select all variables prescribed by literature; however, the dearth of data was a major constraint in the selection of some variables such as the literacy rate and the Gini coefficient.

Table 52: Summary of explanatory variables for estimating tax revenue

Description	Expected relationship with taxable capacity
GDP per capita (pgdp): Steenekamp (2007) asserts that the level of development is a critical factor for governments to raise adequate revenue to finance public spending. Hypothetically, Rising per capita incomes tend to drive urbanization and non-agricultural activities (Besley and Persson, 2013).	A positive relationship is expected. (Lotz and Morss, 1967, Ghura, 1998; Gupta 2007).
Openness (open): Measures the share of international trade in GDP and an indicator of liberalization in the economy (Ghura 1998). There is a high degree of monetization; meanwhile it is relatively easy to collect (Stotsky and WoldeMariam, 1997; Ghura, 1998; Tanzi and Zee, 2001; Addison and Levin, 2012).	A positive relationship is expected.
Financial deepening (fid): Measured as the ratio of broad money to GDP. Tax revenue from financial deepening can reduce revenue volatility by increasing the private sector's ability to smooth its income in response to shocks (Aggrey, 2011). Taxes become easier to collect when the degree of monetization increases (Ndiaye and Korsu, 2014).	A positive relationship is expected.
Population (pop): Measured by ratio of urban population to total population. The demand for government services increases with increase in urban population as public sector activities are concentrated in the cities. To satisfy the increase in demand for public services more tax revenue is required (Ndiaye and Korsu, 2014)	A positive relationship is expected.
Foreign Aid (aid): Fjeldstad (2013) suggests that the motivation for donor assistance has been to strengthen tax systems in developing countries. However, critics argue that it has let to crowding out of tax revenue (Gupta et al., 2003; Ahmed and Mohammed, 2010; and Thornton, 2014).	This study expects negative relationship between tax capacity and foreign aid.

Source: Author's compilation from the literature review

The choice of explanatory variables in this study is centered on some elements of the tax base and other control variables that include factors of economic policy, social and political factors. This is consistent with literature on the determinants of tax capacity elucidated in chapter 6. (Le, et al., 2012; Fenochietto and Pessino, 2013; Yonah and Goujon, 2017). There is substantial theoretical and empirical literature that justifies the use of traditional variables and other factors in explaining changes in tax performance as discussed in chapter 6.

7.4.4 Explaining Tax effort

Persistent time efficiency is normally due to factors emanating from economic policy decisions while transient efficiency is often linked to tax administration efficiency (Brun and Diakite, 2016). Table 53 shows a summary of exogenous variables which explain tax effort.

Table 53: Summary of explanatory variables explaining tax effort in the SADC

Description	Expected relationship with tax effort
Inflation (infl): Higher inflation rates may demoralize the public to pay taxes, while affecting the tax-paying capacity of the taxpayers (McMahon and Schmidt-Hebbel, 2000; Agbeyegbe et al., 2004).	This study expects a negative relationship.
Corruption (corr): Bird et al. (2008), Ajaz, and Ahmad (2010) and Besley and Persson (2013) hypothesize that if taxpayers feel that their country is rampant with corruption, then there is increased likelihood of not complying with tax obligations. This in turn will constrain tax effort.	A negative relationship is expected between tax effort and corruption.
Government effectiveness (geff): Economic prosperity is linked to government effectiveness, hence this study believes that it is equally important in establishing efficient and effective tax systems.	A positive relationship is expected between government effectiveness and tax effort.
Political stability (pol): Reflects perceptions of the extent to which public power is exercised for private gain (World Bank Indicators, n.d). Political instability can influence behaviour towards tax evasion or tax avoidance as taxpayers respond to the injustices of the political economy. In this regard, political stability is expected to have a positive impact on tax effort.	A positive relationship is expected (Mutascu, Tiwari and Estrada, 2011; Ehrhart, 2011; Besley and Persson, 2013)

Source: Author's compilation from the literature review

7.5 Estimation Procedure

When estimating SFMs, three estimation procedures may be used and these include the following:

- Maximum likelihood estimation (ML)
- Generalized Least Squares method (GLS)
- Method of Moments

7.5.1 Maximum Likelihood (ML)

This study adopted a multi-step estimation strategy influenced by Belotti, Daidone, Ilardi & Atella (2012), Lai and Kumbhakar, (2016) as well as Lien, Kumbhakar & Alem (2018). Firstly, the study considered the estimation of the four component SFM, which includes country latent heterogeneity, persistent efficiency, transient (residual) efficiency and random shocks (systematic error term). Secondly, the study incorporated explanatory variables for transient efficiency. Following equation 5, this study applied the multi-step estimation strategy estimation method. A combination of the random effects model and the ML estimation technique was selected because of its capability to estimate robust standard errors while accommodating efficiency in the residuals, heteroskedasticity in the stochastic error term (v_{it}) and heteroskedasticity in the composite tax effort term (u_{it}).

Consequently, the multistep procedure used to estimate the model followed the method of Kumbhakar et al. (2015). The first step involved the use of the standard random-effects panel data model to obtain consistent estimates of β . The second step included the estimation of persistent tax effort, τ_i , while step 3 focused on the estimation β_0 and the parameters associated with the random components v_{it} and u_{it} . Step 4, focused on the estimation of the transient (residual) component of efficiency, u_{it} .

7.5.2 Diagnostic tests

Given that there are potential threats, which influence the validity and reliability of regression results, this prompted the need to choose a methodology that would minimize the effects of such threats. For instance, ordinary multiple regression methods may be used on panel data but at the risk of omitting variable bias in estimated coefficients. This arises because unlike panel regression, the technique does not control for some variables that affect the dependent variable (Stock and Watson, 2003). The subsequent sub-sections focus on some of the diagnostic tests associated with panel regression.

7.5.2.1 Multicollinearity

Multicollinearity refers to the existence of a “perfect,” or exact, linear relationship among some or all explanatory variables of a regression model (Gujarati, 2004). Given the absence of full control over the choices of data at one’s disposal when conducting empirical work, it is suggested that multicollinearity is a data deficiency syndrome. Yaguchi (1994) asserts that the use of partial-correlation coefficients in detecting multicollinearity may be misleading when there are three or more variables, hence, suggests the use of the condition index. In this regard, this study employed several measures to detect the extent of multicollinearity using the *collin* command in Stata, which permits the computation of several collinearity diagnostic measures. The calculated measures include VIF, tolerance, eigenvalues, condition index, and R-squared (Ender, 2013). The test computes eigenvalues and condition index with an intercept or without an intercept to measure the sensitivity of the parameter estimates in the regression (Yaguchi, 1994: 21). The condition index is defined as:

$$CI = \sqrt{\frac{\text{Maximum eigenvalue}}{\text{Minimum eigenvalue}}} \quad (6)$$

In this regard, Yaguchi (1994) suggests that weak multicollinearity exists among variables if CI is between 5 and 10, while moderate and strong multicollinearity is associated with a CI of between 30 and 100, where explicit judgement is made on the parameter estimates. Further, if the CI exceeds 100, the 'strong' multicollinearity is suggested, causing possible harm to the parameter estimates” (Yaguchi, 1994).

7.5.2.2 Hausman test

The Hausman test is used to test for endogeneity and to differentiate between the appropriate fixed effects model and the random effects model. In essence, the Hausman test considers whether the unique errors (u_i) are correlated with the regressors.

The null/alternative hypothesis is stated as:

H_0 : unique errors (u_i) are not correlated with regressors

H_1 : unique errors (u_i) are correlated with regressors

If the p-value is less than 0.05 the fixed effects model would be the most appropriate estimation technique, otherwise the random effects model is more appropriate.

7.5.2.3 Heteroscedasticity

According to Colombi et al. (2017), modelling heteroskedasticity is critical because both model parameters and efficiency estimates are adversely affected when it is neglected. To detect heteroscedasticity this study employed the Breusch-Pagan/Cook-Weisberg test for heteroscedasticity. The problem of continuing to use data that suffers heteroscedasticity is that whatever conclusion or inferences, they will be misleading.

H₀: The variance of the error term is constant.

H₁: The variance of the error term is not constant.

If the p-value is less than $p < 0.05$ then the null hypothesis is rejected, thus implying the presence of heteroskedasticity.

7.5.2.4 Test for skewness

This study follows the rule of thumb that stipulates that a test for skewness must be conducted before carrying out a Maximum Likelihood estimation involving stochastic frontier models (Kumbhakar et al., 2015). This emanates from the notion that the assumptions in the traditional Stochastic Frontier Models do not permit non-negative skewness (Hafner, Manner & Simar, 2018). In this regard, since a production frontier model should have the OLS residuals skewed to the left, then a tax frontier should also reflect the same. The existence of efficiency in a model is indicated by the presence of OLS residuals that will be negatively skewed (Kumbhakar et al., 2015). Several studies argue that a Stochastic frontier model is inadequate if it is “wrongly” skewed (absence of negative skewness) (Bonanno, De Giovanni & Domma, 2017; Hafner et al., 2018; Kumbhakar et al., 2015). This study conducted the Jarque-Bera test for normality where the null hypothesis states that residuals are normally distributed at the selected alpha level of 0.05. Notably, the composite disturbance term becomes negatively skewed if tax effort exists as shown below:

$$\varepsilon_i = v_i - u_i$$

It is negative skewed if u_i is one-sided and nonnegative. Therefore, there would be need to test the presence of tax effort and measure its contribution to the residuals in stochastic frontier analysis. If there is no tax effort, then $u_i = 0$, while, $\varepsilon_i = v_i$, where the error is symmetric with no skewness. If there is evidence of tax effort, $u_i \geq 0$, while $\varepsilon_i = v_i - u_i$ is negatively skewed. In this regard, if the p-value of the statistic is less than 0.05, the null hypothesis is rejected implying that the distribution of residuals is not normally distributed. To ascertain whether the

residuals exhibit positive or negative skewness, this study found the Kernel density estimate of the error term.

7.5.2.5 Parametric distributional assumptions

The essence of the stochastic tax frontier is that it enables researchers to calculate the distance above or below the tax frontier and this distance represents tax effort of a country's tax system (Parman and Furtherstone, 2019). Notably, there are many parametric methods of determining tax effort using the stochastic frontier approach. According to Kumbhakar et al. (2015), the first stochastic frontier model by Aigner et al. (1977) assumed that residuals followed a half-normal distribution. Such a distribution has only one parameter for estimation and was therefore relatively easy to compute. However, the major challenge it posed was that it was too rigid as it was impossible to disentangle technical inefficiencies into transient and persistent efficiency. In view of this challenge, developments in theory led to the use of other distributional models which accommodate positive and negative skewness as well as symmetric distributions. Nevertheless, the focus of this study was to choose parametric assumptions from models that accommodate negatively skewed distributions and these include the half-normal distribution, truncated-normal distribution and the exponential distribution. Although there is a variety of SFMs in panel data analysis, the estimation strategy in this study followed the assumption that the distribution of residuals is truncated normal²¹. In this regard, the estimation method permitted the study to determine local efficiency (efficiency), heteroskedastic in efficiency and the error term.

7.5.2.6 Test for cross sectional dependence/contemporaneous correlation

Cross-sectional dependence is an issue in macro-panels with long time series. If $T > N$ then Breusch-Pagan test for independence would be more appropriate. If $T < N$ then alternative methods would be better and these include the Perasan's CD test, Friedman's test and the Frees' test. Nonetheless in this study, $T > N$, hence the Breusch-Pagan test was employed to test for cross sectional dependence among SADC member states. According to Woodridge (2003), cross-sectional dependence is a problem in macro panels with long time series (over 20-30 years) and not much of a problem in micro panels (few years and a large number of cases). The null hypothesis in the B-P/LM test of independence is that residuals across entities are not-

²¹ See the specified in the summary by Belotti et al. (2012: 728),

correlated. If the p-value is less than $p < 0.05$, this leads to the rejection of the null hypothesis, implying that there is cross-sectional dependence.

7.5.2.7 Panel unit root test

According to Merryman (2004) the command *xtfisher* in STATA combines the p-values from N independent unit root tests, as developed by Maddala and Wu (1999). The Fisher unit root test is based on the p-values of individual unit root tests and it assumes that all series are non-stationary under the null hypothesis against the alternative that at least one series in the panel is stationary (Merryman, 2013). Further, Merryman (2013) asserts that the difference between the Im-Pesaran-Shin (1997) test and the Fisher's test is that the latter does not require a balanced panel. In this regard, this study employed the Fisher test for panel unit root in STATA 13.

7.5.3 Other estimation considerations

The earliest models employed in stochastic frontier analysis were restrictive, however, developments overtime have permitted estimations using models with assumptions that are fairly rational to reduce both theoretical and methodological limitations of prior models. In this regard, this section considers modelling heterogeneity separate from tax effort and modelling persistent tax effort separate from transient tax effort.

7.5.3.1 Modelling heterogeneity separate from tax effort

According to Kumbhakar, Parmeter & Zelenyuk (2017), early SFMs could not disentangle the effects of tax effort from country heterogeneity. In this regard, this limited researchers to model either time-invariant tax effort or time-invariant country heterogeneity. However, as shown in Lai and Kumbhakar (2016), advancements in SFMs now enable researchers to disentangle time-invariant individual specific effects from persistency efficiency. In addition, Kumbhakar et al. (2015) suggest that the major drawback of being unable to separate unobserved time-invariant heterogeneity from tax effort is that it will be difficult to tell whether \hat{u}_i has picked the latter or the former. According to Kumbhakar et al. (2015) the earliest models assumed α_i to be the individual (unobserved) effects that were time invariant and individual specific but not related to other explanatory variables. However, in the context of the estimating tax capacity and tax effort in the SADC, this study separated country specific heterogeneity from persistent tax effort to determine whether there was a significant component of tax effort that

has been persistent over time. This has improved implications for policymaking, hence this study modelled country heterogeneity separate from tax effort as reflected in equation 7.

$$Y_{it} = \alpha_i + \beta \mathbf{x}_{it} - \tau_i + v_{it} - u_{it} \quad (7)$$

This direction was inspired by Kumbhakar et al. (2015), who assert that the purpose of separation is to ascertain whether the individual effects represent persistent tax effort or whether individual effects are independent of efficiency but capture unobserved heterogeneity.

7.5.3.2 Modelling tax effort in a Stochastic Tax Frontier Model

The purpose of understanding the sources of tax effort in the performance of tax revenue is critical as it informs policymakers with information on the likely sources of inadequacy in tax effort. Although the concept of analyzing tax effort or efficiency is relatively common in economics, it has somewhat been limited in the context of assessments of tax revenue potential, particularly in Africa. According to Brun and Diakite (2016), tax effort of taxable capacity can be either time invariant or time variant. The implication of the former is that there is no possibility of improving tax systems over time, hence tax reform would not induce any changes on tax performance in practice (Brun and Diakite, 2016). Examples of time-invariant tax effort models include Pitt and Lee (1981), Schmidt and Sickles (1984) and Battese and Coelli (1988). In order to depart from invariability of tax effort, this thesis considered a time-decaying tax effort model similar to those found in second generation stochastic frontier models which include Battese and Coelli (1992), Cornwell, Schmidt and Sickles (1990) and Kumbhakar (1990). One of the major advantages of time-decaying tax effort models is that they permit tax effort to change over time and exponentially (Brun and Diakite, 2016). In view of the need to proffer practical solutions on the practice of tax design in the SADC, the exploration of factors influencing time-decaying tax effort has practical implications for tax policy.

This study noted that there is considerable progression in the evolution of time-decaying tax effort models as scholars attempted to improve on the methodological flaws of the earliest forms of second generation stochastic frontier models. According to Brun and Diakite (2016), the model by Battese and Coelli (1992) is criticized for being too restrictive as it only considers tax effort to change over time and exponentially. The assumptions of the model are that it follows random type models and that the tax effort term is a half-normal distribution or truncated normal distribution (Brun and Diakite, 2016). Consequently, a half-normal distribution implies a mode of zero in the distribution, thus implying that the proportion of tax

administrations to achieve their tax revenue potential is greatest (Brun and Diakite, 2016). In contrast, the truncated distribution allows for variation in proportion of tax administrations to achieve their tax revenue potential with a positive mode (Brun and Diakite, 2016).²²

Notably, Kumbhakar et al. (2014) suggest that there is need to direct attention towards the interaction between the model used of analysis and the interpretations thereof. As such, Brun and Diakite (2016) as well as Lai and Kumbhakar (2016) argue that the rationale of separating time-invariant (persistence) effects and time-varying/decaying (transient) effects is to accommodate the differences in the implications they have for policy. According to Lai and Kumbhakar (2016), persistent efficiency can only be dealt with in the long-run through some kind of restructuring while transient efficiency can be dwelt with in the short run. This however, differs from Brun and Diakite (2016) who seem to negate persistent efficiency citing that it implies that policymakers cannot improve the tax system in the short run. Although Kumbhakar et al. (2014) provide a four component SFA model which incorporates persistent tax effort, Greene (2005) is of the opinion that the sources of persistent tax effort in taxation are more likely to address tax administration than tax design issues. Notwithstanding this, the interplay between tax design and tax administration remains important in tax policy, hence, this study adopts the four component SFA model and is specified as follows:

$$Y_{it} = \beta_0 + \theta_i + \beta \mathbf{x}_{it} - \tau_i + v_{it} - u_{it} \quad (8)$$

Where,

Y_{it} , is the log tax revenue to GDP ratio for country i at time t ; ($i = 1, \dots, N$ and $t = 1, \dots, T$)

\mathbf{x}_{it} , is the vector that represents variables affecting tax revenue for country i at time t ;

β_0 , is the intercept,

θ_i , represents unobserved heterogeneity

β , is a vector of unknown parameters,

$\tau_i > 0$ is persistent efficiency,

²² For more details on the shortcomings of the earliest models of the second generation of stochastic frontier models, see Brun and Diakite, (2016).

$u_{it} > 0$ is transient efficiency,

v_{it} , is the statistical noise (the disturbance or error term).

This study elected to use the truncated normal distribution, hence the determinants of tax effort are modeled against the mean tax effort. Notably, studies differ on whether to estimate the determinants on the mean of tax effort or the variance of the mean of tax effort or both. Kumbhakar et al. (2017) argues that there is benefit in modelling the determinants on both the mean tax effort and the variance of tax effort since it reduces ambiguity on the effect of the determinants. However, Kumbhakar et al. (2017) assert that such a process is complex to estimate and may result in identification problems. In this regard, this thesis focused on modelling the determinants on the mean of tax effort.

7.6 Interpretation of estimated results

This section focuses on bringing insight into how interpretations were made on the determinants of taxable capacity in the SADC, country specific effects and tax effort. The use of the SFA made it possible to simultaneously estimate the parameters of the Stochastic Tax Frontier and tax effort functions. According to Kumbhakar et al. (2014), different assumptions and specifications are found in competing panel data models of tax effort, time-invariant (persistence) effects and time-varying/decaying (residual) effects. In this regard, efficiency results become dependent on how researchers model and interpret tax effort.

7.6.1 Determinants of taxable capacity

In order to conclude on whether an explanatory variable was statistically significant in explaining changes in the dependent variable, this study used the two-tail p-values test whose hypothesis states that each coefficient is different from zero (Torres-Reyna, 2007). To reject the null hypothesis, the p-value has to be lower than 0.05 in order to say that the variable has a significant influence on the dependent variable (Torres-Reyna, 2007). From equation 8, the study was able to estimate the β s.

7.6.2 Country specific effects

According to Torres-Reyna (2007), the use of the random effects model depicts that a country's error term is not correlated with the predictors. Similarly, Greene (2002) suggests that time-invariant variables may represent observable heterogeneity that is not related to tax performance but captures country specific effects. In this regard, time-invariant variables play

a similar role as other explanatory variables. From equation 8, θ_i represents the random unit effect for latent heterogeneity. Predicted values of θ_i are obtained from the outcome of estimating the tax frontier to obtain the estimates β and β_0 .

7.6.3 Transient efficiency

Colombi et al. (2011) suggest that transient efficiency refers to time-varying efficiency that captures short run efficiency. The implication for government or policymakers is that it is permissible to make changes in the tax system informed by empirical evidence on the sources of efficiency. From equation 8:

$$\varepsilon_{it} = v_{it} - u_{it} + E[u_{it}], \quad (9)$$

Assuming that v_{it} is i.i.d, while $N(0, \sigma_v^2)$, u_{it} is i.i.d $N_+(0, \sigma_u^2)$ where $E[\tau_i] = \sqrt{2/\pi\sigma_u}$. Equation 9 is estimated using Stochastic Frontier techniques- the Battese and Coelli (1988) approach (bc) to obtain the transient tax effort component u_{it} , also known as relenting tax effort in Kumbhakar et al. (2017).

7.5.1 Persistent efficiency

According to Colombi et al. (2011), persistent efficiency refers to time-invariant tax effort that occurs due to long run sources. In essence, it implies that government or policymakers cannot make changes to the tax system to induce changes on tax revenue performance, however, in the long run, reorientation or restructuring the tax system is an available option. From equation 8:

$$\theta_i = c_i - \tau_i + E[\tau_i], \quad (10)$$

Assuming that c_i is i.i.d, while $N(0, \sigma_c^2)$, τ_i is i.i.d $N_+(0, \sigma_\tau^2)$ where $E[\tau_i] = \sqrt{2/\pi\sigma_\tau}$. Equation 10 is estimated using the truncated –normal distribution to obtain estimates of τ_i , using the JLMS approach.

7.5.2 Tax Effort Index

The essence of developing a tax effort index is to enable classification of countries depending on their ability to raise tax revenue for their tax base (Lotz, 1967; Le et al., 2012; Fenochietto and Persson, 2013; Brun and Diakite, 2016 and Yohou and Goujon, 2017). This study

computed the tax effort index based on the regression and calculated as the ratio of the actual tax ratio and the estimated tax ratio. The tax effort index is specified as follows:

$$\text{Tax Effort Index} = \frac{\frac{T}{Y}}{\frac{\hat{T}}{\hat{Y}}} = \frac{T}{\hat{T}} \quad (11)$$

According to Le et al. (2012; 7) “a high tax effort is the case when a tax effort index is above one, implying that the country well utilizes its tax base to increase tax revenues. A low tax effort is the case when a tax effort index is below one indicating that the country may have relatively substantial scope or potential to raise tax revenues.” If a country has low tax effort and low tax collection, then there is room to increase tax revenue towards their tax capacity without causing major economic distortions or costs (Le et al., 2012). In addition, if a country has low tax collection but with high tax effort then there is limited room to increase tax revenue without causing distortions (Le et al., 2012).

7.6 Qualitative analysis: Narrative analysis of tax policy in SADC (2002-2016)

The second phase of explanatory sequential design adopted in this study involved a narrative analysis of tax legislation in the SADC over the period 2002-2016. The purpose of the narrative analysis was to provide better insight into the role that policymaking played with regard to tax capacity and tax effort in the SADC. The method pursued here was inspired by Romer and Romer (2010) who conducted a narrative analysis of federal tax legislation in the United States over the period 1945-2007 as well as Cloyne (2012) who provides a narrative account of all legislated discretionary policy changes in the United Kingdom from 1945 to 2009. The study uses budget statements and Acts of parliament of the SADC as the major sources of information to identify significant piece of tax legislation over this period. In addition, the study uses other sources (where possible) to determine the main reason for each action and classified them into one of four categories namely;

- responding to a current or planned changes in government expenditure,
- counteracting other influences on economic activity,
- reducing an inherited budget deficit, and
- the need to increase long-run growth.

Finally, the study classifies each tax change depending on whether:

- the intention was that it would be temporal or permanent,
- it centred on changing marginal tax rates, and
- it significantly changed investment incentives.

The results of the narrative analysis are presented subsequent to the quantitative results obtained in the first phase. The information provided by this analysis is potentially crucial in enhancing the understanding of the estimates of tax capacity and tax effort in the SADC.

7.7 Conclusion

The chapter sets out the methodology in view of the need to develop an approach that would enable the study to proffer a pragmatic approach to tax policy design in the SADC. The study adopted the research onion framework to develop the research design and research approach by considering each layer of the framework against the research objectives, research questions and the hypotheses set in chapter one. In view of the purpose of the study, the research uses a mixed methods approach which permits the qualitative analysis to augment the findings of the quantitative analysis. In this regard, the quantitative analysis forms the first phase of analysis where a stochastic frontier approach is used to determine tax capacity and tax effort in the SADC. The second phrase constitutes the qualitative analysis which sets out a narrative analysis on significant tax policy changes in the SADC over the period 2002-2016. In order to account for validity and reliability of the results from the estimation of stochastic frontier model, the study conducted several diagnostic tests including the test for model selection. The original contribution of the methodology of the study is that it is the first of its kind to produce estimates of tax capacity and tax effort for the SADC region over the period 2002-2016. Further, the major contribution emanates from the use of a methodology which entails the use of a four-error component model that disentangles random-effects, the idiosyncratic error term, persistent tax effort and transient tax effort. Notably, the use of the four-error component model is relatively novel in assessing tax capacity and tax effort in Africa.

CHAPTER 8

DETERMINANTS OF TAX CAPACITY AND TAX EFFORT IN THE SADC: RESULTS AND DISCUSSION

8.1 Introduction

This chapter focuses on the presentation and discussion of the findings of the study, where a mixed method approach was employed. As suggested in chapter 7, the purpose of undertaking qualitative analysis was to augment the findings of the quantitative analysis, as such two forms of analysis are presented in this chapter. The first phase of the analysis in this chapter involved the estimation of tax capacity and tax effort in the SADC over the period 2002-2016. Following the introduction, the chapter begins with a summary statistics of the panel data used in this study. This is followed by a discussion on the model selected for estimation. Consequently, this is followed by a section on the pre-estimation and postestimation diagnostic tests relevant to the stochastic frontier analysis employed in this study. Noting that tax effort is synonymous with tax effort, these terms are used interchangeably in this chapter. The presentation and discussion of the results on the estimates of tax capacity and tax effort marks the end of the first phase on quantitative analysis. Prior to the conclusion, the chapter presents the second phase on the findings of the narrative analysis of tax legislation in the SADC over the period 2002-2016. Lastly, the chapter ends with a summary and conclusion on the study findings.

8.2 Descriptive/Summary Statistics

This section presents the summary of descriptive statistics of unbalanced panel data for 13 SADC member states. The use of unbalanced data was motivated by unavailability of data for some member states and missing entries in other instances. Although there was an option to fill in missing data points to yield balanced panel data, the degree of missing entries was too large on some years. This counteracted the rationale of interpolation and extrapolation of data as they could not be kept a bay without igniting bias, this justifies the resolution to use unbalanced data which was used and evaluated against the following checkpoints:

- i. The presence of longitudinal data and the presence of fixed and/or random effects.
- ii. Consistency of the entities (countries); as such this study checked whether entities did not change during the period of research.
- iii. The time periods were checked for consistency where each period was taken as a year.

- iv. Each country was checked to ensure that not more than one observation occurred in a particular time period.

Table 54 shows the summary of statistics for tax revenue and other independent variables explored in this study. The overall statistics are based on 183 observations and 171 observations for the size of the shadow economy variable (*sizshad*). Seychelles was excluded on this variable due to the lack of informality measures in literature. The mean for tax revenue in the region was 23.50465, with a standard deviation of 9.556973. This comparable that of LAC region, however, SADC still remains behind the levels in OECD by over 10%. OECD (2018a) suggests that in 2000, Africa had an average tax ratio of 14% which rose to 19.1% in 2015. LAC was purported to have grown from 18% in 2000 to 23.1% while the average for OECD countries remained at 34% for the period 2000 to 2015.

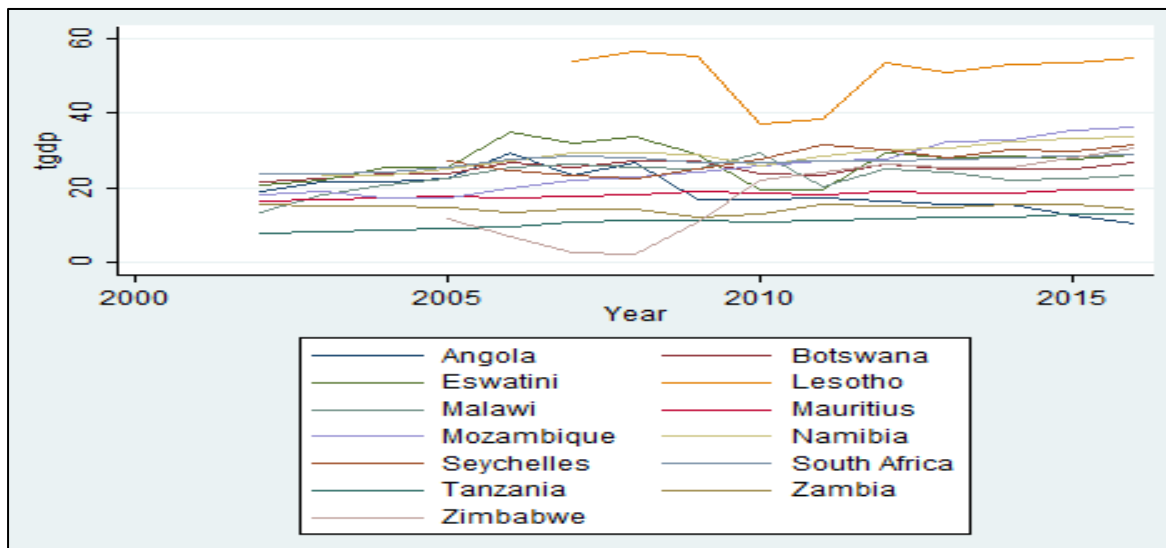
Table 54: Summary Statistics

Variable	Mean	Standard. Deviation	Minimum Value	Max value
tgdp	23.50465	9.556973	2.153343	56.5354
pop	39.67396	15.1844	14.786	67.933
fid	41.35784	25.08997	5.406917	109.8959
infl	1262446	1.71e+07	-2.4095	2.31e+08
corr	-0.2257802	0.6771861	-1.44389	1.216737
pgdp	3729.068	3366.077	296.9835	13598.34
open	96.01191	38.76284	37.42109	225.0231
pol	0.0929862	0.6365353	-1.577046	1.200234
foraid	6.056015	7.056037	-.2602161	50.07259
gvtexp	22.66355	13.48851	2.047122	88.98288
plcdebt	43.87426	32.68917	3.66	204.25
geff	-0.2906111	0.6564018	-1.545878	1.049441
sizshad	35.04848	11.83092	16.58	69.08

Source: Author's calculation

Figure 16 shows a comparative level of tax-ratios in the SADC region. Distinctively, Lesotho collected the highest levels of tax revenue in the aftermath of the global financial crisis of 2008/9.

Figure 16: Comparative levels of tax performance in SADC (2002-2016)



Source: Authors' calculations

Notably, since 2007 Lesotho has collected tax revenue which surpassed the regional mean for the period 2002-2016.

8.3 Model selection

The stochastic tax frontier used in this study follows the standard stochastic production frontier by Aigner et al. (1977). Although there are many functional forms for production functions, this study considered the Cobb-Douglas function and the Translog function as done by several other empirical as the models are considered to model reality better than other functional forms. The Log-likelihood test was conducted in order to choose between the Cobb-Douglas function (restricted model) and the Translog function (unrestricted model) against the null hypothesis that the restricted model is statistically better than the unrestricted model. Table 55 shows the results comparing the two models to ascertain the model that was more appropriate for the estimation.

Table 55: Log-likelihood test results

Likelihood ratio test	LR chi(20)	189.54
Assumption: model ₁ is nested in model ₂	Prob > chi2	0.0000

Source: Author's calculation

This study rejects the null hypothesis that the Cobb-Douglas function is more appropriate than the Translog function, hence the latter was adopted to estimate tax capacity and tax effort in the SADC over the period 2002-2016.

8.4 Diagnostic Tests

In order to use the most efficient method to assess tax capacity and tax effort in the SADC, numerous diagnostic tests were required to ensure that all estimated regressions are not biased and that clarity is made in substantiating the reasons for the selected method. Owing to some differences in tax systems alluded to in chapter two, this study assumes that the initial tax revenue levels across the sample vary and that the error terms also vary across countries and/or years. For this reason, this study is more concerned about whether the unobserved individual entity effects are stochastic rather than whether they are correlated with other explanatory variables. Nevertheless, it is statistically important to validate the presence of fixed effects or random effects in order to effectively choose the most appropriate estimation procedure that is commensurate with the nature of panel data collected (Park, 2011). In this regard, random and fixed effect estimators were tested using the Hausman test (Park, 2011).

8.4.1 Multicollinearity test

Based on the Condition Index (CI), the findings of this study suggest the presence of strong multicollinearity if a Translog function was used. Weak multicollinearity is suggested by a CI, which is below 5, while numbers between 30 and 100 suggest moderate multicollinearity. Lastly, strong multicollinearity is suggested by a CI of over 100. This is not surprising given the nature of the Translog function where other variables are derived as products of combinations of the four variables where weak multicollinearity is suggested. In order to deal with the problem, Yaguchi (1994) suggests either removing the highly correlated predictors from the model or the principal component analysis. However, neither of the proposed methods augments the purpose of analysis and interpretation that was required in this study as removing variables would lead to elimination of key determinants that explain tax capacity and tax effort in the SADC.

Fillipini (2012) argues that multicollinearity is irrelevant if the purpose of the model is to predict rather than to estimate the determinants of the dependent variable, and hence sometimes the problem is unsolvable. This scenario depicts the situation of this study as the Translog function exhibits gross multicollinearity. Fillipini (2012) states that while the Translog function has desirable attributes, it is more important to consider the objective of the study when choosing the functional form. Further, Fillipini (2012) asserts that it's more relevant to consider the quality and quantity of available data and computer resources available. Against this

background, this study negates the use of the Translog model because of the presence of strong multicollinearity. This augments the results in the section above.

Following the rejection of the Translog function, the results of the Cobb Douglas function suggests the absence of multicollinearity as shown in Table 56.

Table 56: Multicollinearity diagnostics

Variable	VIF	SQRT VIF	Tolerance	Squared
Tgdp	2.45	1.57	0.4074	0.5926
Pop	2.16	1.47	0.4630	0.5370
Fid	7.27	2.70	0.1375	0.8625
Infl	1.14	1.07	0.8781	0.1219
Corr	16.48	4.06	0.0607	0.9393
Pgdp	7.55	2.75	0.1325	0.8675
Open	2.14	1.46	0.4674	0.5326
Pol	4.11	2.03	0.2436	0.7564
Foraid	2.81	1.68	0.3557	0.6443
Gvtexp	1.35	1.16	0.7409	0.2591
Plcdebt	1.59	1.26	0.6299	0.3701
Geff	29.63	5.44	0.0338	0.9662
Sizshad	4.00	2.00	0.2502	0.7498
Mean VIF	6.36		Condition Number	37.1531

Source: Author's calculation

The results in Table 56 show relatively low figures of the VIF and Conditional index, suggesting limited potential of the threat of multicollinearity on the estimation of unbiased parameters.

8.4.2 Hausman test: Fixed effects versus Random effects

It tests whether the unique errors (u_i) are correlated with the regressors and thus the null hypothesis is that they are not. The p-value is not less than 0.05, hence, the study concluded that the random effects model is the most appropriate estimation technique. In this study fixed

effects are absent, hence the random effects model was preferred. Earlier intuition from the previous chapters is that there is heterogeneity in SADC cross sections and this is appreciated by the models used in estimating the country specific effects. Table 57 illustrates the findings from the Hausman test.

Table 57: Hausman Test Fixed effect model versus Random effect model

H ₀ : Random effects are preferred to Fixed effects	
chi2(1)	3.46
Prob>chi2	0.4840

Source: Author's calculation

The model of this study requires the use of random effects estimation since the p-values are not less than 0.05. In this regard the study failed to reject the null hypothesis that unique errors were correlated with regressors, hence, the random effects estimation model was chosen as the most appropriate in the assessment of tax capacity and tax effort in the SADC region.

8.4.3 Heteroskedasticity test

The test for heteroskedasticity is also important as it influences the choice of model and estimation method thereof. Table 58 shows the results are obtained from the Breusch Pagan test as follows:

Table 58: The Breusch Pagan/ Cook-Weisberg test for Heteroskedasticity

H ₀ : Constant variance Variables: fitted values of lntgdp	
Chi2 (1)	4.07
Prob>chi2	0.0438

Source: Authors' Calculation

Since the Chi-squared value is significant with p-value below the appropriate threshold ($p < 0.05$) therefore the null hypothesis of homoskedasticity is rejected and thus Heteroskedasticity is assumed.

8.4.4 Cameron & Trivedi's decomposition of IM-test

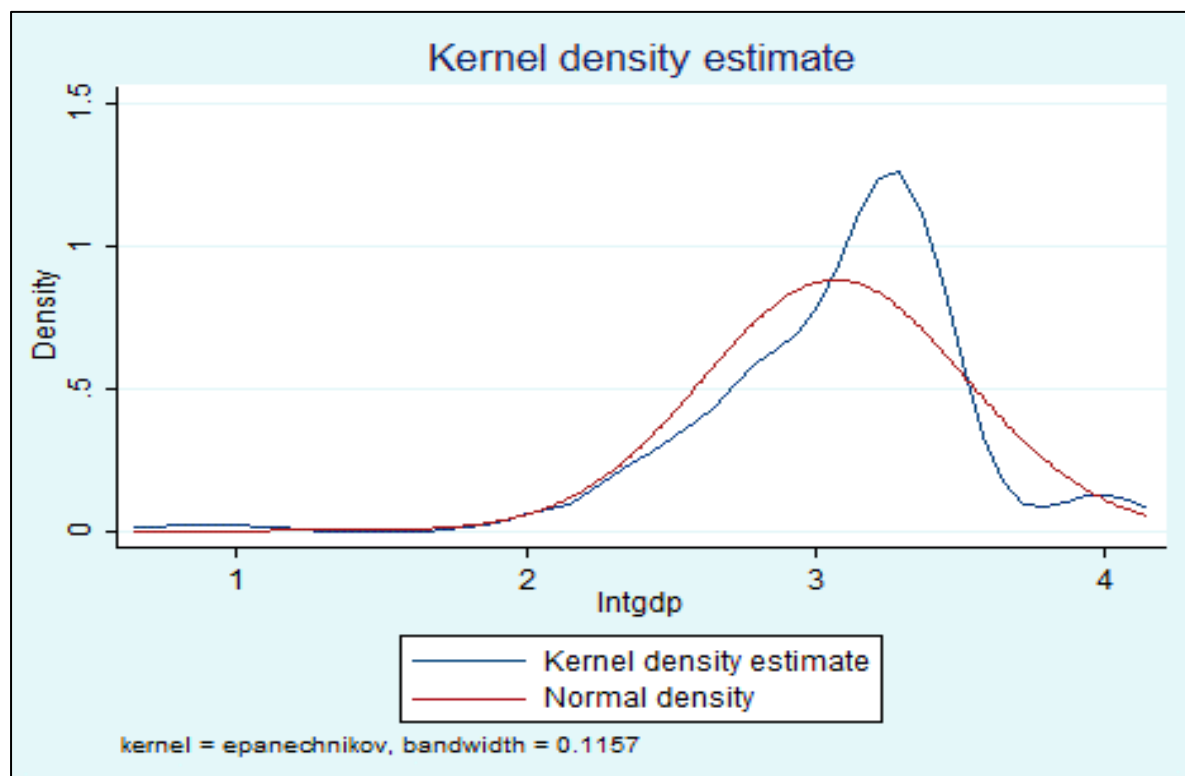
Table 59: Results for Heteroskedasticity, Skewness and Kurtosis

Source	chi2	df	P
Heteroskedasticity	140.89	20	0.0000
Skewness	20.66	5	0.0009
Kurtosis	0.05	1	0.8193
Total	161.60	26	0.0000

Source: Author's Calculation

Based on the p-value for skewness of 0.0009 and the p-value of heteroskedasticity, this study found these to be worrisome as indicators of skewness and heteroskedasticity. Therefore this study rejected the null hypothesis of homoscedasticity and concluded that a stochastic frontier approach was appropriate since the distribution of residuals was not normal. Further, the presence of skewness suits the use of distributional assumptions discussed in the previous chapter. However, it was necessary to ascertain further the nature of skewness in order to select the most appropriate distribution of residuals to fit in the model selected. In

Figure 17: Kernel density estimate



Source: Author's Calculation

In view of the need to ascertain the nature of skewness, this study used the Kernel density estimate to determine whether the residuals had negative or positive skewness. On the basis of the findings in Figure 17, this study concluded that the distribution of the residuals was negatively skewed, hence models that assume negative skewness were appropriate. This is discussed in the subsequent subsection.

8.4.5 Parametric distributional assumptions

From the previous subsection on skewness, it emerges that the distribution residuals is negatively skewed, hence appropriate parametric assumptions were required. This study made preference of the truncated-normal distribution over the half-normal distribution and the exponential distribution, because of its ability to accommodate two-parameters of tax effort. One of the limitations of the half normal distribution is that it does not accommodate heteroskedasticity in stochastic error term (v) and the predicted errors (u) since it assumes they are homoscedastic (Kumbhakar et al., 2015). Further, the half-normal distribution tends to be inherently restrictive as it a zero mode and clusters observations close to full efficiency (Kumbhakar et al., 2015). Nevertheless, the results in section 8.4.3 show that the composite error term is in fact heteroskedastic and thus making the half-normal distribution inappropriate. Kumbhakar et al. (2015) argue that ignoring heteroskedasticity in v_{it} leads to biased estimates of tax effort. Additionally, ignoring heteroskedasticity in u_{it} results in biased estimates of both parameters and tax effort (Kumbhakar et al., 2015). In this regard, this study adopted the truncated-normal distribution which allows for heteroskedasticity and permits robust standard errors to be obtained.

8.4.6 Test for cross sectional dependence/contemporaneous correlation

Cross-sectional dependence is more of an issue in macro-panels with long time series. However, literature posits that if $T > 30$ then Breusch-Pagan test for independence will be more appropriate. Further, if $T < 30$ then alternative methods will be better and these include the Perasan's CD test, Friedman's test and the Frees' test. Nonetheless in this study, $T < 30$, hence the study used the *xtcsd* command after *xtreg* in STATA to test for cross sectional dependence using Frees' test as it permits the use of unbalanced data. Table 60 presents the findings and the null hypothesis which states that residuals across entities are not correlated.

Table 60: Frees' test for cross sectional dependence

Frees' test of cross sectional independence = 0.952
Critical values from Frees' Q distribution
alpha = 0.10 : 0.2559
alpha = 0.05 : 0.3429
alpha = 0.01 : 0.5198
Average absolute value of the off-diagonal elements = 0.352

Source: Author's Calculation

The results suggest the presence of cross sectional in the SADC since the average absolute correlation is 0.352. Further, Frees' statistic at all the levels of alpha provided is greater hence the study rejected the null hypothesis that there is cross sectional independence and concluded that there is cross sectional dependence in the SADC. This result augments the notion that South Africa is visibly dominant in both the politics and economy of the SADC, hence, all member states in the region depend on it as well as on each other as evidenced in SACU states.

8.4.7 Panel unit root test

The results of Fisher's test for panel unit root are provided in Table 61 where the null hypothesis states that all series have unit root. Although there are four tests under the Fisher's test Choi (2001) recommends the use of the inverse normal Z statistic as it offers the best trade-off between size and power.

Table 61: Results of Fisher's panel unit root test

Variable	Inverse of Z p-value	Order of Integration	Options
Lntgdp	0.0000	I (0)	drift
Lnpop	0.0000	1 (0)	-
Lnfid	0.0000	1 (0)	drift
Lnpgdp	0.0000	1 (0)	drift
Lnopen	0.0000	1 (0)	drift
Lnforaid	0.0000	1 (0)	drift
Pol	0.0000	1 (0)	drift
Corr	0.0000	1 (0)	drift
Infl	0.0000	1 (0)	drift
Geff	0.0049	1 (0)	trend

Source: Author's calculation

This study rejects the null hypothesis that all the panels contain unit root. This is based on the significance of the p-values which are less than the 0.05 level, hence, the study concludes that all the variables are stationary at level. However, since the series are I(0), they cannot be

cointegrated, suggesting that there is no stable long-run relationship between the variables. Further, this allowed the study to go directly into regression of the Stochastic Tax Frontier since all the series were stationary without differencing.

8.5 Estimation of Tax capacity and Tax effort in the SADC region

This study adopted a similar method to that of Heshmati et al. (2018) which involves a multi-step procedure described in Kumbhakar et al. (2014). In this regard, this study followed the guide provided by Kumbhakar, Wang & Horncastle (2015) on how to perform stochastic frontier analysis in STATA, leading to the subsequent stages described in the subsections that follow.

8.5.1 Step 1: Estimation of parameters for tax capacity and random individual effects

In order to estimate equation (5), the equation was rewritten as follows:

$$Y_{it} = \beta_0 + \theta_i + \beta \mathbf{x}_{it} - \tau_i + v_{it} - u_{it} \quad (12)$$

Given equation (12), the first step was to estimate the parameters for tax capacity in the SADC using a random effects model to obtain an efficient estimate of β and the time-invariant components β_0 and θ_i .

The estimation of a log-log regression yields coefficients that are interpreted as elasticities in the tax frontier employed in this study. Table 62 provides the estimates of the Cobb- Douglas tax function. In general, the results in Table 62 confirm the standing of similar findings obtained by the standard approach used to assess tax revenue performance. Notably, urban population, financial deepening, per capita GDP and openness are statistically significant in explaining tax capacity in the SADC as indicated by p-values of less than 0.05 level of significance.

Another alternative way to evaluate the statistical significance of estimated parameters is to follow the rule of thumb, which stipulates that the modulus of the Z-statistic should be greater than 1.96. In this regard, irrespective of the use of different econometric estimation methods, it appears that this does not lead to different interpretations of the role played by the determinants of tax performance (Cyan et al., 2013).

Table 62: Results for the estimation of tax capacity

Lntgdp	Coefficient	Standard. Error.	Z	P>Z	[95% Confidence Interval]	
Tax Frontier						
Lnpop	0.0172615	0.0480296	0.36	0.719	-0.0768749	0.1113979
Lnfid	0.2695782	0.0347335	7.76***	0.000	0.2015018	0.3376546
Lnpgdp	0.1657211	0.0259864	6.38***	0.000	0.1147887	0.2166534
Lnopen	0.2933887	0.0309024	9.49***	0.000	0.232821	0.3539564
Lnforaid	-0.0028998	0.0121816	-0.24	0.812	-0.0267754	0.0209758
_cons	-0.1833979	0.190604	-0.96	0.336	-0.5569749	0.1901791
Determinants of Tax effort						
Mu						
Pol	0.5354948	0.5927825	0.90	0.366	-0.6263376	1.697327
Corr	-2.83914	1.674065	-1.70*	0.090	-6.120248	0.4419666
Infl	9.24e-09	3.50e-09	2.64***	0.008	2.37e-09	1.61e-08
Geff	-0.5274294	1.07867	-0.49	0.625	-2.641585	1.586726
_cons	-3.854953	2.605358	-1.48	0.139	-8.961361	1.251455
Variance of tax effort component						
Usigma						
_cons	-0.9636224	0.6177428	-1.56	0.119	-2.174376	0.2471312
Variance of the idiosyncratic error component						
Vsigma						
_cons	-6.09982	0.4082406	-14.94	0.000	-6.899956	-5.299683
Variance of the random effect component						
Theta						
_cons	0.2865696	0.0103834	27.60	0.000	0.2662185	0.3069208
sigma_u	0.6176637	0.1907786	3.24	0.001	0.3371633	1.131524
sigma_v	0.0473632	0.0096678	4.90	0.000	0.0317463	0.0706624
Lambda	13.04101	0.1891037	68.96	0.000	12.67037	13.41164

Significant at 1% (***), 5% (**), 10% (*)

Source: Author's calculation

Mu represents the mean of the truncated-normal distribution in terms of a linear function of covariates defined by inflation, corruption, government effectiveness and political stability.

Usigma specifies tax effort as heteroskedastic while vsigma specifies the idiosyncratic error as heteroskedastic. This was done to control for heteroskedasticity observed when diagnostic tests were carried out.

a) Tax Frontier estimates

From the five possible determinants of tax capacity selected in this study, only three were significant and positive, while the other two variable were insignificant. The decision over the statistical significance of the explanatory variables was made by making use of p-values and the z-scores using the 0.05 level of significance. Nonetheless, the study also considered the 0.01 level of significance as well as the 0.1 level of significance. Financial deepening, economic development and trade openness were found to be significant while urban population and foreign aid were found to be insignificant.

Financial deepening

If financial deepening is increased by one percent, it is expected that tax revenue will increase by 0.2695 percent. Ndiaye and Korsu (2014) obtained a similar result and conclude that financial deepening is a key driver of tax revenue. When a country's financial sector is developed, this permits the flow of credit to productive activities thereby increasing the incomes of businesses and individuals. This tends to widen the tax net and tax base. In this regard, Ndiaye and Korsu (2014) suggest that increasing the degree of monetization makes it easier to collect taxes and increase tax revenue.

Economic development

A one percent change in per capita is expected to increase tax revenue by 0.1657 percent. Steenekamp (2007) asserts that the level of development is a critical factor for governments to raise adequate revenue to finance public spending as rising per capita incomes tend to drive urbanization and non-agricultural activities (Besley and Persson, 2013). This in turn means that more economic activities will fall in the formal sector facing increased exposure to observation by government (Besley and Persson, 2013). The findings are consistent with the greater part of empirical evidence on the determinants of tax revenue performance outlined in chapter six.

Trade Openness

Increasing openness by one percent is expected to yield an increase in tax revenue 0.2934 percent. In the wake of globalization, many economies have increasingly liberalized trade. Literature considers the international trade sector in developing countries to be the most

monetized sector of the economy. A considerable number of studies suggest that openness has a positive impact on the tax revenue to GDP ratio (Stotsky and WoldeMariam, 1997; Ghura, 1998; Tanzi and Zee, 2001; Agbeyegbe *et al.*, 2004 and Addison and Levin, 2012). Conversely, Imam and Jacobs (2007) and Bird *et al.*, (2008) suggest a negative relationship while Karagöz (2013) argues that this result could be because only a few taxes are directly affected by openness.

Although some studies have found the size of the population and foreign aid to be important in explaining tax revenue performance, the findings of this study indicate otherwise.

b) Random-effects component

The random effect component measures the difference between the average tax revenue in each SADC member state and the regional average score of tax revenue. Table 63 shows the summary of the random-effects component in the SADC after estimating equation (12). The random-effects component controls for unobserved heterogeneity often unaccounted for in the standard approach. From Table 62, the constant of the variance of the random effects component was statistically significant.

Table 63: Summary for estimated random-effects component in the SADC (2002-2016)

Variable	Mean	Standard deviation	Min	Max
Random Effect	3.420387	0.3991832	2.557146	4.156366

Source: Author’s calculation

The mean for the random-effects component in the SADC is 3.420387, however, there is huge dispersion in the region as indicated by the difference between the minimum and maximum values and the average deviation of 0.3991832.

Step 2: Estimation of transient tax effort/efficiency

The second step involves estimating transient tax effort u_{it} through the predicted values of e_{it} . The study employed the standard stochastic frontier approach using the Battese and Coelli (1988) approach to obtain estimator to obtain the predicted value of time varying residual technical efficiency $[\exp(u_{it}|e_{it})]$. The assumption made was that $v_{it} \sim N(0, \sigma_v^2)$ and $u_{it} \sim N_+(0, \sigma_u^2)$.

The method used to estimate the determinants of tax effort results in estimates whose magnitude is of limited relevance because $E[u_i|z_i]$ is nonlinear in z , hence, the slopes the estimates of z_i are not the same as the marginal effects of z_i (Kumbhakar et al., (2017)). Regarding the different parametric distributions, Kumbhakar et al. (2017) suggest that when the truncated normal distribution is assumed, the sign of the coefficient of any determinant of tax effort does not always imply that it will be the direct impact of z_i on tax effort. Kumbhakar et al. (2017) therefore suggest that caution must be exercised not to directly interpret the impact of the determinants of tax effort purely, based on the signs of the coefficients. Kumbhakar et al. (2017) asserts that concise statistics like the average partial effect (APE) or the partial effect of the average (PEA) can be used, although caution is essential. Nevertheless, this thesis elected not to give estimates of the marginal effects.

In this regard, this study takes cognizance of the notions raised by Kumbhakar et al. (2017) and thus reports both the signs of the coefficients and marginal effects of the determinates of tax effort in the SADC. Table 64 shows the regression results for transient tax effort, while Figure 18 shows graphs by country of transient tax effort in the SADC. In this case, the transient estimated efficiency scores are not affected by unobserved heterogeneity.

Table 64: Summary of transient tax effort in tax systems of the SADC

Variable	Mean	Standard deviation	Min	Max
TE	0.7060952	0.2173386	0.1368432	0.9968731

Note: TE (bc) refers to transient tax effort that was obtained Battese and Coelli (1988).

Source: Author’s calculation

The mean score of tax efficiency in the SADC is 0.7060952 based on the Battese and Coelli (1988) approach. This suggests that there was about 70.61% tax effort towards the attainment of maximum or potential tax revenue, hence SADC operates at an average of about 70.61%. In this regard, an additional 29.39% of tax effort is required to get to maximum tax revenue in the region. The results show a minimum transient tax effort score of 0.1368 and a maximum score of 0.9969, while the average deviation from the mean transient tax effort is about 21.73%. The range of 0.86003 suggestive of the existence of wide variation in the level of tax effort in the SADC.

In view of the need for tax cooperation and tax coordination in the SADC, the range of transient tax effort is indicative of great dispersion among member states. Although tax policy is a key

instrument that can be used to tune tax effort towards the attainment of potential revenues, the effort in member states is pitched at different levels. It is likely that tax policy coordination will be stalled as other countries have very low levels of tax effort.

The study estimated the determinants of mean tax effort where tax effort was modeled against four independent variables, which include political stability, corruption, inflation and government effectiveness. The p-values of corruption and inflation indicate that the variables are statistically significant in explaining changes in tax effort at the 0.1 level of significance and 0.05 level of significance respectively.

Corruption

A unit increase in corruption is expected to reduce tax effort by 2.8391 and this is consistent with the findings of Fenochietto and Pessino (2013), Cyan et al. (2013) Langford and Ohlenburg (2015).

The adverse effects of corruption may reduce the efficiency of tax systems through policy decisions and the administration of taxes (Langford and Ohlenburg, 2015). In the former, corruption may be infested in the political system where political interest overrides economic reasoning and hence as long as the desire to tax is not aligned with the need for political survival, political dominance and political legitimacy, then less effort would be exerted in raising potential tax revenues. On the other hand, designing taxes appropriately is critical in view of the environment in which taxation occurs. Rampant corruption may increase inequalities as corrupt political figures may recuse themselves from paying taxes, as such tax morale is likely to decline leading to tax avoidance and tax evasion. Ajaz and Ahmad (2010) describe corruption in tax administration as one of the institutional problems affecting the process of tax revenue generation. Notably, corruption is as social issue seems to be relatively easier to deal with than the complications of restructuring tax handles. According to Besley and Persson (2013) if political turnover is considerable then corruption may hinder the process of building effective tax systems. Bird et al. (2008) suggest that it is possible that developing countries fail to meet their tax revenue needs because those who dominate political institutions may not be willing to increase taxes. In this regard, Bird et al. (2008), Ajaz, and Ahmad (2010) hypothesize that if taxpayers feel that their country is rampant with corruption, and then there is increased likelihood of not complying with tax obligations. This in turn will result in declining tax revenues. Several empirical studies suggest that corruption negatively affects tax

revenue generation in developing countries (Gupta, 2007; Imam and Jacob 2007 and Ajaz and Ahmad, 2010).

Corruption affects the quality of governance and thus is likely to influence tax effort negatively as expected. Notably, Slemrod (2016) contends that assessing the effect of corruption on tax systems in developing countries is important as bureaucratic organizations have the capacity to reduce the effectiveness of public policy. In this regard, Cyan et al. (2013) suggest that corruption may limit tax effort by increasing the effective tax on tax payers due to unobserved payments being charged on tax and yet they do not find their way into public finance accounts. However, this is likely to motivate a further reduction in taxes if the payment for corruption fall short of the amount required as tax. Additionally, Cyan et al. (2013) posit that tax policy decisions like an increase in the tax rate can result in increased bargaining power being handed over to tax collectors, hence increased corruption permits the loss of potential tax revenue.

Inflation

The results show a positive relationship between inflation and tax effort as a unit increase in inflation is expected to yield a $9.24e-09$ increase in tax effort.

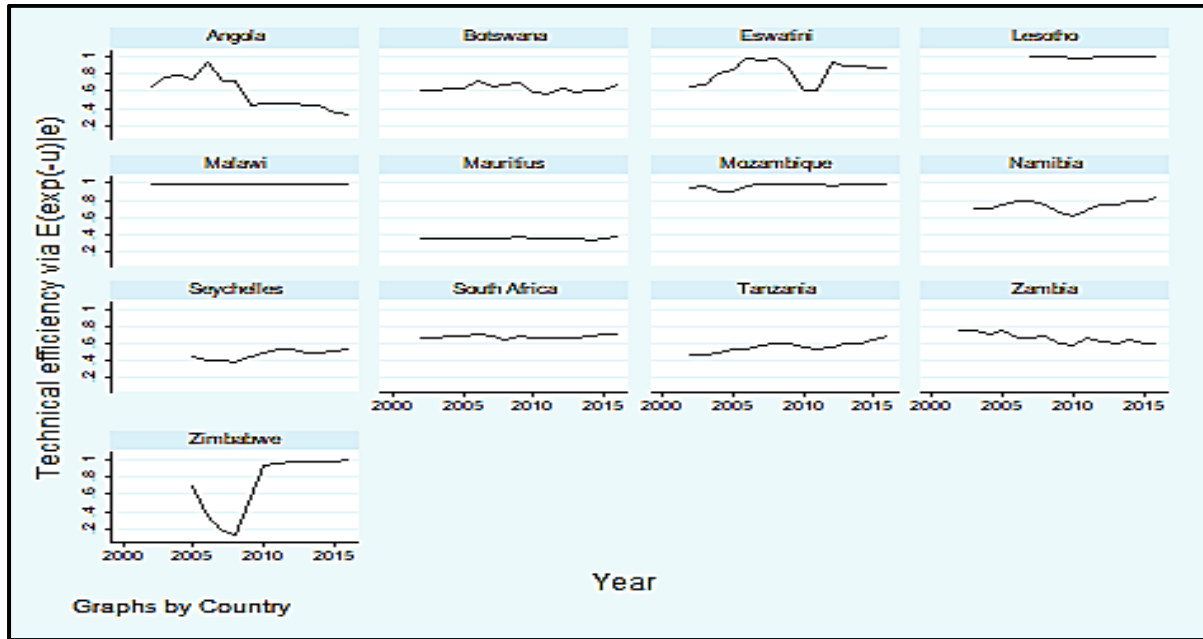
Fenochietto and Pessino (2013) assert that inflation decreases tax effort, meaning that increased levels of inflation move tax effort downward or increase tax effort in tax collection. Similarly, Ciro, Camilo & de Mendonça (2016) argue that inflation targeting can improve the reputation of central banks in improving tax capacity use. This is contradictory to the findings of this study probably because the average inflation for the region was raised by high inflation in some individual countries like Zimbabwe. However, as noted from chapter 2, the SADC region has not performed as expected in meeting the target of 3-7% of inflation. In this regard, member states may be exerting more effort towards taxation in view of compensating for the loss of real value of their tax collections, through raising more revenue.

However, political stability and government effectiveness were found to be statistically insignificant in explaining tax effort in the SADC.

Since transient tax effort relates to tax effort in the short-run, it means that tax effort can be adjusted over time without making major tax policy changes (Baduneko and Kumbhakar, 2016). In this regard, it would imply that if tax effort is limited in one particular year it is most likely that a particular event of corruption or inflation would have stimulated the change but it would not mean it would happen again in the same year in the period that follows.

While most of the countries have tax effort which is above 50 percent over the period 2002-2016, Zimbabwe was below average for the greater part of the period prior to 2010. Notably, Figure 18, suggests Malawi and Lesotho have somewhat achieved consistent and high levels of tax effort during the period of analysis.

Figure 18: Transient tax effort of tax systems in the SADC (2002-2016)



Note: Tax effort in Figure 18 is based on the Battese and Coelli (1988) approach

Source: Author's calculation

8.5.2 Step 3: Estimation of persistent tax effort

The third step involves estimating persistent tax effort τ_i through the predicted values of α_i . The study used the standard stochastic frontier approach and the Jondrow et al. (1982) while assuming that $\theta_i \sim N(0, \sigma_\theta^2)$ and $\tau_i \sim N(0, \sigma_\tau^2)$. Table 65 shows the summary of persistent tax effort.

Table 65: Summary of persistent tax effort

Variable	Mean	Standard deviation	Min	Max
PTE	0.133524	0.0914642	0.1033575	1

Source: Author's calculation

The mean score of persistent tax effort is about 13.35%. On average, SADC countries fall short of attaining full tax capacity or their tax frontiers by 86.65% in the long-run. The maximum

value of persistent tax effort is one while the minimum value is 0.1034. In addition, the average deviation is relatively low at about 9.14% indicating that the variation in the persistent efficiency in the SADC is relatively low. High persistent tax effort would mean that a country is expected to operate such a tax system over time with those inefficiencies unless some major changes are undertaken. In this regard, high levels of persistent tax effort should be of concern to tax policymakers because of the persistence (Baduneko and Kumbhakar et al., 2016).

Figure 19 shows persistent tax effort in member states of the SADC over the period 2002-2016. This study therefore finds it unnecessary to advocate reorientation and restructuring of tax systems in the region as the experiences low persistent tax effort. Figure 19 shows graphs by country with regards to their respective persistent tax effort. Since it does not change overtime, if a country wants to improve efficiency then some fundamental changes are needed in tax policy or tax administration. Prior to the period 2010, Zimbabwe had a sharp increase in persistent tax effort, which would have called for tax policymakers to review the tax system and consider options to reorient or restructure. However in the aftermath of 2010, persistent tax effort began to decline and relatively lower, consistent and comparable with other SADC member states.

Figure 19: Persistent tax effort of tax systems in the SADC (2002-2016)



Source: Author's calculation

Heshmati et al. (2018) suggest that lower persistent tax effort is expected if heterogeneity is separated from persistent tax effort. This assertion is consistent with the findings of this study

as it separated heterogeneity from persistent tax effort. In addition, Baduneko and Kumbhakar (2016) argue that as long as the level of persistent tax effort is similar among panels then the overall value will be low.

8.5.3 Summary of Tax effort in the SADC (2002-2016)

The tax effort index is the ratio of the actual tax-GDP ratio over that estimated tax-GDP ratio. Table 66 shows the overall tax effort of SADC tax systems. Persistent tax effort is low and has lower dispersion, while transient tax effort is high with considerable dispersion of about 21.73%. Overall, the mean tax effort is 0.08.

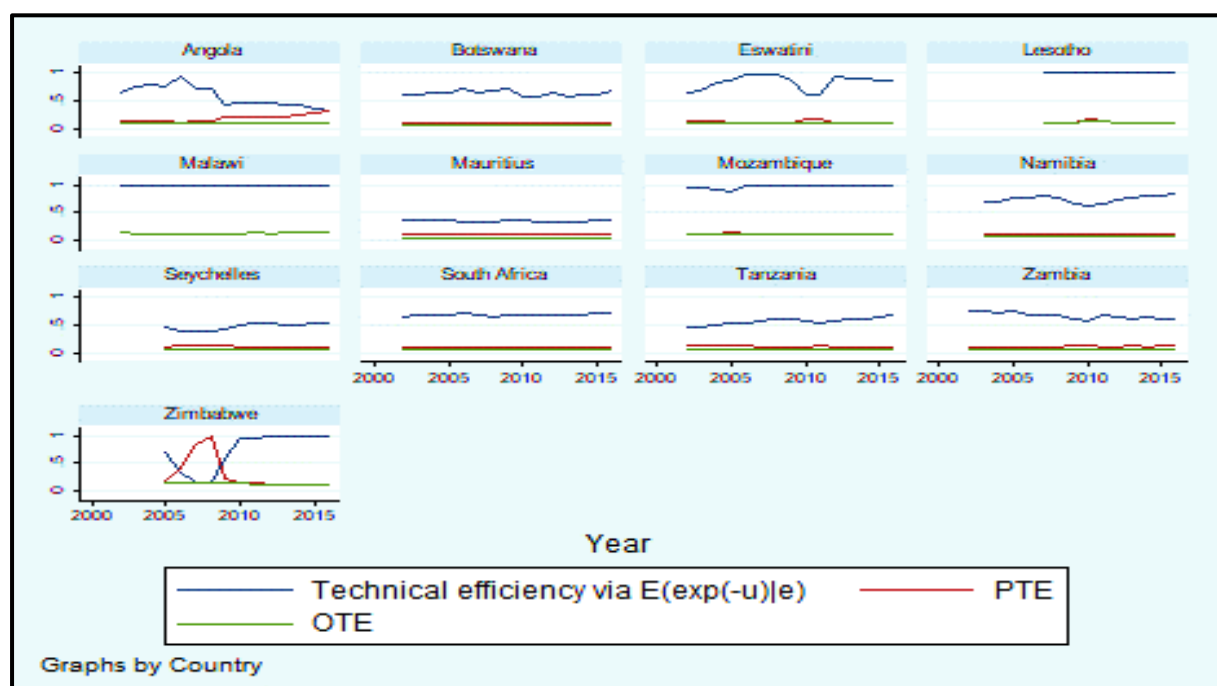
Table 66: Overall tax effort in tax systems of the SADC (2002-2016)

Variable	Obs	Mean	Standard. Deviation	Min	Max
Transient	182	0.7060952	0.2173386	0.1368432	0.9968731
PTE	182	0.133524	0.0914642	0.1033575	1
OTE	182	0.0875422	0.0283364	0.0371725	0.1599946

Source: Author's calculation

Figure 20 shows the overall state of tax effort in the SADC over the period 2002-2016.

Figure 20: Tax effort in the SADC (2002-2016)



Source: Authors' calculation

According to Heshmati et al. (2018), there is a trade-off between high levels of tax effort and the dispersion of tax effort. The higher the levels of tax effort are, the closer it is to the tax frontier, hence lower dispersion.

Had the study not disentangled heterogeneity, persistent tax effort and transient tax effort in the SADC, Table 67 shows the results that would have been obtained for tax effort estimates in the SADC and the rankings of member states.

Table 67: Average tax-to-GDP ratio, estimated tax capacity and estimated tax effort ²³

Country	Average tax-to GDP ratio	Estimated tax capacity	Estimated tax effort	Rank in the SADC region ²⁴
Angola	19.06%	23.60%	0.81	9
Botswana	25.20%	26.15%	0.96	7
Eswatini	27.01%	21.15%	1.28	3
Lesotho	50.63%	21.94%	2.31	1
Malawi	22.95%	16.07%	1.43	2
Mauritius	18.15%	29.11%	0.62	12
Mozambique	25.23%	20.00%	1.26	4
Namibia	28.71%	25.63%	1.12	5
Seychelles	27.67%	31.43%	0.88	10
South Africa	26.85%	26.53%	1.01	6
Tanzania	10.77%	17.64%	0.61	13
Zambia	14.64%	19.48%	0.75	11
Zimbabwe	18.05%	19.01%	0.95	8
SADC	24.22%	22.90%	1.06	

Source: Author's calculation

²³ In the absence of disentangling the error term, Table 67 shows what the estimated tax effort would have been.

²⁴ Rank according to the highest tax effort.

This study therefore concurs with Brun and Diakite (2016) that some methodologies tend to overestimate or underestimate tax effort. Table 68 shows the estimated persistent, transient and overall tax effort in the SADC over the period 2002-2016.

Table 68: Estimated persistent tax effort, estimated transient tax effort and overall tax effort in the SADC (2002-2016)

Rank in the SADC region ²⁵	Country	Transient Tax effort	Persistent Tax effort	Tax effort
1	Zimbabwe	0.73	0.3090	0.13
2	Malawi	0.991	0.1300	0.13
3	Lesotho	0.995	0.1165	0.12
4	Mozambique	0.97	0.1171	0.11
5	Eswatini	0.83	0.1262	0.102
6	Angola	0.58	0.188	0.1
6	Zambia	0.66	0.1151	0.08
8	Namibia	0.74	0.1102	0.08
9	South Africa	0.68	0.1070	0.073
10	Botswana	0.63	0.1079	0.07
11	Tanzania	0.57	0.1191	0.067
12	Seychelles	0.47	0.1154	0.05
13	Mauritius	0.36	0.1063	0.04
	SADC	0.71	0.13	0.08

Source: Authors' calculation from estimated stochastic tax frontier estimates

The findings indicate low persistent tax effort relative to transient tax effort among SADC countries. Since persistent tax effort is more concerned about tax policy while transient tax effort relates to tax administration issues, this study notes that there is dire need to address long term tax effort in the SADC through reorientation or restructuring of tax systems as a way of moving closer to attaining maximum tax capacity. Overall tax effort was found to be relatively low in the region due to the low levels of persistent tax effort. Assuming the regional average

²⁵ Since transient tax effort is concerned with tax administration while persistent tax effort is concerned with tax policy, the ranking in this study is based on the latter.

as the benchmark for tax collection and 1 as the benchmark for tax effort, all SADC countries have low tax effort. In relation to tax collections Tanzania, Zambia, Zimbabwe, Mauritius, Angola and Malawi have low tax collections, while, Botswana, Mozambique, South Africa, Eswatini, Seychelles, Namibia and Lesotho have high tax collections in the respective order.

8.8 Narrative record of major legislated tax changes in the SADC (2002-2016)

8.8.1 Background

Romer and Romer (2010) argue that it is difficult to measure the effects of aggregated tax changes because of the existence of correlation between economic developments and some of the determinants of tax changes. Hence, the output of regression analysis is believed to involve a pervasive omitted variable that captures both legislated tax changes (Romer and Romer, 2010). Notably, motivation for instituting tax changes may lie beyond the primary objective of taxation (that is raising revenue). Therefore, this thesis was cognisant of the need to bring insight into the omitted variable focusing on legislated tax changes and how they may aid to explain tax capacity and tax effort in the SADC.

This section provides the narrative record of major tax changes that were legislated in the SADC over the period 2002-2016. The study made use of tax reform studies and primary documents produced by policymakers, specifically, national budget statements and parliamentary reports. The study sought to identify legislated tax changes as well as identifying the motivation of each change for all major tax policy actions over the period 2002-2016. Since Romer and Romer (2010) suggest that using control variables of broad measures of tax changes is insufficient to explain the effects of tax policy; this thesis provides a narrative record to complement the output of the regression analysis. In a similar manner to Romer and Romer (2010), this study considers major tax legislated changes as those that received more than incidental mention in the primary documents used in this analysis. Most importantly, the findings indicate that each major tax change was motivated by a clearly identifiable reason. This study expected that it would be prudent to have tax changes classified as either endogenous or exogenous, since, the former has practical implications on the conduct of tax policy (within the control of policymakers).

8.8.2 Major legislated tax changes in the SADC (2002-2016)

Table 69 shows a summary of legislated tax changes that occurred in SADC member states over the period 2002-2016. In view of the primary goal of raising tax revenue or additional

revenue, the central focus of the narrative analysis was to establish notable tax legislative changes that occurred in the SADC. As such, this study focuses on legislative changes that had a potential effect on the tax base, tax rate and tax structure of SADC countries as key elements affected by tax policy.

Table 69: Major Legislated tax changes in the SADC (2002-2016)

Country	Major Changes in Tax Legislation
Angola	<ol style="list-style-type: none"> 1. Petroleum taxation law –Law No.13/04 (24 December 2004) 2. Consumption tax –Presidential legislative decree No.7/11 (30 December 2011) 3. Withholding Industrial Tax rates (Effective 1 January 2015)
Botswana	<ol style="list-style-type: none"> 1. Introduction of VAT (April 2002) 2. Value-Added Tax Amendment Act (2010) 3. Income Tax Amendment Act (2011) 4. Income Tax Amendment Act (2012)
Eswatini	<ol style="list-style-type: none"> 1. Foreign Account Tax Compliance Act (2010) 2. Value-Added Tax Act (2011)
Lesotho	<ol style="list-style-type: none"> 1. Value Added Tax (Amendment) Act No. 6 of 2003 2. Income Tax (Amendment) Act, 2014
Malawi	<ol style="list-style-type: none"> 1. Value Added Tax (2005) 2. Taxation Act (2006) 3. Taxation (Amendment) Act 2016
Mauritius	<ol style="list-style-type: none"> 1. Several amendments were made to the Income Act, Value Added Tax Act and the Customs Tariff Act.
Mozambique	<ol style="list-style-type: none"> 1. Personal Income Tax (IRPS) decree 21/2002; Corporate Income Tax (IRPC) decree 21/2002 2. Customs Law 3/2007 3. Simplified Tax for small contributors (2009) 4. Value Added Tax Code, approved by Law no. 32/2007; Corporate Income Tax Code, approved by Law no. 34/2007; Personal Income Tax Code, approved by Law 33/2007
Namibia	<ol style="list-style-type: none"> 1. 5% non-diamond mining royalty tax in 2004 2. Export Levy Act, 2016
Tanzania	<ol style="list-style-type: none"> 1. Income Tax Act, 2004 2. Value-Added Tax, 2014
Seychelles	<ol style="list-style-type: none"> 1. Goods and services Regulation Act 2003 2. Business Tax Act 2009; Excise Tax Act 2009 3. VAT 2010 4. Seychelles Petroleum Tax Act 2008 5. Corporate Social Responsibility Tax 17, 2013; Tourism Marketing Tax, 2013
Zambia	<ol style="list-style-type: none"> 1. Customs and Excise (Amendment) Act No.2 2009

Source: Authors' own compilation

Angola

The Law of Taxation on Petroleum Activities (Law 13/2004) is one of the most important forms of legislation that governs the taxation of oil and gas operations in Angola, as it defines costs, deductions, tax charges and taxable income (Adedayo, 2006; Marques n.d). Since Angola is among the top oil and gas producing countries in Africa it is not surprising that the country is heavily dependent on these resources for revenue generation (Adedayo, 2006). In this regard, the fiscal system of Angola is structured to generate high tax revenue.

The motivation behind the enactment of the Law of Taxation on Petroleum Activities was to organize the different tax regimes that were previously found in different pieces of legislation. In addition, the law aimed at making taxation much fairer and more uniform for taxpayers affected by it. The law applied to “all entities, whether Angolan or foreign, performing petroleum operations in Angolan territory, as well as in other territorial or international areas within the tax levying jurisdiction” (The Petroleum Taxation Law, 2004: Article 3). More specifically, the law on taxation of Petroleum activities determines the kind of tax regime applied to oil activities in Angola. Tax charges in this category include oil production tax, oil income tax, oil trading tax, surface training and the contribution to staff training (Marques n.d). It is important to note therefore that each tax has a distinct contribution base and incidence, meanwhile, the tax applies to entities that are involved in oil activities regardless of whether they are established in Angola or not.

According to Fjeldstad, Jensen and Paulo (2014) tax reform in Angola after 2010 aimed at increasing non-oil tax revenue by broadening the tax base, rationalizing tax incentives, increasing control with voluntary tax payments and fighting tax evasion (Fjeldstad, Jensen and Orre, 2012). Fjeldstad et al. (2014) suggest that there were huge delays in implementing legislative tax reforms, hence, despite improved tax administration, poor tax design essentially affected the tax system of Angola, as it largely remained inefficient and outdated. Notably, in 2011 the Council of Ministers approved updates on the General Tax Code, the Code of Tax Procedure and the Tax Collection Enforcement Code because the old ones were outdated and irrelevant to practice. It is important to note that although it was expected that the revised tax codes would be implemented by 2012, there were delays on the legislative front due to the absence of strong political support (Fjeldstad et al. (2014). In addition, laws on PIT and the Industrial Tax remained under preparation for two years due to delays in the legislative front. In this regard, Fjeldstad et al. (2014) affirm that tax reform in Angola was derailed by the

political economy and the closed-circle approaches to policymaking. Nevertheless, Fjeldstad et al. (2014) are of the opinion that the tenets of a good tax system are somewhat lacking in the tax system of Angola, especially given the limited room for stakeholder consultation. Fjeldstad et al. (2012) contend that despite the obsolete nature of the tax system that called for tax reform, there were indications that colonial legacies still played an important role. Additionally, Fjeldstad et al. (2012) assert that due to the wide fiscal non-oil deficit in 2011 of 23.2 percent of GDP, there was need to raise more revenue as one of the major objectives of tax reform.

Miranda Firm (n.d) suggests that at the beginning of the new millennium, tax revenue from oil and gas constituted over 80 percent of state revenue, hence government sought to reduce this dependency by instituting tax reforms that would see contributions rising from other forms of taxes outside oil and gas operations. Some of the notable legislated tax changes are highlighted in Table 69.

Although Angola set to adopt VAT in 2019 as part of its reforms on the Consumption Tax and related legislation, this study considers the role of the Consumption Tax enacted through the presidential decree in 2011. The major objective was to broaden the scope of Consumption Tax by including additional taxable events such as consultancy services, lease of machinery and works on property among others (Miranda Firm n.d). The major purpose of the decree on Consumption tax was to enforce that resident companies supplying taxable services to oil had to assess consumption tax. However, one of the main drawbacks was that oil companies would then be required to pay the net value of the service and set aside the consumption tax to remit to government (Miranda firm n.d). Notwithstanding this, gross concerns were raised over the role that Consumption tax would have on already existing exemptions made to petroleum activities. Hence, another presidential decree was made in October 2014 on Consumption tax to consolidate regulations and to factor in concerns raised on exemptions and the payment of the tax, leading to the removal of certain services (Miranda n.d). In the Consumption Tax Act of 2014, it became clearer who was subject to Consumption Tax, the duties to assess and pay the tax and the chances of having the burden being transferred to third parties. Further, a wide range of exemptions are offered especially where production becomes unfeasible due to the burden of the tax (Miranda n.d).

Marques (n.d: 16) suggests that Law n.17/14 of October 2014 “provides that certain services provided to Angolan entities by residents or non-residents are subject to withholding industrial tax at the rate of 6.5% levied on the services value.” Although oil companies are not subject to

the Industrial Withholding Tax, the law plays a role through its impact on oil companies and contractors of oil companies (Miranda n.d). The previously existing tax rates of 5.25 percent and 3.5 percent were replaced by a single rate of 6.5 percent effective from 1 January 2015.

Botswana

According to Ndlovu (2016) the level of development in Botswana, coupled with growing population put government expenditure under pressure, hence necessitating the need to move to other forms of taxation. One of the major tax changes in Botswana over the period 2002-2016 include the introduction of VAT in April 2002, replacing the Sales Tax. Notably, several exemptions were made to certain financial services, medical services and education. Botswana's VAT was legislated by the Value- Added Tax Act 2002, while the Value-Added Tax Amendment Act of 2010 resulted in the increase in the VAT rate from 10 percent to 12 percent and the inclusion of zero rating on certain basic food items to alleviate the burden of indirect tax on the poor. Further, in 2015, another important amendment was made to reduce the burden of indirect taxation on the poor, hence zero –rating was introduced on certain basic foods (Ndlovu, 2016).

In view of the critical challenge of dwindling revenue from mining, Botswana set to renew its fiscal system by increasing its tax base, implementing technological advancements, enhancing tax administration and simplifying tax design. One of the most prominent tax changes since 2002 includes six amendments on the Botswana Income Tax Act, of 1995 (Ministry of Finance and Development Planning (MFDP), n.d). The amendments were in section 8, 21, 14 and 18. (See Income Tax Act, 1995) which included “the introduction of the individual taxpayer registration, which made it compulsory for every person with a taxable income over P36.000 to apply for a Tax Payer Identification Number and to submit an annual income tax return. It was expected that this legislation would enhance compliance and increase the total revenue” (Ndlovu, 2016: 18). Notably, the Income Tax Amendment Act of 2011 consequentially made Botswana's income tax system one of the lowest in the world because of the low PIT rates and CIT rates. The ultimate effect of the simplified tax system is evidenced by high tax compliance and low cost of administration. Significant tax reform occurred in Botswana over the period 1987-2015 (Ndlovu, 2016). Notably, Ndlovu (2016) contends that in comparison to Botswana's colonial tax state, the present day tax system of the country has transformed from being one of the most inefficient in Africa to one of the most efficient in Africa. Further, Ndlovu (2016) states that Botswana's tax system has made significant progress towards

achieving the four fundamental principles of taxation which include efficiency, effectiveness, accountability and transparency. Consequentially, tax revenues rose significantly (Ndlovu, 2016).

Eswatini

Eswatini undertook several reforms on its income tax, however, one of the most prominent being the reduction in the corporate tax rate from 30 percent to 27.5 percent over the period 2012-2017 (Ayoki, 2017). Notably, the reduction of the corporate tax rate initially dropped from 37.5 percent to 30 percent but the further reduction was due to the need to make it at par with the South African corporate tax rate (Ayoki, 2017). Some of the wide ranging reforms undertaken during 2001/2 were aimed at broadening the income tax base as well as shifting tax burden from direct taxes to indirect taxes (Ayoki, 2017). The Foreign Account Tax Compliance Act (FATCA) was enacted in 2010 in United States America (USA), however, Swaziland adopted it within its regulatory framework (Central Bank of Swaziland n.d; The Standard bank, 2017). FACTA compels financial institutions to disclose annually to the Internal Revenue Service (IRS) financial information in respect of USA Citizens' offshore income in order to detect, deter and discourage offshore tax evasion (SRA n.d). In the global summary of FACTA Intergovernmental Agreements (IGAs) in Deloitte (2012), Eswatini and the US have not concluded negotiations while other African countries like Mauritius, Seychelles, South Africa and Tunisia have signed their IGAs.

DeSTaT (2012) made an analysis to determine the potential opportunities and challenges for developing countries that implemented FACTA and suggest that there is no single answer as countries differ. However, it is important to note that by its nature, tax law in the USA seems to extend to the whole world because of the country's economic position in the global economy. In this regard, DeSTaT (2012: 6) argues that every developing country "needs to understand how a taxpayer is conducting its business, is structuring its operations, and is making investments in the country. To achieve this level of understanding, it may be necessary for the country to have a solid grasp of the taxpayer's activities, transactions and business structure beyond the borders of that jurisdiction." However, DeSTaT (2012) affirm that the effect of FACTA is minimal for countries that do not derive payments from sources in the US.

It is suggested that SRA paved way for the introduction of VAT in 2012 and subsequently led to the replacement of sales tax at a standard rate of 14 percent due to its higher revenue potential

(Ayoki, 2017). The major motive behind the adoption of VAT was because it presented more potential to increase tax revenue than sales tax. In addition, VAT was viewed to be fairer than sales tax due to its ability to remove the cascading effects of sales tax as businesses would only remit tax on the value added in a supply chain (Ayoki, 2017) In this regard, Ayoki (2017) contends that this in part consequentially augmented tax effort.

Lesotho

Lesotho introduced of VAT in 2003 with the aim of ending the abuse of tax exemptions certificates and to close the loopholes that suppliers were using to evade tax. It was hoped that these measures would widen the tax base and improve efficiency and equity” (Koatsa and Nchake, 2017: 7). According to Lephoto (2004), VAT was introduced in July 2003 to replace the General Sales Tax (GST) and the primary law governing the implementation of VAT is the Value Added Tax Act No 9 of 2001 and its amendment Act No 6 of 2003 (Lephoto, 2004; Lesotho Revenue Authority-LRA n.d). Theoretically, VAT and GST yield similar revenue, however, in practice, the former generates more revenue for government since it is administered at various stages of production unlike sales tax (Lephoto, 2004). As such since sales tax normally applies to finished products, revenue generation may be constrained if it difficult to cover all retailers (Lephoto, 2004). This is validated by the LRA (n.d) as evidence shows that VAT system has been more effective the GST system. In the first quarter following the adoption of VAT in Lesotho, VAT collected 79.9 percent higher than the GST revenue in the previous quarter (Lephoto, 2004). In addition, Lesotho enacted the Value Added Tax (Amendment) Act, 2011 to provide for the inclusion of zero ratings and more comprehensive provision on electronic and cross border services and supplies (LRA n.d). The introduction of VAT in Lesotho thus reduced dependence on SACU revenues.

The amendment of the Income Tax Act, 1993 involved the adjustment of personal income tax rates prescribed in the second and third schedules. The statement of objects in the Income Tax Amendment Bill, 2014 suggests that the effective tax rate on personal income in Lesotho was one of the highest. It is believed that the high tax rate encouraged tax avoidance and tax evasion due to the heavy burden it laid on taxpayers. In this regard, the adjustment set to reduce tax burden and promote tax compliance as well as to stimulate consumption from increased income. This in turn could yield to additional VAT revenue. With reference to corporate tax, the bill ended the use of zero rate corporate tax on extra-SACU exports and introduced a standard rate of 10 percent for all manufacturer. The obligations under regional and

international agreements stipulate that low tax rates should be abolished as a way of addressing differentiated application of tax rates in the SACU region to discourage unfair competition (LRA, n.d).

Malawi

In a study by the International Institute for Sustainable Development (iisd), Nsiku (2013) suggests that Malawi has increased its tax revenues over time, however, taxation is viewed to be unsustainable to meet the countries expenditure and public debt. The increase in revenue is attributed to personal income taxes and consumption taxes. From the quantitative analysis in the previous section, the results suggest that Malawi has limited room to improve its tax system as it operates beyond its tax capacity. By exploring legislated tax changes in Malawi over the period 2002-2016, this study yields explanations that may enhance insight into the drivers of the existing tax system.

In general, the major regulatory framework governing taxation in Malawi is the Taxation Act of 2006 while other issues are governed by the VAT and the Customs and Excise Act of 1969 (Kenani, 2010). Notably the current tax system of Malawi is enshrined by the provisions of the Taxation Act of 2006. Notably, there were no significant legislated changes on the Customs and Excise Act since 1989 (Kenani, 2010). The statutes provide the framework for tax administration and the calculation of taxes. VAT was introduced in 2002 in Malawi although it had been previously added to the Customs and Excise Act in 1989. VAT was known as surtax and charged on all taxable manufactured goods where tax was to be levied. However, in 2005 Surtax was renamed to VAT after the Value Added Tax (VAT) Act was enacted. According to MRA (n.d) the purpose of enacting VAT in Malawi was to provide a productive, stable and efficient source of government revenue. However, VAT has also been used as a social security tool to redress equality by introducing numerous exemptions and zero ratings on goods and services deemed to be used by lower income groups of society. However, MRA (n.d) contends that this has resulted in the erosion of the tax base and effecting revenue generation.

In the context of this study, notable VAT amendments were done in August 2016 through the provision of a standard rate of 16.5 percent on tap water produced by water boards, ordinary bread, newspapers, periodicals, journals and magazines, laundry soap and milk. Previously, these products were either zero-rated or exempted (MRA n.d). Nevertheless, baby milk formula

is exempted from VAT. This was against the background that using VAT as a social security tool eroded the tax base (MRA n.d).

Mauritius

One of the most prominent changes in Mauritius was the establishment of the country's Revenue Authority as a corporate body set to manage and collect revenue effectively and efficiently. Louise (2016) suggests that the role of tax administration is to make sure that no revenue remains uncollected within the framework set by the statutes. Hence, in some instances, empirical evidence has tended to suggest that tax administration inadequacies consequentially affect tax revenue performance (Louise, 2016).

Although there were some amendments to the Finance Act in respect of direct and indirect taxes, this study did not find significant tax reforms within the context of this study during the period 2002-2016. However, in recent times, Mauritius committed to undertaking significant tax reforms (Republic of Mauritius, 2018). Although the scope of this study covers the period 2002-2016, an insight into the tax reform proposals aids in explaining some of the results obtained from the regression analysis. According to the sample of countries used in this study, Mauritius is ranked last in terms of tax effort and hence it is not surprising that post the period 2002-2016, the country seeks to undertake significant reform. Since the proposed tax reforms have not yet been legislated, this study notes some of the notable changes drawn from the budget statement of Mauritius for 2018/19. In order to raise productivity, government proposed granting an annual tax credit of five percent for three years to employers under the work at home scheme (investment in the required IT system). In order to boost the production of food, a sheltered farming scheme was proposed where 100 farms would benefit from being exempt from taxation on all income from their projects for the first eight years. Other proposals seek to attract foreign investment into the country, however, there is relatively less bias of introducing initiatives to raise tax revenue for public expenditure.

In view of the flat income tax rate of 15 percent, government of Mauritius acknowledges that this created inequalities over the period 2006-2014, hence the need to work towards reducing the gap between the rich and the poor to provide an incentive for those who want to work. In this regard, a negative tax regime was introduced effectively from 1 July 2017 to provide financial support to low income employees. In addition, the government of Mauritius introduced a tax band of 10 percent to replace the previous 15 percent. Regarding the taxation

of global business companies, Mauritius set to abolish the Deemed Foreign Tax Credit regime available to companies holding a Category 1 Global Business Licence. This was to be replaced by a partial exemption regime where 80 percent of income tax would be exempted from sources that include foreign source dividends and profits attributable to a foreign permanent establishment; interest and royalties; and income from provision of specified financial services (Republic of Mauritius, 2018). Andersentax (n.d) contends that the proposals set in the country's budget speech are not surprising because Mauritius is signatory to the Multilateral Instrument to implement tax treaty related measures to prevent Base Erosion and Profit Shifting.

Mauritius signed an IGA with the US on the implementation of the FACTA effective from 27 December 2013. The agreement is centered on tax information sharing between the US and Mauritius using Model 1 under which financial institutions in the country will report information on US accounts to their local tax authority. Nevertheless, Mauritius proposed indirect tax measures in its Finance Bill which was released in July 2018 which lies outside the scope of this study.

Mozambique

There is wide acknowledgement that since 1998, Mozambique has been enroute to modernizing and strengthening its tax system (AFRODAD, 2011, Fjeldstad and Heggstad, 2011; German Financial Cooperation (KfW), 2011; Price Waterhouse and Coppers (PWC), 2018). Byiers (2004) suggests that the motivation behind the tax reforms in Mozambique was to widen the tax base, eliminate the cascading effect of Circulation Tax and to promote exports while raising revenue among other reasons. The reform of indirect taxation was largely undertaken in 2002/3 (Theodossiadis, 2004).

In 2002, Law15/2002 was approved by parliament in a bid to clarify the tax system for future reforms. This followed the introduction of VAT in 1998 and continuous Customs reforms in the country (Byiers, 2004). Consequentially, Law 15/2002 stipulates the new revenue sources for income and wealth and indirect taxes on expenditures. Further, the statute focuses on the introduction of the new Vehicles Tax and the Fuel Tariff, Stamp duty revision and the new Customs Code (Pauta Aduaneira) (Byiers, 2004). Notably, decree 20/2002 facilitated for the implementation of the new PIT in 2003 and similarly, decree 21/2002 focused on the new CIT. Byiers (2004) contends that the replacement of the previous complex system of five taxes was

necessary because the tax base had been eroded by generous tax exemptions and deductions. The individual income tax is progressive and applicable to residents of Mozambique, however, complexities arose from calculating taxes due from annual household income, while the initial amount of tax had deductions calculated from it (Byiers, 2004). This poses a huge administrative constraint in tax revenue collection because PIT can only be taxed at source where it is possible. The major challenge of attempting to calculate family annual income is that the larger part of business in Mozambique is informal (Byiers, 2004). Further, Byiers (2005) suggests that the Government of Mozambique faced challenges in correctly implementing the new individual taxes to civil servants as they could not calculate the annual yearly income as stipulated by law. In 2007 and 2008, Mozambique consolidated the amendments to the IPRS and adjusted tax bracket thresholds and family allowances as well as introducing tax on income from traded securities and term deposits (USAID, 2009).

In 2009, Mozambique introduced the Simplified Tax for Small Taxpayers (ISPC) as a new simplified tax system for small enterprises and replaced the simplified tax regimes for both income tax and VAT. Similarly, Value Added Tax, Mozambique amended the tax code in 2007 and 2008 by increasing the threshold for registration and expanding the scope of the simplified tax scheme as well as the revision of the list of exempt goods and transactions (USAID, 2009).

The implementation of the new CIT in 2002 aimed at replacing the Industrial Contribution on company profits, part of the Labour Income Tax, the Complementary Tax and the Urban Building Contribution (Byiers, 2004). The new CIT was now applicable to profits of commercial, cooperative and public enterprises (and on incomes not liable to IRPS) at a rate of 32% (Byiers, 2004). Notably agricultural activities were taxed at a rate of 10% until 2010. In addition, Mozambique introduced a fuel tariff (Law15/2002) to replace the Special Fuel Tax which had been in operation since 1990. The major difference between the two being that the former was calculated as the amount payable per litre or Kg and updated (at a maximum of 5%) on a quarterly basis according to inflation (Byiers, 2004). However, the latter was subject to alterations by the Minister of Finance and Minister of Industry & Commerce. The effect on increasing vulnerability to the country's population was deemed to be minimal because of the small share of fuel in the economy (Byiers, 2004). In 2007 and 2008, Mozambique raised the threshold for paying income tax and made other subsequent changes to the tax code. Further, the new law consolidated amendments.

Another major legislated tax change was the introduction of a new Fiscal Benefits Code with the aim of bringing all fiscal benefits under one code from previous decrees that include Investment Law (3/93), the Mining Law (14/2002) and the Petroleum Law (3/2001) (Byiers, 2005). The provisions of these statutes provided for a range of fiscal incentives that include deductions from taxable income, accelerated depreciation, tax credits, and reduction of tax rates, import regimes and deduction of the amount of tax assessed (see Byiers, 2005: 22). Notably, the reforms were made for both generic benefits and specific benefits for designated types of projects. Nevertheless, the primary motive for having the new Fiscal Benefits Code was largely biased towards attracting foreign investment than raising additional tax revenue. The idea of introduce a consolidated statute on fiscal benefits came highly recommended by the IMF coupled with renewed donor interest in deepening already implemented tax reforms. Byiers (2004) contends that the advent of the SADC Trade protocol was likely to have an effect on tariff regimes as SADC member states would reduce their tariffs to match regional standards.

Conclusively, Byiers (2004) argues that tax reform in Mozambique was barely homegrown but rather an element of external financial partner initiatives. Further, Byiers (2004) debases lack of analysis on the impact of tax reform; a-priori and ex-post, hence making it difficult to provide a strong foundation upon which to build future reforms in terms of economic policy and revenue generation. Theodossiadis (2004) asserts that the tax reforms implemented in Mozambique were largely driven by theories on uniform taxation. Notably this departs from the theoretical framework used to in this thesis as it focused on the theory of taxation in developing countries. Uniform taxation is a concept commonly discussed in the Optimal Theory of Taxation, which however lies outside the scope of this thesis since the greater part of literature aligns optimal taxation with developed countries. This reinforces the argument made in Chapter two that when tax policy is driven by external forces, its orientation is also bound to suit the philosophy of its proponents.

Byiers (2004) is of the opinion that overemphasis on raising tax revenue comes at the cost if theoretical prescriptions on tax design are implemented without regarding whether the administrative capacity is adequate to fulfil the intended goals. Further, in the absence of analyses on the impact of tax reforms on the public and private businesses, it is plausible that the motive to widen tax bases may in reality translate to increased tax burden (Byiers, 2004). Notably, KfW (2009) is of the opinion that there are limitations in advancing revenue gains for

Mozambique through tax policy changes. However, it is possible to increase revenue yields by improving tax administration, hence KfW (2009) suggest that by capitalizing on increased efficiency, the country can then reduce its tax rates to promote economic growth instead of focusing on revenue generation in isolation.

Namibia

In 2012, tax revenue contributed 94% to total government revenue in Namibia (Chiripanhura and Chifamba, 2015). Since 2009/10 the greater portion of the country's tax revenue came from direct taxes and is generally larger than most regional comparators (Kostiainen, 2018). One of the major challenges of tax policy in Namibia is that the process of establishing new tax laws is very slow. For instance in 2015, the Government of Namibia introduced the Solidarity Tax with the intention of financing poverty reduction, however, the public was abrasive because of they felt the burden would weigh heavily on middle income groups who were already overburdened by high taxes. However due to the strong resistance, against the Solidarity Tax, government eventually retreated on the initiative citing that it would apply it to high income groups in the future. To date, the tax has not attained the status of a Bill (Kostiainen, 2018). In this regard, this study notes that although various tax proposals were made through budget speeches, the number of tax changes over the period 2002-2016 is not as pronounced as that of other countries in the region.

There are studies that support the notion that tax changes were rare in Namibia over the period under consideration in this thesis. For instance, Shikongo (2018) estimated tax elasticity and tax buoyancy for Namibia using quarterly time series data between 2001 and 2014 and captures tax changes using dummy variable only in 2011. Similarly, Chiripanhura and Chifamba (2015) examine the impact of income tax policy changes in Namibia and focus on the year 2013 when the Ministry of Finance imposed a 25% royalty on mining ventures. In a similar manner to that of the Solidarity Tax, mining companies were not pleased and criticized government arguing that such an initiative would lead them to bankruptcy. Similarly, government backtracked and promised to consult before any announcements were made in future and to date no Bill has been tabled to this effect. Although Shikongo (2018) suggests that Namibia has undertaken tax reforms since 1990 in order to mobilize sufficient revenue, the tax system of the country remain inadequate in terms of productivity. In this regard, Shikongo (2018) proposes that Namibia should widen its tax base by making efforts towards taxing the informal sector in order to increase tax revenue as well as strengthening existing tax laws.

The Income Tax Act of 1981 has had several amendments, however, in the context of assessing tax capacity and tax effort, this study notes that there is limited evidence on the existence of major tax changes over the period 2002-2016. Similarly, the Value Added Tax of 2000 has not been significantly amended in recent times. However, one of the notable tax changes is the introduction of the Namibia Revenue Authority (NRA) Act 12 of 2017, which was established with the intention of improving tax collection by instituting an independent corporate body. In addition, the NRA enforces tax laws provided in section 38 of the Act.²⁶ Further, Namibia introduced the Export Levy Act 2 of 2016 was enacted to provide for the imposition of an export levy on certain goods in order to enhance the value of addition and national industrial development (Parliament of Namibia). In view of tax changes with potential to affecting tax revenue, Namibia introduced several amendments to the Value Added Tax Act of 2000. For instance in the Value-Added Tax Amendment Act 4, of 2008, products like fresh and dried beans, sunflower cooking oil, animal fat, bread, and bread and cake flour became zero-rated (Parliament of Namibia). Normally, the motive of such intervention is to redress equity challenges and minimize the tax burden for lower income groups whose consumption is predominantly based on basic commodities. The Income Tax Act 5 of 2010 and Act 3 of 2011 set out increase the threshold on income tax payable by individuals and to reduce the rate payable by non-mining companies among other issues (Parliament of Namibia n.d). These were intended on improving tax revenue.

The most recent news on Namibia reports that there are proposals in the draft tax bill to increase tax rates for businesses and individuals. Further the draft bill proposes remove preferential treatment of businesses and to abolish certain exemptions and introduce withholding taxes on dividends to Namibian citizens and reduce the tax rate for lower-income groups (Likela, 2019). The motive is to put tighter controls on the tax system, however, there are concerns that this would only make the tax system punitive (Likela, 2019). While the intention is to increase tax revenue, Likela (2019) is of the opinion that Namibia is already a high tax jurisdiction and raising tax rates would only increase the burden on individuals and businesses in ways that may actually result in a decline in tax revenue. This is expected because households have less money

²⁶ (Section 38) 1. Customs and Excise Act, 1998 (Act No. 20 of 1998); 2. Export Levy Act, 2016 (Act No. 2 of 2016); 3. Income Tax Act, 1981 (Act No. 24 of 1981); 4. Petroleum Taxation Act, 1991 (Act No. 3 of 1991); 5. Stamp Duties Act, 1993 (Act No. 15 of 1993); 6. Transfer Duties Act, 1993 (Act No. 14 of 1993); and 7. Value Added Tax Act, 2000 (Act No. 10 of 2000).

to spend or invest. Further, it is argued that this would likely result in outflow of capital to more competitive countries in the region where tax rates are lower (Likela, 2019).

Seychelles

SAOPRA (2019) suggests that Seychelles tax legislation mainly provides for taxes that include corporate income taxes; tax on the earned income taxes on goods and services and customs duties on imported goods. Overall, the purpose of instituting tax reform in Seychelles was to eliminate distortions and encourage tax compliance.

Seychelles enacted the Business Tax Act in 2009 to provide for the general taxation of the taxable income of a business. However, effective of 1 January 2011, Seychelles applied a zero% tax rate on the first SR 150 000 of taxable income for sole traders and partnerships. Seychelles introduced the Corporate Social Responsibility Tax Act 17, 2013 which came into effect on 1 January 2014. The Act imposes tax on a person whose annual turnover is in excess or equal to the liability threshold (SR 1 000 000) provided in the First Schedule at the rate stipulated (0.5%). More importantly if a person owns two or more businesses, the law views these as one. However, the statute also permits that in lieu of paying the corporate social responsibility tax an equivalent amount can be paid as donations, sponsorship or projects funding as specified in the Second schedule. This makes CSR mandatory for certain persons and is motivated by the need to ensure compliance with ethical and regulatory standards, promoting accountability for businesses' actions that can lead to a positive impact on the communities and markets in which it operates. Notably even if a company engages in CSR, these do not substitute the businesses' obligation towards CSR. However, deductions may be made on the business tax liability (SRC, n.d).

The Goods and Services Regulations Act became effective on 1 July 2003. It provided for the imposition of tax on goods and services in Seychelles on good manufactured in the country and services provided as given on the receipt of payments. A tax rate of 12% was applicable for goods manufactured by Seychelles Trading Company and Seychelles Agro Company. However, 5% concessionary trade tax was provided on importation of goods for value addition by manufacturers and persons in agriculture or fisheries. Further, a rate 15% was provided for imports into Seychelles as provided by Schedule 3. Generally, the tax rate varies between 0% to 15% on various commodities and services as provided in Schedule 1, 2 and 3 of the Goods and Services Regulation Act. In 2010, Seychelles passed the VAT Act which provided for new

consumption tax that would replace the Goods and Services Tax (GST) with the aim of correcting the cascading effects. VAT in Seychelles was designed as a broad-based tax of 15 percent on the greater part of goods imported, produced and consumed in Seychelles. Although the law was passed in 2010, it only took effect as of January 2013 (SRC n.d).

Given that Seychelles is largely dependent on tourism, the government saw it fit to introduce the Tourism Marketing Tax (TMT) in January 2013. The tax applies to a person whose annual turnover equals or exceeds the liability threshold provided in Schedule of the Act, in particular, all tourism businesses, banks, insurance companies and telecoms with an annual turnover of 1 million. The rate is 0.5% of the annual turnover, paid monthly on monthly turnover. In view of reducing reliance on tourism, the country sought to broaden its tax bases. Consequentially, the Seychelles Petroleum (Taxation) Act was introduced in 2008 to amend and consolidate the law relating of petroleum taxation and to make provision for charging extra tax to be known as additional profits tax. The petroleum income tax was introduced at a rate of 35% and assessed yearly. In addition, a presumptive tax was introduced in 2013 at a rate of 1.5% on annual turnover for all small businesses with an annual turnover of less than SR1 million.

The Excise Tax Act, of 2009 was enacted to provide for the imposition of excise tax in Seychelles and took effect on 1 January 2010 (SRC n.d). However, the Excise Amendment Act 25, of 2017 provides that the “Minister may in the interest of the public grant a reduction or concession on the rate of any goods specified in schedule 1 or grant exemption from payment of tax payable on any excisable goods.” In addition, SRC (n.d) states that excise taxes are levied both imports and locally produced cigarettes or tobacco, alcohol, motor vehicles and petroleum products.

South Africa

The recommendations of the Katz Commission first phase on tax reform (1994-1999) led to outcomes that involved the implementation of institutional reform to permit more efficient administration of tax laws and policy changes to the tax regime (Manuel, 2002). Notably, in the period 1994-2002, PIT, VAT and CIT remained key in the process of tax reform leading to structural base broadening reforms and strong revenue performance. In addition, South African tax reforms sought to address equity in order to enhance tax morale as well as enhancing tax administration to ensure stable and buoyant tax revenue. This in turn provided significant tax relief for both individual and corporate taxpayers. Further, Ndofula (2014)

asserts that the first phase on tax reform also intended to reduce government borrowing, increasing neutrality of the revenue base and closing loopholes in the tax system. One other notable change in South Africa was the shift from using source-based income tax before 2001 to residence-based income tax after 2001 due to the consequences of globalization (Ndofula, 2014). Although the implementation of tax reform was met with an increase in tax revenue from 1994 to 2010, the recent decline in tax revenues, increasing public debt and a gloomy economic outlook pose a new challenge for South Africa to use taxation as a fiscal policy instrument to avert the problems the country faces. For instance, government expenditure has more than doubled since 1960 from percentages below 10% to over 20% by the end of 2016. Some proponents call for the use of tax reform while others simply call for a reduction in government expenditure.

In view of the need to secure and expand the tax revenue base, Van Heerden (2014) suggests that tax reform in South Africa has played a key role towards the attainment of this goal. Van Heerden (2014) particularly focused on tax reform on PIT as the major contributing tax revenue base compared to CIT and indirect taxes such as VAT. It is important to note that during the period 1994-1999 the contribution of PIT to tax revenue grew from 40 to 43%, however, this declined to 34% by 2011 (Van Heerden, 2014). It is argued that the nature of tax reform on PIT was not solely driven by the need to expand the revenue base. Marginal tax rates became lower in a bid to address inequalities in income distribution. In 2013, the minimum and maximum marginal tax rates in South Africa were 18 and 20 respectively. However, Van Heerden (2014) argues that it would be detrimental to reform the tax system by increasing the marginal rates of PIT since they were above those of other countries. In this regard, this would tend to weaken the country's tax competitiveness, hence eventually corroding the revenue base. Since 2003, the PIT/GDP ratio has been around 8%, hence showing the relative importance of PIT revenue as a major source of income.

Chikozho (2018) asserts that the agenda for instituting tax reform in developing countries has also been prompted by fears over the corrosive nature of illicit financial flows. Over the period 2003/4 to 2016/17, the major sources of tax revenue in South Africa were PIT, VAT and CIT in the respective order. In 2014, the Tax Justice Network –Africa considered South Africa and Kenya as the most efficient tax collectors in Sub-Saharan Africa (Chikozho, 2018). More importantly, the South African Revenue Services (SARS) has made efforts to improve and modernize tax administration in a bid to reduce tax evasion, tax avoidance, enabling

progressive reduction in PIT and CIT rates as well as increasing tax revenue collection. The Tax Administration Act of 2011 was enacted to simplify tax administration for both SARS and tax payers (Chikozho, 2018).

Following the recent fiscal challenges and economic glitches in South Africa, various proponents have attempted to model the possible impact of implementing changes in the marginal tax rate reform and changes income bands (Van Heerden, 2014; Jordaan and Schoeman, 2015). The primary concern was on the effects of revenue, tax efficiency and optimal level of taxes that support economic growth. Jordaan and Schoeman (2015) suggest that their simulations show that lowering marginal tax rates would move the PIT/GDP ratio closer to the optimal levels. Notably, the top marginal tax rates on PIT in South Africa declined from 44% in 1990/1 to 40 in 2009/10 (Ndofula, 2014). However, there is a clear trade-off between the amount of tax revenue collection and tax efficiency when PIT reform is instituted.

In view of CIT, South Africa had a rate of nominal tax of 50% in the period 1989/90, which was eventually reduced to a flat rate of 40% and the meet with the subsequent introduction of the Secondary Tax on Companies (STC) at 15% on distributed profits. Due to concerns that this effectively increased CIT and reduced the competitiveness of South Africa in attracting investment, the flat rate on taxable income declined to 35% while the STC rose to 25% in the period 1994/95. By 2009/10, the rate of CIT went down to 28% while STC went to 10% (Ndofula, 2014).

The enactment of income tax laws on CIT and PIT ended the discriminatory provisions that had resulted in the CIT rate being lower than the rate of PIT. This ended in the fiscal period 2002/3. By lowering the marginal tax rates of PIT in comparison to the rates on CIT began to protect the country from brain drain as previous rates facilitated for skilled professionals to immigrate to other countries with lower rates. Similarly, other professionals tended to find an incentive in opening their own businesses to avoid the high rates of PIT. Although STC had risen to 25% in the period 1995/6 from 10% in 1994/5, it was eventually reduced to 10% in 2009/10 due to the combined burden that companies experienced by effectively paying CIT and STC. The major complications surrounding STC were that it failed to get international recognition and faced resistance as companies called for its reduction or elimination. Nevertheless, the subsequent effect of tax reforms on CIT, PIT and STC resulted in PIT contribution to total tax revenue falling from 44% in 1994/5 to 34% in 2009/10, CIT

contribution to total tax revenue rose from 11% in 1994/5 to 23% in 2009/10. Lastly, STC contribution to total tax revenue rose from 1% to 3% (Ndofula, 2014).

The VAT system marked 21 years of existence in September 2012. Notably, VAT remained at 14% for over three decades. Although the VAT rate changed by 1%, the contribution to total revenue rose from 29, 288 million rands in 1994/95 to 147, 941 million rands by 2009/10. However, it is not desirable nor feasible to increase VAT rates in view of obtaining additional revenue as the original design of the tax was set to be regressive. This means that lower income earners pay a greater percentage from their income, however, the addition of financial services in VAT in 1996 means that there is increased vertical equity as the rich use these services more, hence the principle of ability to pay is applied (Ndofula, 2014).

Lewis and Alton (2015) assert tax reforms in the past two decades yielded a well-balanced, modern tax system, however, additional revenue is needed to cover social spending and expenditure on infrastructure to increase growth and well-being in South Africa. In this regard, Lewis and Alton (2015), contend that there is additional scope to broaden tax bases further. This is consistent with the findings of the thesis which show that South Africa has yet to attain its taxable capacity. Nevertheless, Lewis and Alton (2015) suggests that using income tax reform could be more distortionary than using consumption taxes like VAT.

Tanzania

According to Fjeldstad (1995), one of the major tax reforms in Tanzania was presented in the Report of the Presidential Commission on Taxation and Expenditure (1989-1991). Fjeldstad (1995) asserts that the shortcomings in the implementation of tax reforms prior to 1995 was due to the effect of adopting the low-tax rate and broad-based strategy. Consequently, Tanzania continued to face widespread tax evasion, extensive tax exemptions and inefficient administration. This could aid to explain the continued interest in tax reform in Tanzania. Ngowi and Olan'g (2014) contend that there is a common standing on the notion that the country's tax revenue performance was subdued due to the effect of tax incentives and tax exemptions in the tax system. In this regard, Temu (2014) suggests that the tax reform in Tanzania was motivated by the need for additional revenue to meet public spending needs among other objectives. Consequently, tax reform led to an increase in tax revenue from 1.1 billion US dollars over the period 2002-2003 to 1.7 billion US dollars over the period 2005-2006 (Temu, 2014).

One of the most prominent legislative tax changes in Tanzania was the introduction a new Income Tax Act in 2004, which aimed to broaden the tax base. This was done through an upward adjustment of the presumptive tax applying to resident individuals with an annual business turnover not exceeding TShs 20 million from 1.1% (on turnover up to TShs 3 million) to 3.3% (on turnover from TShs 14 million to TShs 20 million) (AfDB, 2010). Further, the Act was amended notably in 2005/6 and 2006/7 by encouraging companies to broaden their public ownership as well as the introduction of the concessionary corporate tax rate of 25% to apply for the first three years to companies that are newly listed on the Dar es Salaam stock exchange (AfDB, 2010). In 2006/07, government reduced the marginal personal income tax rate for the lowest tax band from 18.5% to 15% (AfDB, 2010).

Tanzania adopted the East African Community Customs Management Act in 2005, “which underpins the establishment of common external tariffs (CETs) and elimination of internal tariffs. It also brought about the: harmonization of customs principles and procedures; and removal of suspended duty” (AfDB, 2010:11).

The fundamental motive behind the VAT Bill of 2014 and the Tax Administration Bill of 2014 was the recognition that tax exemptions and tax incentives resulted in huge revenue losses to government. Consequently, Tanzania enacted the Value Added Tax Act in 2014. Ngowi and Olan’g (2014) assert that this presented an opportunity to take advantage of the provisions of tax exemptions and reduce tax incentives thereof. Notably, the VAT Act of 2014 streamlined the provision of tax exemptions by excluding investors with Tanzania Investment Center (TIC) certificate of incentives, investors in EPZs and SEZ as well as those with strategic investors’ status will no longer enjoy VAT exemption (Ngowi and Olan’g, 2014). In this regard, it was expected that Tanzania would see an improvement in tax revenue performance. With reference to the canons of a good tax system, the Tax Administration Bill of 2014 addressed critical issues such as convenience of payment and ease of collection. The Tax Administration Act came into effect on 11 May 2015. Nevertheless, the World Bank (2015) argue that Tanzania’s revenue levels were too low to finance its ambitious investment program unless a comprehensive approach was adopted. Although the World Bank (2015) acknowledges that good progress was made in the late 2000s, it is argued that Tanzania’s tax revenue levels remain one of the lowest in the world.

Temu (2014) is of the opinion that the simplification of tax laws has enabled taxpayers and tax officials to apply tax laws in a fair, equitable and transparent manner. Nevertheless, income

taxes and customs duties are classified under union taxes while other taxes are regarded as non-union taxes in cognisance of the union between Tanzania and Zanzibar. In this regard, the Tanzania Revenue Authority oversees the union taxes whilst the Zanzibar Revenue Board is responsible for all other taxes. According to Ngowi and Olan'g (2014), the introduction of VAT (December 2014) in Tanzania allows the possibility of reducing tax incentives owing to the availability of tax exemptions in the VAT Act. Ngowi and Olan'g (2014) suggest that the specification of entities who are eligible for limited tax exemptions permits more tax revenue to be collected and the same effect was expected from the removal of exemptions from investors who previously enjoyed it.

In view of the canons of a good tax system, Temu (2014) is of the opinion that some of legislated tax changes have simplified the tax system of Tanzania as well as increasing equity and transparency. According to Ulriksen, Katera and Msami (2019), a series of tax reforms were undertaken in 2016 which affected a wide range of revenue contributors, however the major targets were tourism and the transport sector. Notably, Ulriksen et al. (2019) suggest that in respect of the tax reforms in 2016, revenue contributors may be classified on their relative importance to the fiscus and politics. Ulriksen et al. (2019) are of the opinion that the tourism and transport sector make a substantial contribution to government revenue as long as the enforcement of taxes does not distort weaken the industry relative to competition from neighbouring countries (Ulriksen et al., 2019).

Tax revenue performance in Tanzania grew by 20% from the period 2002/3 to 2016/7. It is believed that this is largely due to the increase in the number of tax payers and a stronger tax system. As such government revenue as a share of GDP moved from 52% in 2002/3 to 80% in 2016/17 (Ulriksen et al., 2019). Notably the transformation in Tanzania's tax system is attributed to three prominent changes in the countries tax code which include the implementation of the use of 2010 Electronic Fiscal Devices (EFDs) , replacement of the VAT Act of 1997 with that of 2014 and the passing of the 2016/17 Finance Act (Ulriksen et al., 2019). However, this thesis focuses on the first two. The aim of using EFDs was to improve tax administration by extending the use of fiscalized devices to small traders who are not registered to pay VAT. Further, the VAT Act of 2014 sought to reduce exemptions, simplify administration and to adopt international best practice (Ulriksen et al., 2019).

Zambia

There were several amendments to the Mining tax regime, Value-Added Tax Act, Customs and Excise Tax Act and the Income Tax Act over the period 2002-2016. Zambia made a unilateral legislative change on its mining tax regime and the Income Tax Act as of 1 April 2008. The intention was to raise revenue from large-scale copper mining from 31% to 47% (Lundstol and Isaksen, 2018). Further, it was hoped that Zambia would move from being a low tax burden country to one with an average tax burden. As such, the mining tax reform undertaken in 2008 in Zambia is considered s one of the most prominent in the country (Lundstol and Isaksen, 2018).

The essence of the 2008 mining tax reform was to place emphasis on raising revenue, gross tax base and putting variable rates in place. The tax reforms of 2008 are known as the “windfall regime,” and the major components included a variable corporate tax rate of 15%, a windfall tax at variable 25 per cent, 50 per cent, and 75 per cent depending on the copper price and a 15 per cent export levy on copper concentrates among others (Lundstol and Isaksen, 2018). According to Manley (2013:21) a windfall tax is defined as “a tax that is levied on the value of a company’s sales of a particular mineral in which the rate increases with the price of the mineral.” The ‘windfall’ tax was levied on gross revenue that was equal to 200% of the average cost of large-scale copper mines in Zambia. It was designed in a way such that it would move along with both domestic and imported inflation as these are key determinants which influence mining cost levels. It was hoped that this would encourage tax compliance and make enforcement easier (Lundstol and Isaksen, 2018).

The most prominent element of the 2008 tax reform package was the progressive ‘windfall’ taxation which was based on the production/export value above 200 per cent of the average calculated operational costs of the companies in Zambia (Lundstol and Isaksen, 2018). The aim was to increase the effective tax rate with higher mineral prices and profits and reduce the tax burden at lower price and profit levels (Lundstol and Isaksen, 2018). In view of the resistance and criticism from companies, government then removed the windfall tax in 2009 through the budget and retained the variable profit tax (Lundstol and Isaksen, 2018).

Following the demise of the “windfall” tax regime, Zambia gained a bad reputation for mining tax instability. In the period 2009-2016, Zambia made several changes to its mining tax regime in part, due to the changes in copper prices and changes in the economy and economic policies

(Lundstol and Isaksen, 2018). In 2015, Zambia made a significant move by abolishing the variable income tax for mining and the corporate income tax but only to increase rates on underground mining (8%) and open cast (20%). This move was heavily criticized by companies, hence forcing government to reconsider the position of the mining tax regime by lowering the rates again to 6% for underground mining and 9% for open cast mining (Lundstol and Isaksen, 2018). In addition, the variable profit tax and the corporate income tax were introduced at 30% for mining operations and 35% for processing. Further, the Mines and Minerals Development Amendments Act of 2015 reduced the mineral royalty, while the Income Tax Amendment Bill removed the variable profit tax. However, a variable royalty tax was introduced for copper production. (Lundstol and Isaksen, 2018).

With reference to the Value-Added Tax Act, this study focused on tax changes that affected section 7 to section 15. The Value-Added Amendment Act No. 29, 2009 provides that any furtherance of registered suppliers or those eligible for registration under section twenty-eight was liable to pay VAT. This extends the scope of the taxable base of the principle Act. On the other hand, the Value-Added Tax (Amendment) Act No. 15, 2013 provides for a charge on land owned in Zimbabwe to a person or partnership to whom tax is due in accordance with section 24A.

With reference to the Customs and Excise Act, this study was concerned with tax changes that amended section seventy-one to section eighty. From Chapter 15, 25, 48, 52, 55, 74, 84, 87, 88 and 90 of the First Schedule, the principal Act was amended by removing duty from some commodities. The affected commodities included animal and vegetable oils and their cleavage products, salt, sulphur, earths and stone, plastering materials, lime and cement; paper and paper board, copper among other goods. However, chapter 85 was amended to accommodate an increase in the customs duty from 5% to 15% on electrical machinery and equipment. On the other hand, the Second Schedule on Excise Tariffs was amended to accommodate for a reduction in excise duties on beer and other fuel oils from 75% to 60% and from 30% to 15% respectively. On the other hand, the Ninth Schedule was amended to factor in the removal of export tariffs of 15% on cotton seeds and cotton that is not carded or combed.

Regarding the Income Tax Act, this study was primarily concerned with tax changes that affected section fourteen to section twenty-eight on the charge of tax and section twenty-nine to section forty-four on deductions. Section thirty-seven of the principal Act was repealed and replaced with a new section on provisions for deductions in accordance with the Income Tax

Amendment No. 1, 2009). Notably, if too many deductions are permitted, this tends to reduce the taxable income and thus reduces prospects of increasing tax revenue from the tax base. There are twelve approved deductions in both the principal and amended Income Tax Act; however, there was an upward revision of figures of total deductions permitted.

According to Manley (2017), Zambia's mining tax policy has been volatile in the recent years despite increased uncertainty of the future as the tax regime changed nine times within a period of a decade and a half. Zambia finds itself in a quandary due to its historic dependence on copper, which has since lost more than half of its value since 2011. Manley (2017) asserts that Zambia would need to maintain its revenues from the mining sector in order to fund its budget. In this regard, the introduction of the mining tax regime in 2007 was aimed at increasing tax revenue, the tax base and bringing changes on tax rates with effect from April 2008 (Manley, 2017). Some of the major aspects included "a variable corporate income tax of 15 per cent; a windfall tax at variable 25 per cent, 50 per cent, and 75 per cent depending on the copper price; a 15 per cent export levy on copper concentrates; and an annual 25 per cent annual capital depreciation allowance" (Manley, 2017: 7).

There is urgent need to address the tax policy challenges of providing a pragmatic approach to solve public finance distress in Zambia. According to Manley (2017), in the 12 months prior to 2017, the Government of Zambia has changed the country's tax regime three times and nine times in 15 years. Notwithstanding this, by 2017, Zambia had another new tax reform underway, that involved the removal of the 9% mining royalty on copper, the introduction of a price-based copper royalty and the removal of variable profit (Manley, 2017). One of the criticism laid against government was that it gave little consideration to the consultative processes of instituting taxes as stipulated in the canons of good tax systems (Manley, 2017). Further, Manley (2017) is of the opinion that there is need for studies that consider tax policy from a broader perspective than focusing on specific tax instruments.

In the 2014/15 national budget, Zambia abandoned the use of CIT in mining and adopted exorbitant mining royalties that were high. However, this only lasted for a few months until government retreated by reintroducing CIT in mining and reducing the royalty rates. Persistent policy reversals have tended to create a wedge between government and mining companies. (Fjeldstad, Fundanga and Rakner, 2016). Just like Manley (2017) the role of establishing a transparent and consultative framework to tax the mining sector is viewed to be critical in addressing tax revenue challenges since Zambia is dependent on it (Fjeldstad et al., 2016).

With reference to the price-based royalty, Manley (2017) contends that the Government of Zambia could not yield sufficient rent when copper prices increased. Meanwhile the removal of the variable tax is criticized because of this elimination of a useful way of ensuring flexibility in the tax take. Despite the risk of having declining mining revenue, Manley (2017) argues that Zambia needs a tax regime that permits progressivity which had previously been embedded in the variable profit tax. The absence of progressivity would limit the tax system because government would have to change tax rates to meet the conditions of copper prices.

In addition, in the absence of progressivity it becomes difficult for government to collect sufficient revenue due to the dynamic nature of profits from rent. However, if progressivity is present then government is able to get more revenue when profits are high and vice-versa. There is one evident fact that is not unique to Zambia but common among resource rich countries. If tax revenue generation is mainly dependent on non-renewable resources, then tax policy volatility is likely to be evident as well (Manley, 2017). According to Lundstol and Isaksen (2018), the IMF was extremely busy over the period 2006-2012 with 85 technical assistance missions in attempt to address fiscal reform in extractive resource sectors. Against this background, Manley (2017) is in doubt that Zambia will be able to raise adequate tax revenue by using a price-based royalty or removing the variable profit tax. Haglund (2013) asserts during the 10 years prior to 2012, Zambia was only collecting 7-8% of its revenue from the mining sector. As such, Manley (2017) proposes that it would be more practical for Zambia to anticipate destabilization due to copper price volatility and hence to design a tax regime that will be resilient.

Zimbabwe

The history of formalized tax legislation in Zimbabwe dates back to the colonial era around the period 1918. After independence, one of the earliest and prominent changes to tax came from the recommendations of the Chellier commission in 1986 (ICAZ n.d). In 2009/10, government instituted the Tax Reform Steering Committee Tenure. The main motivation behind tax reform was to simplify tax legislation, improve tax administration and to enhance equity and neutrality as well as to widen the tax base (ICAZ, n.d). In 2011, there were proposals to implement a resident based tax system, however, the Income Tax Bill which covered this issue was never passed into law. AFRODAD (2011) and Chikarapo (2015) contend that the growth of the informal sector resulted in lower tax revenue collection relative to total spending, hence the need to redress the problem.

While it is appreciated that tax laws are necessary to guide and punish tax offenders, Chikarapo (2015) is of the opinion that the tax system of Zimbabwe operates in a very punitive regulatory environment. Hence, there have efforts to encourage tax compliance through the provision of tax amnesty to noncompliant taxpayers. In contrast to these efforts, Chikarapo (2015) argues that this did not lead to the desired outcome. Similarly, ZIMRA's limited capacity to audit the informal sector, seems to have provided an incentive for huge tax evasion by informal sector actors. In addition, Chikarapo (2015) suggests that the introduction of fiscal cash registers was critical in reducing leakages from VAT collections. Similarly, government developed a Simplified Tax Structure targeting turnover for small businesses at a lower rate of 2-3% for implementation from January 2019 to overcome the challenges relating to tax performance of the current presumptive tax (GoZ, 2019). This would be applicable to small businesses below the VAT threshold.

Ngwenya and Siziba (2016) attest that despite the influence of tax avoidance and tax evasion, as well as the growth of the informal economy on tax collection, these factors do not seem to yield significant difficulties on the operations of the Zimbabwe Revenue Authority (ZIMRA). Hence, Ngwenya and Siziba (2016) argue that ZIMRA should design a tax regime that will be able to tap into informal sector activity. In this regard, Ngwenya and Siziba (2016) suggest that with the assistance of financial institutions, financial inclusion may go a long way in enabling government to tax informal activities. According to the GoZ (2019), Zimbabwe has limited room to raise significant additional revenue from individuals and businesses. This is consistent with the findings of in this thesis. However, it is important to note that in 2019, the recommendation by Ngwenya and Siziba (2016) became a reality as government introduced the MIT. Mlilo (2016) reports that the major drawbacks to the tax system of Zimbabwe have been tax evasion, defaulting and concerns over a restrictive tax regime. In this regard, one of the major proposals in the National Budget for 2017 was to eliminate double taxation of presumptive tax paid by informal traders and a downward review of taxes paid by SME's.

Similarly, government introduced the current transfer pricing framework into the country's tax legislation to counter tax avoidance through illicit financial flows by reducing the opportunities for shifting profits to lower tax jurisdictions. According to the GoZ (2019), the anti-avoidance legislation redefines cross border transactions between associated enterprises through the application of internationally acceptable transfer pricing methods in the determination of transaction values for purposes of assessing taxable income.

To date, the GoZ endeavours to review and develop a less complicated tax system. In this regard, while it is important to be compliant with fiscal and customs laws, government also acknowledges that a good business environment would also require support and innovation in the design and administration of tax policies. Hence, government seeks to establish tax policy that will move “towards sustainable taxation, reduced penalties and interest, also nurturing businesses to enhance capacity to pay their tax dues, and remaining operational in order to produce, export, and create employment” (GoZ, 2019: 16). Notably, the GoZ (2019) contends that corruption has been fueled by lack of knowledge on tax legislation as tax officers’ resort to charging non-existent taxes in order to entice taxpayers to negotiate for lower taxes.

8.8 Conclusion

Although the Likelihood ratio test had indicated that the Translog model was preferred to the Cobb-Douglas model, the severity of multicollinearity resulted in the use of the latter. The study estimated a four component Stochastic Tax Frontier model where unobserved heterogeneity, persistent and transient inefficiencies are considered important to understanding the differences in tax capacity and tax effort in the SADC. The stochastic frontier analysis enabled this study to express the maximum amount of revenue that countries could collect from given bundles of determinant characteristics of revenues. Further, it was also permissible to estimate tax effort in a country’s revenue collection and the factors determining tax effort in tax system of the SADC. The tax frontier presented in this study shows the highest level of taxation that is tenable under the given country conditions specified in this study. The results indicate that financial deepening, economic development and trade openness influence tax revenue performance, while corruption, and inflation influence tax effort. The findings on tax effort show that low persistent tax effort than transient tax effort and this is consistent with the narrative record which indicates that the SADC has made greater effort at improving tax administration than tax policy.

CHAPTER 9

CONCLUSIONS, POLICY IMPLICATIONS AND FUTURE RESEARCH

9.1 Introduction

The research findings of this study were presented and reported in the previous chapter. This chapter will provide the main conclusions, policy implications, recommendations and suggestions for future research. Subsequent to the introduction, this chapter is structured as follows: section 9.2 provides the summary of the study while section 9.3 discusses the major findings. Section 9.4 dwells on conclusions and policy implications drawn from the summary of empirical findings of study. Section 9.5 discusses the contribution of this study to existing knowledge. Lastly, section 9.6 provides limitations of the study that contributed to the development of suggestions for further research.

9.2 Summary of the study

In developing countries, taxation remains one of the chief sources of financing development, particularly in Africa. The main objective of this study was therefore to assess tax capacity and tax effort in the SADC region against the background that there is need for practical advice towards the use of tax policy as an instrument for raising funds. The study provided an overview of tax systems in the SADC by placing emphasis on the regions' historical background, political economy and most recent macroeconomic conditions. This was motivated by the need to gain insight into the setting and environment in which taxation occurs in the SADC. In addition, the study focused on elucidating the evolution of tax structures in the SADC and the state of tax systems in the region thereof. Reiterating the statement of the problem, there was need to ascertain whether SADC countries have attained their full tax potential and whether maximum effort has been exerted in that regard. Hence, tax policy was viewed as a critical tool that governments can use to meet their full tax potential in view of financing socio-economic development. Further, the study explored the theoretical foundations on tax policy in developing countries by dwelling on the origins, objectives and general issues of relevance. However, in order to bring relevance to the context, the theoretical framework of the study was centered on the theory of taxation in developing countries and complemented by theory on the political economy of taxation. This enabled the study to have a broader tax policy perspective by relating economic, administrative and political factors approaches to taxation.

Guided by theories and empirical work, the study employed a mixed method approach to assess tax capacity and tax effort in the SADC. The quantitative approach employed unbalanced panel data for 13 SADC states for the period 2002-2016 and used the Stochastic Tax Frontier to estimate the determinants of tax capacity and tax effort. This was done using the tax-to-GDP ratio as the dependent variable while per capita GDP, openness, financial deepening and population were fitted as explanatory variables. The regression process involved the use of a multi-step method to estimate the Stochastic Tax Frontier which had a four component error term. From the latter, the study disentangled country-specific heterogeneity from tax effort and modeled the latter against government effectiveness, political stability, foreign aid, corruption and inflation. However, tax effort was separated further into persistent tax effort and transient tax effort.

The qualitative part of the analysis was aimed at augmenting the regression results obtained from the quantitative approach and involved the use of a narrative record on the major tax legislated changes that occurred during the period 2002-2016. The determinants of tax revenue performance are provided for by using proxies' of tax bases which reflect the extent to which ability to pay influences revenue generation. Further, the determinants of tax effort were estimated to aid in explaining how institutional factors and economic policy constrain the ability of government to collect taxes from the available capacity. In essence, the narrative analysis aimed at providing further insight into whether tax legislated changes could have had a role in tax capacity through their influence on tax rates, tax bases, incidence and the ultimate tax structure.

In view of the methodology pursued, the objectives of the study were achieved to a larger extent as the regression output made it possible to determine what factors influence tax performance and how SADC countries rank in terms of tax effort. Further, through the narrative analysis, the study was able to establish whether there had been any significant tax legislated changes during the period 2002-2016. In this regard, this study believes that the theoretical framework and methodology of the study provided an adequate basis to make conclusions and extract policy implications that led to the development of practical tax policy advice for the SADC on tax capacity and tax effort.

9.3 Policy considerations for SADC

Although this chapter primarily set out to provide the summary, conclusion and policy implications of the study, this section serves to reiterate some of the key tax policy

considerations that SADC member states need to consider. It is apparent that SADC seeks to achieve macroeconomic convergence and to have tax cooperation as well as coordination of tax regimes. From the overview of tax systems in the SADC and the theoretical framework of taxation in developing countries, this study found some useful insights for consideration.

From chapter 2, the study noted that colonial legacies cannot be wished away as their traces link with tax capacity or tax effort. Notably, colonial legacies differ in length, depth and influence, hence political transformation has differed in the region. In addition, the diversity of political ideology in the region poses a potential challenge for coordination as long as SADC does not deter the prevalence of autocratic leadership as it limits the capacity of governments to consolidate legitimacy and control of their states. Since governments are borne from political processes, it is difficult to ignore the link between political ideology and the type of government. In particular, the dominance of ruling parties in the SADC is suggested to work against the principle of establishing democratic processes through multiparty systems.

In view of the macroeconomic conditions of the region, it is apparent that there is a longstanding history which shows the dominance of South Africa both politically and economically. This is further complicated by the notion that the region faces distinct economic disparities and different fiscal pressures. This means that the choice of taxes will have to depend on the state of the following factors that include: economic development, increased revenue demand, fiscal deficits and large public debt. In addition, the study noted that there have been significant structural changes from agriculture to services dominating economic activity. While the manufacturing sector contribution has been declining prolonging corrective measures to resuscitate the sector will only deepen the crisis. The decline in export prices of commodities tends to increase the vulnerability of economies which are dependent on non-renewable resources like oil and minerals. Examples include Angola-oil, Botswana-diamond, Namibia-gold, South Africa-gold and Zambia-copper.

With reference to macroeconomic convergence, the region has had significant challenges in meeting the set criteria. This is compounded further by the notion that SADC member states are classified differently. Theory asserts that low-income countries are better off using indirect taxes while middle –income countries use direct taxes. In this regard, tax harmonization becomes less favourable as it likely to result in inequalities. Current tax structures in the region differ however, Angola, Tanzania, Zambia and Mauritius have had average tax below 20% of GDP over the period 2002-2016. Trade taxes are dominant in SACU member states with the

exception of South Africa which is more reliant on CIT than consumption taxes, although Botswana and Namibia also have a fair share coming from CIT. Angola uses more CIT and obtains over 40% of its total tax revenue from it. Malawi and Mozambique are similar to South Africa as they depend on CIT more than consumption taxes. In contrast, Tanzania, Zambia and Zimbabwe depend more on Consumption taxes than CIT.

From chapter 3, the study noted that the drive to raise adequate or additional tax revenue must not supersede the need to do so without imposing economic distortions or costs. Similarly, tax coordination is permissible if the tax systems in the region do not deviate too much from each other. However, the design of tax systems must consider the structure of the economy, public spending needs, capacity of tax administration and whether the country has access to other non-tax revenue. Although tax revenue generation is often the prime goal of taxation, conventions states that consumption taxes are ideal to address efficiency concerns while income taxes better suited to redressing redistribution concerns. Hence, no single tax structure or tax mix can meet the requirements of every country. In this regard, the consideration of country specific circumstances will most likely yield distinct tax policy advice especially given the challenges the environment places on choosing the appropriate tax structure. It is apparent that the SADC region is punctuated by high levels of poverty, high informality and uneven distribution of income among other factors.

From chapter 4, the study noted that low income countries can extend their scope to tax if they establish progressive institutions that promote technological and social innovation to transform the patterns and forms of production activities. The type of tax system should reflect the tax base and the law should be able to enforce the compulsory characteristic of any tax. Considerations for efficiency need to focus on collection, compliance and enforcement while effectiveness should reflect the degree to which taxes are predictable, transparent and enforceable. Hence, the feasibility of tax policy is limited by tax system issues and the practicality of tax policy. In this regard, the question of what to tax is as important as how to tax.

9.4 Summary of Empirical findings

The overall empirical findings reveal that:

1. Financial deepening was found to be significant and positive. Theory asserts that financial deepening influences growth through the provision of credit towards productive activities, hence this increases peoples' ability to since more income can be generated by businesses. This is expected to grow the tax base. (Karimo and Ogbonna, 2017). This notion is consistent with the findings of this study as financial deepening had a positive effect on tax revenue as expected. Nevertheless, Kilindo (1997) suggest that governments may depend on borrowing from the financial sector when they face low tax bases, to close the gap between revenue and expenditures.
2. Per capita income was used as a proxy for economic development was significant and positive in explaining tax revenue performance as this drives urbanization and the growth of non-agricultural activities. The expectation is that more and more activities become observable as they enter the formal sector, hence a wider tax net implies that tax revenue performance will increase (Besley and Persson, 2013). The findings of the study are in sync with the notion that economic development is critical for tax revenue performance as reiterated in other studies that include Lotz and Morss (1967) as well as Alfirman (2003).
3. Trade openness was employed as a proxy for the international trade sector which is asserted to be the most monetized sector of the economy in developing countries. The results of this study are consistent with a considerable number of studies that suggest that openness has a positive impact on the tax revenue to GDP ratio (Stotsky and WoldeMariam, 1997; Ghura, 1998; Tanzi and Zee, 2001; Agbeyegbe *et al.*, 2004 and Addison and Levin, 2012). Nevertheless, Imam and Jacobs (2007) and Bird *et al.* (2008) suggest a negative relationship.
4. Country specific effects were present in this study as reflected by the random effect component which measured the difference between the average tax revenue in each SADC member state and the regional average score of tax revenue. This enabled the study to control for unobserved heterogeneity often unaccounted for in the standard approach. There was huge dispersion in the role of country specific effects in the region as the study indicated by the variance. However, without the use of the four-component SFA, these random effects would have been passed off as idiosyncratic errors and thus limiting the opportunity to link the results to tax policy. From chapter 2, the

heterogeneity of the SADC region was apparent and this is augmented by the results on the random effect component in chapter 8. The variance of *theta* was significant with a p-value of less than 0.05% level of significance. However, this has limited implications for tax policy as country specific effects are beyond the control of tax policymakers. Nevertheless, since heterogeneity was disentangled from tax effort, this study believes that the improved estimates of tax effort aid to channel the appropriate corrective measures towards tax policy.

5. With regards to tax effort, this study disentangled persistent tax effort (long-run) from transient tax effort (short-run). The findings show that while there has been more effort towards tax administration than tax policy as indicated by higher levels of transient tax effort over persistent tax effort. In view of overall tax effort, Zimbabwe, Malawi, Lesotho and Mozambique ranked best in the respective order. With a regional average transient tax effort of 0.71, this means that the region has room to improve on tax administration by exerting effort of about 0.29 in order to attain its maximum tax capacity. In addition, the regional average of 0.13 means that very low effort is extended towards tax policy as a tool towards moving towards the maximum tax capacity. This as generally tended to pull overall tax effort downwards, this heightens the need to redress tax policy issues in the region as it shows that countries are doing fairly well in addressing short –term efficiency issues. Notably, inflation and corruption were found to be statistically significant at explaining changes in tax effort.
6. From the narrative analysis, the findings indicate that raising additional revenue or raising adequate revenue has been the dominating motive behind changes in tax legislation. SADC member states have attempted to broaden tax bases, increase compliance by reducing tax rates which created inequalities and shifting from direct to indirect taxation. Hence, tax policy advice can also be guided by the lessons drawn from history on how past changes in tax legislation have been conceived and perceived in the SADC region during the period 2002-2016. Notwithstanding this, the SADC has also had its fair share of challenges in tax policymaking as some noble proposals were never enacted into law.

There is a common trend of delays in the process of tax policy making especially among low tax effort countries. Nonetheless, there are success stories of countries like

Botswana that transformed from having one of the least efficient tax systems in Africa to one of the most efficient. Notably, there it seems that greater emphasis was placed on improving tax administration, hence, several countries made legislative changes to establish autonomous tax revenue agencies or to alter rules and procedures of administering taxes. This coincides with the fact that the quantitative analysis shows higher tax effort relating to tax administration than tax policy.

9.5 Conclusion and policy implications

There has been growing concern that SADC countries need to ensure that they fund their own developmental programmes, however, raising finance for public spending remains a critical challenge in the region. Given that tax revenue remains an indispensable source of finance for most governments in developing countries, there is need for insight into whether there are practical ways in which governments can improve their current tax revenue performance. In this regard, this study was not driven by the need to assess tax performance in the region per se but rather was concerned with ascertaining whether SADC member states have attained their tax capacity and whether maximum effort has been exerted towards collecting potential tax revenue. Recalling the objectives and the research problem, it is affirmative that the empirical findings enabled the study to answer the research questions to a greater extent. In this regard, conclusions could be drawn to inform the development of policy recommendations that may help to direct tax policy in the SADC region. The following conclusions and policy implications are important for SADC countries:

1. Theoretical Considerations

From the theoretical framework the study sought to find out whether theory could offer could offer some directives for tax policy. This section considers the theoretical implications:

- One of the most fundamental aspects arising from this study is that it adopts the view that governments are impartially benevolent and seek to implement tax policy in ways that yield the best outcome for society. In this regard, if any government positions itself as proposed by this consideration, the insights provided in this study can become useful in transforming the way taxes are designed and administered in the SADC region. This implies that as long as governments pursue other interest apart from improving societal well-being, the directives offered by theory for tax policy may remain impractical.

- Chapter 2 provided some of the basic characteristics of taxes which are important. As such, this study notes that since taxes are compulsory, it implies that practical and effective taxation can only happen through the imposition of tax laws. This study notes that although legislative tax changes have occurred in the SADC region, tax evasion and tax avoidance have become a problem. In this regard, there is need to redress existing tax laws to ensure that they promote efficiency and equity.
- Since taxes are considered as unrequited payments, the principle of benefit becomes practically distant because making unrequited payments implies that the benefits provided by government are not proportionate to the payment made by taxpayers. This contradicts the Benefit principle which highlights that people are likely to pay taxes if they feel they is a benefit that will accrue to them from the use of funds collected as taxes. In order to reduce tax evasion and tax avoidance in instances where tax payers are motivated by the Benefit Principle, this study suggests that earmarking taxes may help to instil confidence of taxpayers if they know what certain taxes will be used for. This also allows checks and balances to be made of holders of both legislative and executive powers.
- The study established that the prime objective of raising funds through taxation is to provide finance for public expenditure. From chapter 4, it is apparent that the SADC region is in dire need for funding to finance developmental programmes that are set to transform the lives of people. However, evidence shows that most governments are grappling to contain their expenditure and if this continues without urgent intervention, it is likely that no meaningful development will occur in the region in the foreseeable future.
- One of the most important lessons drawn from the principles of a “good” tax system is that there is a framework that is available that can inform tax policy decision-making. Regardless of whether a country is a developed nation or a developing nation, the principles of a “good” tax system remain universal. Since tax practitioners came up with this framework, it presents tax policymakers with an opportunity to better understand the institutional units who pay taxes. In this regard, tax reform proposals should at best preserve or promote the establishment of the principles of a good tax system. Therefore, this implies that any imposition of tax legislative changes (regardless of the motivation) will likely alter existing tax systems. This study recommends that governments should not be tempted to use tax policy as a tool for controlling behaviour but rather, to primarily use it to raise funds for public expenditure. Hypothetically, this study concludes that since tax practitioners played a major role in coming up with the principles of a “good” tax system, it an

acknowledgement of commitment to fulfilling tax obligations as long as taxing authorities take cognisance of some of the key issues raised. This implies that governments ought to formulate tax policies that resonate with these principles as it may help to reduce tax evasion, tax avoidance and non-compliance that pose a huge threat to tax collection. Against this background, this study recommends the frameworks as practical guide to the assessment of tax systems and tax policy proposals.

- The concepts embedded in the classification of taxes provide can provide insight to those tasked with the responsibility of choosing the “right” tax system.

-From the *basis of incidence*, it is important for tax policy designers to be able to determine the economic entity that eventually pays the tax. In view of direct taxes, governments need to assess whether the level imposition of such taxes is appropriate for their country since it has often been shown that direct taxes are inadequate to meet revenue needs for poor countries. In addition, considerations also need to be made in evaluating whether the costs of collection make it a good option. Against this background, the study recommends that the SADC region should draw closer to using a tax mix with more indirect taxes as their regressive outcomes can be countered by implementing pro-poor programmes through public expenditure to balance out the lack of redistribution. Indirect taxes are more economic to administer and provide a wide coverage unlike direct taxes.

- The theories of *tax progression* provide insight into the ideologies that have motivated the introduction and application of the principle of tax progression. Even in the context of developing countries, it is crucial to establish the conditions that would be adequate and necessary for the application of tax progression. This study concurs with literature that the prime objective of taxation should focus on raising funding for public expenditure, however, socio-political factors should not influence the introduction of tax progression as these leaves countries under the threat of falling into socialism or communism. Similarly, tax progression can be applied as a compensatory tool if there exist legal injustices inherited from the past which may justify the need to tax more from those who benefited from such situations. However, in reality it is difficult to reach a consensus on what would constitute legal injustices. Further, theory also suggests that tax progression can be applied on the basis of ability to pay or the theory of benefit. It is important to note that the theory of benefits contradicts one of the key characteristics of taxation which states that taxes are unrequited payments. In this regard, it is not hard to understand why progression has somewhat been hinged on the

ability to pay. The lesson derived from this is that tax progression punishes success without any justifiable reason to validate it.

Regarding the basis of progression, it is crucial to understand the degree of tax progression in a country in view of where the tax system started from and where it may potentially approach the limit in progression. Although some SADC countries implemented progressive taxation, in some instances it is unclear how it is measured. Nevertheless, it is important that tax policymakers consider the role of income distribution and explaining the extent of progressiveness. This clarity is essential in order to preserve transparency as a key aspect of a “good” tax system. From a theoretical perspective, there are shortcomings in using local and uniform measures to progressive taxation, hence, this study recommends the use of global measures because it is possible to put tax schedules into categories (progressive, proportional, regressive) as well as enabling the ordering of tax progression. This study recommends that if any country in SADC region fails to meet the regional inflation target, then necessary adjustments would need to be made to avoid movement of tax brackets unless tax indexing is done.

-Regarding *tax base*, this study notes that there has been substantial sectorial transformation and economic diversification in the SADC. Notably, the characteristics of most countries has limited the ability of governments to design tax systems that are efficient and modern. As a result, governments resort to generating tax revenue from available options, without giving careful consideration to efficiency or equity issues. Against this background, this study recommends that SADC countries should re-evaluate their economic structures and explore broadening their tax bases. However, it does not guarantee increases in tax revenue. While the region may seek to increase tax revenue, the study notes that most countries have contributed to the existence of narrow tax bases through tax policy interventions such as deductions on income tax, VAT exemptions on VAT and tax incentives in the mining or manufacturing industry. Some of the tax bases in the SADC have been shrinking due to a diverse spectrum of factors within and beyond the control of government. Tax base erosion has taken the form of tax evasion, tax avoidance, tax expenditures, hence this study recommends that tax reform proposals should consider assessing the causes of tax base erosion and deal with the challenges.

2. Tax Policy Considerations

- The idea that a “good” tax system should raise the required revenue implies that the choice of tax policy becomes very critical. This study believes that the origins of tax policy in the SADC have not adequately reflected the context in which it was being applied. One example is the implementation of VAT which became widespread following the recommendations by IMF nonetheless, the European tax model uses VAT and the philosophy guiding this tax system is that social inequality links with income inequality, hence, redistribution is required. It can therefore be argued that this ideology cannot be regarded as the key issue in SADC. However, the merits of using indirect taxes would tend to provide better insight.
- Literature asserts that major taxes in developing countries include corporate income taxes (CIT), value-Added Tax (VAT), excises, import tariffs and personal income taxes (PITs). This assertion is consistent with what is found in the SADC region. Many countries have been able to withhold CITs hence making it a viable revenue instrument since the method makes it easier to identify tax payers and to collect tax at low cost. Notably, the choice of revenue instruments chosen and the revenue obtained, depend on the organization of production activities in the economy, defined tax bases, selected tax rates and the administrative capabilities of tax authorities. This study concurs with the opinion that developing countries should tax efficiently while reserving expenditure policy to address redistribution goals. Against this background, SADC countries should consider realigning their tax policy towards achieving efficient tax systems.
- Although the SADC region has similar characteristics in the economic structures of its member states, there exists some form of variation which makes it difficult to prescribe a one-size-fits-all approach to tax structure. This implies that the design of tax policy needs to take cognisance of the varied array of factors that may influence the level of tax revenue for each respective country. This study notes that the economic performance of across the region is varied and is yet to meet the macroeconomic convergence criterion. In this regard, this study recommends individual countries to focus on establishing robust tax policies to support their revenue needs. Further, SADC endeavors to ensure “coordination of taxation policies to the extent necessary to improve efficiency in tax collection, safeguard regional tax bases and reduce obstacles to intra-SADC trade and investment.” However, this study believes that the region is not yet well prepared to work as a

unified unit in tax policy since most countries are battling to achieve the macroeconomic convergence criteria or at least remaining consistent.

- This study established that there is active use of tax incentives in the SADC region a notion that was also raised in previous studies. However, this study believes that the use of tax incentives in the SADC is somewhat distortionary in view of the need to generate tax revenue as well as macroeconomic convergence. This study suggests that SADC countries should consider adopting the recommendations made by the OECD on the use of tax incentives. In addition, this study reinforces the need to use other instruments apart from tax to influence behaviour than using taxes because it disrupts the achievement of the fundamental role of raising revenue.
- Regarding the challenges of tax policy in developing countries, the study concludes that the problems identified from theory are also present in SADC countries. The growth and existence of the informal sector remains a key challenge, however, the transition to cashless societies may permit governments to find alternative tax bases, for instance, where mobile money is used. Although many countries consider the industry a threat to tax revenue collection, collectively, it may seem as if the sector has a lot of money which governments cannot tax however, many small businesses or individuals are likely to fall in low tax thresholds as the sector is dominated by low income earning people who are there to make a living due to the unavailability of opportunities in the formal sector. In this regard, this study recommends that SADC countries should focus on stimulating tax compliance in the informal sector. With the exception of Zimbabwe and Tanzania, the level of the informal economy is below 50 percent.
- From a global view, Africa collects the least tax revenue and it is evident that developing countries have their own distinct tax structure from those of developed countries. This implies that models used in the latter will not be effective for governments in developing countries. Rich countries rely more on social security while the share of CITs, trade taxes and general consumption taxes remain higher in developing countries compared to rich countries.
- From the overview of tax systems, it is apparent that former British colonies share similar administrative structures, hence the study recommends the SADC secretariat to conclude on providing a comprehensive tax database to allow member states to share information on it and improve their own tax systems. Nonetheless,

although the region has similar colonial legacies, governments are encouraged to redesign tax policy to create tax systems that resonate with the structural changes that have occurred in individual countries. While literature suggests that politicians may influence tax policy, this study is of the view that the prevalence is somewhat limited as tax design has often been the responsibility of technocrats than legislators although the latter plays a critical role in enacting laws that allow tax policy changes to happen. The study acknowledges that the political economy is an important factor in many economic outcomes, however, in recent years there has been uncertainty non-performing governments have been threatened by mass protests and legal action where politicians have mismanaged economics. In the wake of such events, this study believes that political survival is likely to suffice if executive and legislative powers reform to fulfilling their mandate to serve the people and not their personal interests. In this regard, this study recommends those who wish to provide effective leadership to put effort in building effective tax systems using robust tax policy that is acceptable to the electorate. Similarly, this study is of the opinion that the type of government a country has does not necessarily affect tax outcomes because the economic prosperity index shows that the top 10 economies are governed by different types of governments. However, the role of democracy should not be undermined as tax policy needs to be supported and accepted in modest terms by public.

- This study is of the opinion that the dominance of South Africa cannot be ignored and has implications for the rest of region. Most SADC countries depend on its transport infrastructure, while South Africa exports more to the region than it imports. In addition, the dominance of South Africa as an economic and political actor cannot be ignored as this also has implications on the conduct of other member states. It is important that the entrance of South Africa into the regional grouping was seen as a critical because it would strengthen SADC. In this regard, there are lessons to be learnt from Britain's exit from the European Union and the resulting effects it is likely to create for Britain and the remaining economies in EU.

3. Considerations from empirical findings

- a. This study rejected the null hypothesis that population and foreign aid positively influence taxable capacity because the variables were statistically insignificant, however, the study failed to reject the null hypothesis that financial deepening, GDP per capita and trade

openness positively influence on taxable capacity. Further, the study rejected the null hypothesis that political stability and government effectiveness influence tax effort, however, the study failed to reject the notion that corruption and inflation are significant in explaining tax effort in the SADC.

- ii. With reference to financial deepening, this study recommends monetary authorities in the SADC to encourage policies that promote greater financial development. For instance, governments can embrace financial technologies to deepen their financial integration within the region and with the rest of the world. Since the SADC has a committee of Governors representing central banks in the region, there is need encourage member states to fully commit towards macroeconomic convergence as a critical foundation for regional financial integration. Although the SADC does not have a specific criteria with regards to tax revenue performance, this study believes that there a linkages between the existing criteria and the role it plays in fostering financial development, which is critical for tax revenue generation.
- iii. As anticipated, economic development is a critical factor in tax revenue generation. This study recommends that SADC member states should promote policies that ensure that regional targets are met and maintained. It is widely acknowledged that macroeconomic convergence is critical in order for the region to achieve its goals which include chief among them-economic development. Notwithstanding this, the assessment of macroeconomic convergence in the SADC shows that the region is still facing challenges that continue to threaten economic growth and development. In this regard, the study advocates that the SADC secretariat should be empowered or exercise its role to hold member states accountable if they fail to meet the macroeconomic convergence criteria as a way of ensuring that governments commit to the programme sincerely. Lessons can be drawn from success stories of regional groups like the EU that have a history of putting pressure on their members when they go off track.
- iv. Although the study shows that trade openness positively influences tax capacity. There has been a longstanding drive in the SADC to reduce reliance on trade taxes towards other indirect taxes. However, the findings of this study contradict this position. As shown in chapter 2, SACU member states are heavily dependent on

trade taxes and this has been confirmed in this study that even the SADC is dependent on trade. This study therefore questions whether it is practical to continue advocating for a shift in tax policy towards other forms of indirect taxes. It is important to note that the argument to shift from trade taxes became dominant when countries were advised to adopt VAT, however, this has not yielded the expected decline or shift from trade taxes. This study assumed that the size of the shadow economy in the SADC region is considerable and cannot be ignored, therefore, this factor could have contributed to the current scenario that has left trade taxes a key element of tax revenue sources, especially in SACU member states. From the overview of tax systems in chapter 2, it emerged that SACU dates back as far as 1910 and trade taxes were designed as a core feature of the union's revenue base. Even after independence, this fundamental fact seems to have remained critical. However, due to the presence of heterogeneity in the region, this study believes that calling all member states to work towards reducing trade taxes for indirect taxes has limited practicality. In this regard, the region to commit fully towards macroeconomic convergence and promote trade within the region and beyond as trade openness is set to grow tax revenue performance. As such the concept of non-tariff barriers to trade should be encouraged in the region except on strategic goods like electricity or health services and security.

- v. There is widespread acknowledgement that corruption disrupts the performance of tax revenue. Notably, some scholars link corruption to the bureaucratic organization rather than the political economy. In this study, the political economy was insignificant in explaining tax capacity. Nevertheless, this study is of the opinion that corruption as a process within the bureaucratic organization limits tax effort in the short-run and not in the long run. In this regard, corruption is better dealt with in tax administration than tax policy. The procedures and rules of tax administration authorities play a crucial role in limiting corruption, and the overall tax take. This study therefore proposes that SADC member states should encourage policies that curb corruption such as implementing digitalization in their processes. There is hope in novel innovations like Digital Ledger Technology (DLT) that show potential to reduce fraud and corruption in taxation.

- vi. The findings of this study suggest that inflation causes tax effort to increase. In view of role of in exerting effort to tax all the available tax bases, it is possible that as inflation rises, a shift to indirect taxes may result in more revenue being collected. For instance, inflation will result in reduced purchasing power but government may increase income tax thresholds so that less tax is charged to leave more disposable income. Further, government can use more efficient taxes like financial transactions taxes which capture a wider net than would have been the case under PIT and CIT. Such efforts may be stimulated by the realization that fiscal pressure could mount as inflation corrodes buying power. However, since this is likely to occur in the short-run, the overall effect of tax effort could yield greater tax take as inflation is not always set to grow after every year.
- vii. This study also found that tax systems in the SADC countries operate below their tax potential largely emanating from low persistent tax effort. Evidence shows that governments have put a lot of effort towards improving tax administration as indicated by relatively higher levels of transient tax effort. This result is complemented by the notion that great strides were taken in many SADC states to have independent tax revenue agencies to administer tax policy. However, this study argues that the major challenge that SADC countries face comes from tax policy itself were tax effort has been very low over the period 2002-2016. If a country has low tax effort and low tax collection, then there is room to increase tax revenue towards their tax capacity without causing major economic distortions or costs. In addition, if a country has low tax collection but with high tax effort then there is limited room to increase tax revenue without causing distortions. Assuming the regional average as the benchmark for tax collection and 1 as the benchmark for tax effort, all SADC countries have low tax effort. In relation to tax collections Tanzania, Zambia, Zimbabwe, Mauritius, Angola and Malawi have low tax collections, while, Botswana, Mozambique, South Africa, Eswatini, Seychelles, Namibia and Lesotho have high tax collections in the respective order.
- viii. Countries with low tax collections and low tax effort have the potential to implement comprehensive tax policy and tax administration reforms in view of raising tax revenue. This is possible for Tanzania, Zambia, Zimbabwe, Mauritius, Malawi and Angola.

- ix. From the narrative analysis, this study notes that tax policy has largely been problematic in Tanzania, Zambia, Zimbabwe and Angola. While they have been initiatives to improve tax administration, poor tax design has hampered the growth of tax revenue in these countries. In addition, it is suggested that rampant corruption has also affected tax administration. Although Malawi has low tax effort and low tax collections, it has already exceeded its tax capacity. This implies that taxation comes with major economic costs or distortions, hence there is need for tax policy reform to bring the country back on its tax frontier. However, this is set to cause a decline in tax revenue assuming that there are no major shifts in the country's circumstances. This also suggests limited ability to pay, however, since Malawi is a low-income country, transitioning to a higher-level status may aid to alter limited tax capacity. In this regard, this study proposes that Malawi should seek for alternative sources of finance as long as the country remains a low-income country since government has been able to go even beyond taxable capacity.
- x. While Botswana, Mozambique and Seychelles have high tax collections, their tax effort remains very low. This means that they still have the potential to implement tax reforms to reduce distortions and reach a higher level of efficiency of tax collection, since their tax effort index is low. However, Eswatini, Lesotho, Namibia, South Africa exceeded their tax capacity although they have high tax collections and low tax effort. Nonetheless, there is limited room to raise additional tax revenue in Botswana, Mozambique and Seychelles unless these countries transition to higher levels of income. Since Seychelles graduated to a high-income country in 2015, it is plausible that additional tax revenue can be obtained without bringing economic costs or distortions. However, under the current circumstances in Eswatini, Lesotho, Namibia and South Africa, there is need for tax policy that will lead each country back to its tax frontier. Transitioning to higher levels of development may allow these countries to continue getting high tax collections but with more efficient tax tools that reduce economic distortions and costs. Since more effort was exerted towards tax administration, there is need to exert more effort towards tax policy that conforms to the principles of a good tax system to encourage tax compliance. The implication of high tax collections and low tax effort suggest there is need to consider other economic objectives in taxation to ensure that tax take remains sustainable, however, other alternative sources of finance may be required to cover costs relating to public spending and financing fiscal deficits.

- xi. This study was primarily concerned with tax policy which is based on the results of transient tax effort. Nonetheless this study was also able to rank SADC member states in terms of their overall tax effort (in terms of transient tax effort and persistent tax effort). In view of persistent tax effort, the ascending order of the ranks show that Zimbabwe put the greatest effort towards tax policy in the period 2002-2016. The subsequent rankings are as follows: Angola (2), Malawi (3), Eswatini (4), Tanzania (5), Mozambique (6), Lesotho (7), Seychelles (8), Zambia (9), Namibia (10), Botswana (11), South Africa (12) and Mauritius (13). Some SADC member states are yet to reach their tax potential because of internal sources of inefficiency which need to be corrected. In this regard, the design of tax revenue reforms must be country specific and constructed after comprehensive analysis of the country's taxable capacity, revenue performance.

9.6 Contribution of the study

The original contribution of this study was that it is the first of its kind to provide estimates for the SADC on tax effort that is separated from heterogeneity and idiosyncratic errors. In addition, the study was able to disentangle persistent tax effort from transient tax effort which has huge policy implications as the latter is concerned with tax administration while the former is concerned with tax policy. From the findings of the study, it was apparent that if tax effort is not disentangled from heterogeneity or separating transient and persistent tax effort, this would result in overestimations being made. This study believes that such an outcome would be detrimental as policy advice will emanate from it. The results of the regression from the Stochastic Tax Frontier Model were augmented by a narrative record on legislated tax changes in the SADC. The rationale of using a mixed method approach was to complement the quantitative results by providing a reflective account of tax legislature in the region as one of the key instruments of tax policy to aid in bringing insight into the outcome of the regression.

9.7 Limitations of the study and suggestions for future research

This study focused on tax capacity and tax effort in the SADC, in view of the need to inform tax policymakers towards a practical guide to tax policy in the region. However, it came with its own limitations. Since there are numerous ways to assess tax capacity and tax effort, this study could not employ all the four rungs suggested by Slemrod (2016). In this regard, further studies can consider how enforcement rules and remittance rules influence tax capacity and tax

effort since this study focused on tax rates, tax bases, tax structure and elements of the bureaucratic organization which include corruption and government effectiveness. In other studies, scholars pay attention to particular sectoral tax bases, however, this study tended to be general by focusing on the wider definitions of tax base. However, this study concurs with Maweje and Munyambonera (2016) that there is need for further studies to also consider sector-specific elasticities on tax revenue. Nevertheless, this may be ideal on the condition that current tax policies in the SADC first change so that it is possible to evaluate the effect of such the changes. Although the political variable considered in this study was insignificant, this study believes that since the type of government is presumed to influence economic prosperity, it may be prudent for further studies to determine whether the same applies for tax capacity and tax effort in developing countries. This comes against the backdrop that there tend to be high economic prosperity indices in countries led by monarchies, hence it is plausible that there may be a phenomenon to link good governance with tax capacity and tax effort.

The narrative record provided in this study was qualitative in nature as it sought to provide insight into the playfield of legislated tax changes in the SADC, in view of supporting the results of the quantitative analysis. Nevertheless, this study notes that other studies such as Romer and Romer (2010) and Cloyne (2012) went further to develop quantitative analyses by determining the size and timing of the revenue effects of legislated tax changes. In this regard, this study recommends further studies to pursue that route to ascertain whether size and timing affected tax revenue in the SADC following changes in tax legislation. In addition, future research can explore the role of democracy in tax policy and use alternative methods to provide better insight.

References

- Adedayo, V.A., (2016). *A Comparative Study of the Petroleum Fiscal Systems of Nigeria and Angola*. Master thesis. Department Of Oil and Gas Management. (South America University)
- Abramovsky, L., Klemm, A. and Phillips, D., 2014. Corporate tax in developing countries: Current trends and design issues. *Fiscal Studies*, 35(4), pp.559-588.
- ACCA, 2009. “12 Tenets of tax”, Available online at: <https://www.accaglobal.com/content/dam/acca/global/pdf/tech-tp-ttt.pdf>. Accessed on 16 May 2018.
- Adam, C.S., Bevan, D.L. and Chambas, G. 2001. Exchange rate regimes and revenue performance in Sub-Saharan Africa. *Journal of Development Economics*, 64(1), 173-213.
- Addison, T and Levin, J. 2012. Determinants of tax revenue in Sub-Saharan Africa. Available online at: <http://www.http://oru.divaportal.org/smash/record.jsfpid=diva2%3A570456&dswid=7873> Accessed 16 June 2015.
- Ade, M., Rossouw, J. and Gwatidzo, T., 2017. *Analysis of tax harmonisation in the SADC* (No. 684).
- Ado, B., Korboe, D., Williams, J. & Mensah, O., 2010 “Implications of IMF loans and conditionalities on the poor and vulnerable in Ghana” Available online at: http://www.actionaid.org/sites/files/actionaid/implications_of_imf_loans_and_conditionalities_on_the_poor_and_vulnerable_in_ghana.pdf. Accessed on 4 September 2018.
- AfDB, 2010. Domestic Resource Mobilization for Poverty Reduction in East Africa. Regional Department East A (OREA).
- AfDB, 2017. African Economic Outlook 2017. Available online at: https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AEO_2017_Report_Full_English.pdf. Accessed on 21 September 2018.
- AfDB, 2018. African Economic Outlook 2018. Available online at: [https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/African Economic Outlook 2018 - EN.pdf](https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/African_Economic_Outlook_2018_-_EN.pdf). Accessed on 21 September 2018.
- AFRODAD (African Forum and Network on Debt and Development), 2011. What has tax got to do with development? A critical look at Mozambique’s tax system.
- Agbeyegbe, T., Stotsky J.G. and WoldeMariam A. 2004. “Trade liberalization, exchange rate changes and tax revenue in sub-Saharan Africa.” *IMF Working Paper*, No. 04-178.
- Ahmad, E. and Stern, N. 1989. Taxation for developing countries. *Handbook of development Economics*, 2, 1005-1092.

Ahmad, E. and Stern, N., 1991. *The theory and practice of tax reform in developing countries*. Cambridge University Press.

Ahmed, Q.M. and S.D. Mohammed 2010. “Determinant of tax buoyancy: Empirical evidence from developing countries”, *European Journal of Social Sciences*, 13 3), 408-414.

Aigner, D., Lovell, C.K. and Schmidt, P., 1977. Formulation and estimation of stochastic frontier production function models. *Journal of econometrics*, 6(1), pp.21-37.

Aizenman, J. and Jinjarak, Y. 2009. Globalization and Developing Countries—a Shrinking Tax Base *Journal of Development Studies*, 45(5), 653-671.

Aizenman, J. and Jinjarak, Y. 2009. Globalization and Developing Countries—a Shrinking Tax Base *Journal of Development Studies*, 45(5), 653-671.

Ajaz, T. and Ahmad, E., 2010. The effect of corruption and governance on tax revenues. *The Pakistan Development Review*, pp.405-417.

Alfirman, L. 2003. Estimating stochastic frontier tax potential: Can Indonesian local governments increase tax revenues under decentralization. *Department of Economics, University of Colorado at Boulder, Colorado. Working Paper*, (03-19).

Alm, J., Bahl, R. and Murray, M.N., 1991. Tax base erosion in developing countries. *Economic Development and Cultural Change*, 39(4), pp.849-872.

Al-Zefeiti, S.M.B. and Mohammad, N.A., 2015. Methodological considerations in studying transformational leadership and its outcomes. *International Journal of Engineering Business Management*, (7), pp.7-10.

American Institute of Certified Public Accountants (AICPA), 2017. “Tax Policy Concept Statement 1 – Guiding Principles of Good Tax Policy: A Framework for Evaluating Tax Proposals” Available online at: https://www.academia.edu/34729007/Tax_Policy_Concept_Statement_1_Guiding_Principles_of_Good_Tax_Policy_A_Framework_for_Evaluating_Tax_Proposals. Accessed on 12 September 2018.

Andersentax, n.d. Mauritius set to introduce significant tax reforms. Available online at: <https://www.mra.mw/individuals/understanding-value-added-tax>. Accessed on 13 September 2018.

Atkinson, A.B. and Stiglitz, J.E. 1976. The design of tax structure: direct versus indirect taxation. *Journal of public Economics*, 6(1), 55-75.

Avi-Yonah, R. and Margalioth, Y., 2007. Taxation in developing countries: Some recent support and challenges to the conventional view. *Va. Tax Rev.*, 27, p.1.

Ayoki, M., 2017. The reform of the tax system in Swaziland. Available online at: https://mpira.uibk-leoben.ac.at/84739/1/MPRA_paper_84739.pdf. Accessed on 12 September 2018.

Baduneko, O. and Kumbhakar, S.C., 2017. Economies of scale, technical change and persistent and time-varying cost efficiency in Indian banking: Do ownership, regulation and heterogeneity matter? *European Journal of Operational Research*, 260(2), pp.789-803.

Bahl, R.W., 2003. Reaching the Hardest to Tax: Consequences and Possibilities, paper presented at the “Hard to Tax: An International Perspective” conference, Andrew Young School of Policy Studies, Georgia State University, May 15-16

Bahl, R.W., 2003. Reaching the Hardest to Tax: Consequences and Possibilities, paper presented at the “Hard to Tax: An International Perspective” conference, Andrew Young School of Policy Studies, Georgia State University, May 15-16

Bamikole, L.O., 2012. Nkrumah and the Triple Heritage Thesis and Development in African Societies. *International Journal of Business, Humanities and Technology*, 2(2), pp.68-76.

Battese, G.E. and Coelli, T.J., 1995. A model for technical inefficiency effects in a stochastic frontier production function for panel data. *Empirical economics*, 20(2), pp.325-332.

Battese, G.E. and T.J. Coelli. 1988. “Prediction of Firm-Level Technical Efficiencies with a Generalized Frontier Production Function and Panel Data.” *Journal of Econometrics* 38, pp. 387–399.

Bayar, A. and Frank, M., 1987. The erosion of the different tax bases. *Public Finance=Finances publiques*, 42(3), pp.341-356.

Belotti, F., Daidone, S., Ilardi, G. and Atella, V., 2013. Stochastic frontier analysis using Stata. *The Stata Journal*, 13(4), pp.719-758.

Berry, W.D. and Fording, R.C., 1997. Measuring state tax capacity and effort. *Social Science Quarterly*, 78(1), pp.158-166.

Besley, T. and Persson, T., 2014. Why do developing countries tax so little?. *Journal of Economic Perspectives*, 28(4), pp.99-120.

Besley, T.J. and Persson, T. 2013. Taxation and development. *Handbook of Economic development*.

Bezat, A., 2011. Estimation of technical efficiency by application of the SFA method for panel data. *Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego Warszawie. Problemy Rolnictwa Światowego*, 11(3).

Bird, R.M. 2008. Tax challenges facing developing countries. *Institute for International Business Working Paper*, (9).

Bird, R.M. and Zolt, E.M., 2003. Introduction to tax policy design and development. *Prepared for a course on "Practical Issues of Tax Policy in Developing Countries," World Bank*, 28, pp.05-22.

Bird, R.M. and Zolt, E.M., 2008. Tax policy in emerging countries. *Environment and Planning C: Government and Policy*, 26(1), pp.73-86.

Bird, R.M. and Zolt, E.M., 2014. Redistribution via taxation: the limited role of the personal income tax in developing countries. *Annals of Economics and Finance*, 15(2), pp.625-683.

Bird, R.M., 1989. The administrative dimension of tax reform in developing countries. *Tax reform in developing countries*, pp.315-46.

Bird, R.M., Martínez-Vázquez, J. and Torgler, B. 2008. Tax effort in developing countries and high-income countries: The impact of corruption, voice and accountability. *Economic Analysis and Policy*, 38(1), 55-71.

Bird, R.M., Martínez-Vázquez, J. and Torgler, B., 2005. Value-added taxes in developing and transitional countries: lessons and questions. *ITP paper*, 505.

Bokusheva, R., Hockmann, H. and Kumbhakar, S.C., 2011. Dynamics of productivity and technical efficiency in Russian agriculture. *European review of agricultural economics*, 39(4), pp.611-637.

Bonanno, G., De Giovanni, D. and Domma, F., 2017. The 'wrong skewness' problem: a re-specification of stochastic frontiers. *Journal of Productivity Analysis*, 47(1), pp.49-64.

Bothhole, T., 2011. Natural resources, institutions and tax revenue mobilization in sub-Saharan Africa. In *comunicación presentada en la Conferencia sobre Economía Aplicada, Kastoria, Instituto Tecnológico de Macedonia Occidental* (Vol. 179).

Bothhole, T.D., 2010. Tax effort and the determinants of tax ratio in Sub-Saharan Africa. In *International Conference on Applied Economics-ICOAE*.

Brautigam, D., Fjeldstad, O.H. and Moore, M. eds., 2008. *Taxation and state building in developing countries: Capacity and consent*. Cambridge University Press.

Briguglio, L. and Galea, W., 2003. Updating and augmenting the economic vulnerability index. *Occasional paper, University of Malta*.

Brun, J.F. and Diakite, M., 2016. Tax Potential and Tax Effort: An Empirical Estimation for Non-resource Tax Revenue and VAT's Revenue. Available online at: <https://halshs.archives-ouvertes.fr/halshs-01332053>. Accessed on 13 June 2018.

Burgess, R. and Stern, N. 1993. Taxation and development. *Journal of economic literature*, 762-830.

Burnside, C. ed., 2005. *Fiscal sustainability in theory and practice: a handbook*. The World Bank.

Businessdictionary.com. (2016). *BusinessDictionary.com - Online Business Dictionary*. Available online at: <http://BusinessDictionary.com>. Accessed 1 June 2018.

Byiers, B., 2004. Tax Reforms & Revenue Performance in Mozambique. *Ministério do Planoo e Finanças*.

Calitz, E., Steenekamp, T.J. and Black, P.A. 1999. *Public Economics for South African Students*. Oxford University Press.

Cariolle, J., 2011. *The Economic Vulnerability Index-2010 Update* (No. I09). Fondation pour les études et recherches sur le Développement International (Ferdi).

Carnahan, M., 2015. Taxation challenges in developing countries. *Asia & the Pacific Policy Studies*, 2(1), pp.169-182.

Carnahan, M., 2015. Taxation challenges in developing countries. *Asia & the Pacific Policy Studies*, 2(1), pp.169-182.

Cawthra, G., 2010. *The role of SADC in managing political crisis and conflict: The cases of Madagascar and Zimbabwe*. Friedrich-Ebert-Stiftung Mozambique.

Central Bank of Swaziland, n.d. The Foreign Account Tax Compliance Act (FATCA). Available online at: <https://www.centralbank.org.sz/media/releases/FATCA.pdf>. Accessed on 12 September 2018.

Central Intelligence Agency, 2018. *The World Factbook 2018*. Government Printing Office.

Chalk, M.N.A. and Hemming, M.R., 2000. *Assessing fiscal sustainability in theory and practice* (No. 0-81). International Monetary Fund.

Chaudhry, I. S. and Munir, F. 2010. "Determinants of low tax revenue in Pakistan", *Pakistan Journal of Social Sciences*, 30 (2), 439-452.

Chingono, M. and Nakana, S., 2009. The challenges of regional integration in Southern Africa. *African Journal of Political Science and International Relations*, 3(10), pp.396-408.

Chikarapo, L., 2015. Tax Offences in Zimbabwe. A Critical Analysis of the Effectiveness of Strategies and Initiatives that are being pursued by ZIMRA. Available online at: <https://www.grin.com/document/341271>. Accessed on 21 September 2018.

Chikozho, C., 2018. Illicit Transfers and Tax Reforms in South Africa: Mapping of the Literature and Synthesis of the Evidence. Available online at: <https://www.africaportal.org/publications/illicit-transfers-and-tax-reforms-south-africa-mapping-literature-and-synthesis-evidence/>. Accessed on 18 September 2018.

Chiripanhura, B. and Chifamba, R., 2015. The impacts of Namibia's income tax reforms: A CGE approach. *AGRODEP/IFPRI Working Paper No. 20*

Choi, I., 2001. Unit root tests for panel data. *Journal of international money and Finance*, 20(2), pp.249-272.

Chu, T.T., Hölscher, J. and McCarthy, D., 2018. The impact of productive and non-productive government expenditure on economic growth: an empirical analysis in high-income versus low-to middle-income economies. *Empirical Economics*, pp.1-28.

Clist, P., 2016. Foreign aid and domestic taxation: Multiple sources, one conclusion. *Development Policy Review*, 34(3), pp.365-383.

Clist, P. and Morrissey, O. 2011. Aid and tax revenue: signs of a positive effect since the 1980s. *Journal of International Development*, 23(2), 165-180.

Cloyne, J.S., 2012. Discretionary tax shocks in the United Kingdom 1945-2009: a narrative account and dataset. Available online at: https://mpira.ub.uni-muenchen.de/37739/2/MPRA_paper_37739.pdf. Accessed on 8 August 2018.

Cnossen, S. (2011). Coordination of Indirect Taxes in the Southern African Development Community. *Tax Notes International*. 61 (12), p.943–969. Available online at: <https://www.taxnotes.com/documentlist/contributors-authors/cnossen-sijbren>. Accessed on 22 June 2018.

Coelli, T.J., Rao, D.S.P., O'Donnell, C.J. and Battese, G.E., 2005. *An introduction to efficiency and productivity analysis*. Springer Science & Business Media.

Colombi, R., Martini, G. and Vittadini, G., 2011. A stochastic frontier model with short-run and long-run inefficiency random effects. Aisberg, WP 012011, University of Bergamo, Italy.

Combes, J.L., Ouedraogo, R. and Tapsoba, M.S.J., 2016. *What Does Aid Do to Fiscal Policy? New Evidence*. International Monetary Fund.

Congleton, R.D., 2002. Policy interests as a source of public agency problems: Some evidence from international environmental treaties. *Fairfax: Center for Study of Public Choice Working Paper*.

Cornwell, C., Schmidt, P. and Sickles, R.C., 1990. Production frontiers with cross-sectional and time-series variation in efficiency levels. *Journal of econometrics*, 46(1-2), pp.185-200.

Creswell, J.W. and Clark, V.L.P., 2017. *Designing and conducting mixed methods research*. Sage publications.

Creswell, J.W., 2013. Steps in conducting a scholarly-mixed methods study. DBER Speaker Series. 48. Available online at: http://digitalcommons.unl.edu/dberspeakers/48?utm_source=digitalcommons.unl.edu%2Fdberspeakers%2F48&utm_medium=PDF&utm_campaign=PDFCoverPages. Accessed on 14 September 2018.

Creswell, J.W., 2014. *Research Design- Qualitative, Quantitative and Mixed Methods Approaches*. Sage Publications.

Croce, M.E. and Juan-Ramon, M.V.H., 2003. *Assessing fiscal sustainability: A cross-country comparison* (No. 3-145). International Monetary Fund.

Cruz-Rodríguez, A., 2014. Assessing fiscal sustainability in some selected countries. *Theoretical and Applied Economics* Vol 21, No. 6(595), pp. 7-22

Cyan, M., Martinez-Vazquez, J. and Vulovic, V., 2013. Measuring tax effort: Does the estimation approach matter and should effort be linked to expenditure goals? *International Center for Public Policy Working Paper* 13-08

D'Souza, E., 2016. *A theory of tax evasion in developing countries* (No. WP2016-03-37). Indian Institute of Management Ahmedabad, Research and Publication Department.

Damme, L., Misrahi, T. and Orel, S., 2008. The IMF's regressive secret Tax policy advice and its distributional impact. *Bretton Woods Project*, 61.

De Mesquita, B.B., Morrow, J.D., Siverson, R.M. and Smith, A., 2002. Political institutions, policy choice and the survival of leaders. *British Journal of Political Science*, 32(4), pp.559-590.

Deloitte, 2012. FACTA IGA Global Summary. Available online at: <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/Tax/us-tax-fatca-iga-global-summary-100917.pdf>. Accessed on 12 September 2018.

Deloitte, 2018. Guide to fiscal information Key economies in Africa. Available online at: <https://www2.deloitte.com/za/en/pages/tax/articles/guide-to-fiscal-information-key-economies-africa-2018.html> Accessed on 21 October 2018.

De STaT, (2012). FATCA in the Perspective of Developing Countries. Available online at: https://www.jus.uio.no/ior/english/research/projects/global-tax-tranparency/publications/fatca-in-the-perspective-of-developing-countries_destat-wp-edited-final.pdf. Accessed on 12 September 2018.

Di John, J. 2006. The Political Economy of Taxation and Tax Reform in Developing Countries, S.L.: *Unu-Wider Unu* 2006/74).

Dictionary, o. (2016). *occupation Meaning in the Cambridge English Dictionary*. Available online at: <http://dictionary.cambridge.org/dictionary/english/occupation>. Accessed on 1 June 2018.

Dioda, L. 2012. *Structural determinants of tax revenue in Latin America and the Caribbean, 1990-2009*. Comisión Económica para América Latina y el Caribe (CEPAL), United Nations ECLAC, Mexico.

Dom, R. and Miller, M., 2018. Reforming tax systems in the developing world. What can we learn from the past? Available online at: <https://www.odi.org/sites/odi.org.uk/files/resource-documents/12280.pdf>. Accessed on 16 May 2018.

- Dreher, A. and Schneider, F., 2010. Corruption and the shadow economy: an empirical analysis. *Public Choice*, 144(1-2), pp.215-238.
- Drummond, P., Daal, W., Srivastava, N. and Oliveira, L. 2012. Mobilizing revenue in Sub-Saharan Africa: empirical norms and key determinants. *IMF Working Paper WP/12/108*. . Washington DC: International Monetary Fund.
- Duncan, D. and Sabirianova Peter, K., 2012. Unequal inequalities: Do progressive taxes reduce income inequality? *Institute for the Study of Labour. IZA DP No. 6910*
- Easson, A. and Zolt, E.M. 2002. Tax incentives. *World Bank Institute*, 1-36.
- Ebeke, C. and Ehrhart, H., 2011. Tax revenue instability in Sub-Saharan Africa: Consequences and remedies. *Journal of African Economies*, 21(1), pp.1-27.
- Ehrhart, H., 2011. Assessing the relationship between democracy and domestic taxes in developing countries. *CERDI, Etudes et Documents*, E 2009.30
- Ehrhart, H., 2013. Elections and the structure of taxation in developing countries. *Public Choice*, 156(1-2), pp.195-211.
- Emran, M.S. and Stiglitz, J.E., 2005. On selective indirect tax reform in developing countries. *Journal of public Economics*, 89(4), pp.599-623.
- End, M.N., Tapsoba, M.S.J.A., Terrier, M.G. and Duplay, R., 2015. *Deflation and public finances: Evidence from the historical records* (No. 15-176). International Monetary Fund.
- Estrada, F., Mutascu, M. and Tiwari, A., 2011. *Estabilidad política y tributación [Taxation and political stability]* (No. 32414). University Library of Munich, Germany.
- Fairfield, T., 2013. Going where the money is: Strategies for taxing economic elites in unequal democracies. *World Development*, 47, pp.42-57.
- Fantom, N. J. and Serajuddin, U., 2016. *The World Bank's classification of countries by income (English)*. Policy Research working paper; no. WPS 7528. Washington, D.C. : World Bank Group.
- Faridy, N. and Sarker, T., 2011. Incidence of Value Added Tax (Vat) in the Developing Countries: A Case in Bangladesh. *International Journal of Trade, Economics and Finance*, 2(5), p.437.
- Favero, C. and Giavazzi, F., 2007. *Debt and the effects of fiscal policy* (No. w12822). National Bureau of Economic Research.
- Fenochietto, M.R. and Pessino, M.C., 2013. *Understanding countries' tax effort* (No. 13-244). International Monetary Fund.
- Filmer, R. & Mushiri, S. 2001. 'Customs revenue implications of the SADC Trade Protocol'. Paper prepared for the USAID/RCSA SADC Trade Protocol Project.

- Fjeldstad, O., & K. K. Heggstad. (2011). The Tax Systems in Mozambique, Tanzania and Zambia: Capacity and Constraints (mimeo).
- Fjeldstad, O.H., 1995. Taxation and tax reforms in Tanzania: A survey. Chr. Michelsen Institute (CMI Working Paper WP 1995:4).
- Fjeldstad, O.H. 2013. *Taxation and Development: A review of donor support to strengthen tax systems in developing countries* (No. 2013/010). WIDER Working Paper.
- Fjeldstad, O.H., Jensen, S.K. and Orre, A., 2012. Taking stock of the tax reform process in Angola, and why tax incentives should be avoided. *Angola Brief, 1*.
- Fjeldstad, O.H., Jensen, S.K. and Paulo, F.M., 2014. The non-oil tax reform in Angola: On track or losing momentum? *Angola Brief, 2*.
- Fjeldstad, O.H., Fundanga, C. and Rakner, L., 2016. The rise and fall of the mining royalty regime in Zambia. *CMI Brief*.
- Franks, M.J.R., Barkbu, M.B.B., Blavy, M.R., Oman, W. and Schoelermann, H., 2018. *Economic Convergence in the Euro Area: Coming Together or Drifting Apart?* International Monetary Fund.
- Fuest, C. and Riedel, N., 2009. Tax evasion, tax avoidance and tax expenditures in developing countries: A review of the literature. *Report prepared for the UK Department for International Development (DFID)*, pp.1-69.
- Gaalya, M.S. 2015. Trade Liberalization and Tax Revenue Performance in Uganda. *Modern Economy*, 6(02), p.228
- Gallagher, M., 2005. Benchmarking tax systems. *Public Administration and Development: The International Journal of Management Research and Practice*, 25(2), pp.125-144.
- Gardner, L.A. 2012. *Taxing colonial Africa: the political economy of British imperialism*. Oxford University Press.
- Garg, S., Goyal, A. and Pal, R., 2017. Why Tax Effort Falls Short of Tax Capacity in Indian States: A Stochastic Frontier Approach. *Public Finance Review*, 45(2), pp.232-259.
- Garikai, B.W., 2009. An empirical analysis of the determinants of tax buoyancy in developing nations: an experience from the SADC economies using panel data analysis. *Master's Dissertation: University of Zimbabwe*.
- Ghura, M.D., 1998. *Tax revenue in Sub-Saharan Africa: Effects of economic policies and corruption* (No. 98-135). International Monetary Fund.
- Gjefsen, T., 2012. Sources of legitimacy: quality of government and electoral democracy. *Department of Political Science, University of Oslo, Oslo*.

- Glenday, G. and Hollinrake, D., 2005. Assessment of the Current State of VAT Implementation in SADC Member States. *Duke Center for International Development, Duke University*.
- Gordon, R. and Li, W. 2009. Tax structures in developing countries: Many puzzles and a possible explanation. *Journal of public Economics*, 93(7), 855-866.
- Gordon, R. and Li, W., 2007. Puzzling Tax Structures in Developing Countries: A Comparison of Two Alternative Explanations. In *Fiscal Policy and Management in East Asia, NBER-EASE, Volume 16* (pp. 9-35). University of Chicago Press.
- Gordon, R. ed., 2010. *Taxation in Developing Countries: Six Case Studies and Policy Implications*. Columbia University Press.
- Government of Zimbabwe, 2019. Zimbabwe Mid-Term Fiscal Policy. Retrieved from: https://www.parlzim.gov.zw/component/k2/download/2492_3fa2241ebb3d27454a48faa2ecfeb27. Accessed on 7 September 2019.
- Greene, W., 2005. Fixed and random effects in stochastic frontier models. *Journal of productivity analysis*, 23(1), pp.7-32.
- Greif, A. and Rubin, J., 2014. *Endogenous Political Legitimacy: The English Reformation and the Institutional Foundations of Limited Government*. Working paper, Stanford University.
- Grossman, G.M. and Helpman, E., 2001. *Special interest politics*. MIT press.
- Grote, M., 2017. How to establish a Tax Policy Unit. Available online at: <https://www.imf.org/~media/Files/Publications/HowToNotes/howtonote1707.ashx>. Accessed in January 2018
- Guillaumont, P., 2011. EVI and its Use. Design of an Economic Vulnerability Index and its Use for International Development Policy. Available online at: <https://halshs.archives-ouvertes.fr/halshs-00557091/document>. Accessed on 8 January 2018.
- Gujarati, D. and Porter, D.C., 2004. Basic Econometrics, 2004. *Editorial McGraw-Hill*, p.858.
- Gunning, J.W., 2001, July. Rethinking aid. In *Annual World Bank Conference on Development Economics 2000* (pp. 125-144). World Bank Publications.
- Gupta, S. 2007. Determinants of tax revenue efforts in developing countries. *IMF Working Papers*, 1-39. International Monetary Fund.
- Hafner, C.M., Manner, H. and Simar, L., 2018. The “wrong skewness” problem in stochastic frontier models: A new approach. *Econometric Reviews*, 37(4), pp.380-400.
- Haglund, D., 2013. Zambia mining sector fiscal benchmarking and assessment. *EPS-PEAKS (Economic and Private Sector)*.

- Hahs-Vaughn, D.L. and Onwuegbuzie, A.J., 2010. Quality of abstracts in articles submitted to a scholarly journal: A mixed methods case study of the journal *Research in the Schools*. *Library & Information Science Research*, 32(1), pp.53-61.
- Hanberger, A., 2003. Public policy and legitimacy: A historical policy analysis of the interplay of public policy and legitimacy. *Policy Sciences*, 36(3-4), pp.257-278.
- Haque, A. (2012). Determinants of low tax efforts of developing countries, mimeo.
- Harberger, A.C., 2003. Reflections on distributional considerations and the public finances. *Module for World Bank Course on Practical Issues of Tax Policy in Developing Countries*, April.
- Hassan, M. and Prichard, W., 2013. *The political economy of tax reform in Bangladesh: Political settlements, informal institutions and the negotiation of reform*. Institute of Development Studies.
- Heady, C. 2002. Tax policy in developing countries: what can be learned from OECD experience in seminar “Taxing Perspectives: A Democratic Approach to Public Finance in Developing Countries” Institute of Development Studies, University of Sussex, UK, October 28-29.
- Heshmati, A., Kumbhakar, S.C. and Kim, J., 2018. Persistent and transient efficiency of international airlines. *European Journal of Transport and Infrastructure Research*, 18(2).
- Hicks, U.K., 1946. The terminology of tax analysis. *The Economic Journal*, 56(221), pp.38-50.
- Hines Jr, J.R., 2007. Excise taxes. *University of Michigan and National Bureau of Economic Research, Michigan*.
- Holm, P. and Koskela, E., 1996. Tax progression, structure of labour taxation and employment. *FinanzArchiv/Public Finance Analysis*, pp.28-46.
- Ilzetzi, E. 2014. *A positive theory of tax reform*. Mimeo, London: LSE and CEPR.
- Ilzetzi, E., 2015. A Positive Theory of Tax Reform. CEPR Discussion Paper No. DP10922. Available online at SSRN: <https://ssrn.com/abstract=2685679>
- Ilzetzi, E., 2018. Tax reform and the political economy of the tax base. *Journal of Public Economics*.
- Imam, P.A. and Jacobs, D. 2007. Effect of corruption on tax revenues in the Middle East. *Review of Middle East Economics and Finance Rev. Middle East Econ. Fin.*, 10(1), 1-24.
- Institute of Chartered Accountants in England and Wales (ICAEW), 1999. Taxguide 4/99 towards a better tax system. Available online at: http://www.icaew.com/index.cfm/route/175054/icaew_ga/Faculties/Tax/Publications_and_technical_guidance/TAXREP_43_10/TAXREP_43_10/pdf. Accessed 1 June 2018.

Institute of Chartered Accountants of Zimbabwe, n.d. Features of the proposed income tax Bill. Available online at: <https://www.icaaz.org.zw/iMISDocs/taxbill.pdf>. Accessed on 23 September 2018.

Institute of Taxation and Economic Policy (ITEP), 2012. "Tax principles: Building Blocks of a sound tax system", Available online at: <https://itep.org/reports-by-year/>. Accessed 22 April 2018

International Monetary Fund (2015). Options for low-income countries' effective and efficient use of tax incentives for investment. Report to the G20 Development Working Group. Available online at: <https://www.imf.org/external/np/g20/pdf/101515.pdf>. Accessed on 20 October 2018.

Ishi, H., 1980. Effects of Taxation on the Distribution of Income and Wealth in Japan. *Hitotsubashi Journal of Economics*, pp.27-47.

ITC, 2010. "Addressing tax evasion and tax avoidance in developing countries" Available online at: https://www.taxcompact.net/documents/ITC_2010-12_Addressing-tax-evasion-and-avoidance.pdf. Accessed on 5 May 2018.

ITC, 2015. First ATI Monitoring Report launched at the ITC/ATI Tax and Development Conference Berlin, Germany / 14–16 June 2017. Available online at: https://www.addistaxinitiative.net/documents/Addis-Tax-Initiative_Monitoring-Report_2015_EN.pdf. Accessed on 22 May 2018.

Ivanyna, M. and von Haldenwang, C., 2012. A comparative view on the tax performance of developing countries: Regional patterns, non-tax revenue and governance. *Economics E-Journal* 6 (2012-32)

Jagers, S.C., Matti, S. and Nordblom, K., 2016. How policy legitimacy affects policy support throughout the policy cycle. *Quality of Governance Institute Working Paper Series 2016:15*. ISSN 1653-8919

James, S. and Nobes, C., 1998. *The economics of taxation*, Prentice Hall Europe – chapter 2

Jordaan, Y. and Schoeman, N., 2015. Measuring the impact of marginal tax rate reform on the revenue base of South Africa using a microsimulation tax model. *South African Journal of Economic and Management Sciences*, 18(3), pp.380-394.

Johnson, G., 2005. *Provincial Politics and Indian Nationalism: Bombay and the Indian National Congress 1880-1915* (Vol. 14). Cambridge University Press.

Kakinaka, M. and Pereira, R.M., 2006. A new measurement of tax progressivity. *International University of Japan, Graduate School of International Relations Working Paper EDP06-7*.

Karagöz, K. 2013 "Determinants of Tax Revenue: Does Sectorial Composition Matter" *Journal of Finance, Accounting and Management*, 4(2), pp 50-63.

- Karimo, T. and Ogbonna, O., 2017. Financial deepening and economic growth nexus in Nigeria: Supply-leading or demand-following?. *Economies*, 5(1), p.4.
- Kayaga, L., 2007. Tax policy challenges facing developing countries: A case of Uganda. *Master of Laws thesis. Queens University, Kingston, Ontario, Canada.*
- Keen, M. 2012. Taxation and Development. *International Monetary Fund Working Paper*, 12(220).
- James, K., 2010. Taxation of Foreign Investments in Malawi. Lessons from Japan. MPRA Paper No. 28191. Available online at: <https://mpra.ub.uni-muenchen.de/28191/>. Accessed on 14 September 2018.
- KfW, 2009. Supporting Tax Reforms in Africa: The Case of Mozambique. Available online at: https://www.kfw-entwicklungsbank.de/Download-Center/PDF-Dokumente-Positionspapiere/2009_11_Steuerreform_E.pdf. Accessed on 14 September 2018.
- Khetan, C.P. and Poddar, S.N., 1976. Measurement of income tax progression in a growing economy: the Canadian experience. *Canadian Journal of Economics*, pp.613-629.
- Kimtai, K.F., 2014. Public Debt, Tax Revenue and Government Expenditure in Kenya: 1960-2012. *Unpublished MBA Project.*
- Kloeden, M.D., 2011. *Revenue Administration Reforms in Anglophone Africa since the Early 1990's* (No. 11-162). International Monetary Fund.
- Koatsa, J.N. and Nchake, A.M., 2017. Revenue Productivity of the Tax System In Lesotho. *ESSA.*
- Kodila-Tedika, O. and Mutascu, M. (2013). *Shadow economy and tax revenue in Africa*. No. 50812. University Library of Munich, Germany.
- Kordana, K.A. and Tabachnik, D.H., 2003. Tax and the Philosopher's Stone. 89 Va. L. Rev. 647 (2003).
- Koskela, E. and Schöb, R., How Tax Progression Affects Effort and Employment (June 2007). IZA Discussion Paper No. 2861. Available at SSRN: <https://ssrn.com/abstract=998475>
- Koskela, E. and Schöb, R., 2012. Tax Progression under Collective Wage Bargaining and Individual Effort Determination. *Industrial Relations: A Journal of Economy and Society*, 51(3), pp.749-771.
- Kostiainen, E., 2018. Taxation and Legitimacy–Namibia in Focus. (Master's Thesis. University of Helsinki).
- Kotlikoff, Laurence J., Assessing Fiscal Sustainability (12/12/2013). Mercatus research. Available online at: <https://ssrn.com/abstract=3191355> or <http://dx.doi.org/10.2139/ssrn.3191355>. Accessed on 5 October 2018.

- Kroupová, Z.Ž. and Slaboch, J., 2015. Tax capacity and tax effort in Visegrad Group countries and in old member EU states. *Theoretical and Practical Aspects of Public Finance 2015*, p.302.
- Kumbhakar, S.C. and Lovell, C.K., 2000. *Stochastic frontier analysis*. Cambridge university press.
- Kumbhakar, S.C., 1990. Production frontiers, panel data, and time-varying technical inefficiency. *Journal of econometrics*, 46(1-2), pp.201-211.
- Kumbhakar, S.C., Lien, G. and Hardaker, J.B., 2014. Technical efficiency in competing panel data models: a study of Norwegian grain farming. *Journal of Productivity Analysis*, 41(2), pp.321-337.
- Kumbhakar, S.C., Park, B.U., Simar, L. and Tsionas, E.G., 2007. Nonparametric stochastic frontiers: a local maximum likelihood approach. *Journal of Econometrics*, 137(1), pp.1-27.
- Kumbhakar, S.C., Parmeter, C.F. and Zelenyuk, V., 2017. *Stochastic Frontier Analysis: Foundations and Advances* (No. 2017-10).
- Kumbhakar, S.C., Wang, H. and Horncastle, A.P., 2015. *A practitioner's guide to stochastic frontier analysis using Stata*. Cambridge University Press.
- Lai, H.P. and Kumbhakar, S.C., 2018. Panel data stochastic frontier model with determinants of persistent and transient inefficiency. *European Journal of Operational Research*, 271(2), pp.746-755.
- Lakshman, W.D., 2017. Political Economy of Taxation in Sri Lanka. *World Review of Political Economy*, 8(2), pp.235-252.
- Langford, B. and Ohlenburg, T., 2016. Tax revenue potential and effort: An empirical investigation. *International Growth Center (IGC) pp*, pp.1-30.
- Larmore, C., 2013. What is political philosophy? *Journal of Moral Philosophy*, 10(3), pp.276-306.
- Le, T.M., Moreno-Dodson, B. and Bayraktar, N., 2012. *Tax capacity and tax effort: Extended cross-country analysis from 1994 to 2009*. The World Bank.
- Lent, G.E., Casanegra, M. and Guerard, M., 1973. The value-added tax in developing countries. *Staff Papers*, 20(2), pp.318-378.
- Lephoto, L.M. 2004. Introduction of VAT in Lesotho. Central Bank of Lesotho.
- Lesotho Revenue Authority (n.d). Value Added Tax. Available online at: <http://www.lra.org.ls/value-added-tax-vat>. Accessed on 13 September 2018.

Letete, P., 2018. Developments in Exchange of Information in Tax Matters within SADC: A move towards Tackling Tax Fraud in Southern Africa. *International Business & Economics Research Journal (IBER)*, 17(2), pp.9-20.

Lewis, C. and Alton, T., 2015. How can South Africa's tax system meet revenue-raising challenges? Available online at: https://www.oecd-ilibrary.org/economics/how-can-south-africa-s-tax-system-meet-revenue-raising-challenges_5jrp1g0xztbr-en. Accessed on 18 September 2018.

Lien, G., Kumbhakar, S.C. and Alem, H., 2018. Endogeneity, heterogeneity, and determinants of inefficiency in Norwegian crop-producing farms. *International Journal of Production Economics*, 201, pp.53-61.

Lipset, S.M., 1959. Some social requisites of democracy: Economic development and political legitimacy. *American political science review*, 53(1), pp.69-105.

Lojanica, N., 2015, May. Government Expenditure and Government Revenue—The Causality on the Example of the Republic of Serbia. In *Management International Conference* (pp. 79-90).

Lotz, J.R. and Morss, E.R. 1967. Measuring " Tax Effort" in Developing Countries (Evaluation de l'effort fiscal dans les pays en voie de développement) (Medición del " esfuerzo tributario" de los países en desarrollo). *Staff Papers-International Monetary Fund*, 478-499.

Lundstøl, O. and Isaksen, J., 2018. *Zambia's mining windfall tax* (No. 2018/51). WIDER Working Paper.

Maddala, G.S. and Wu, S., 1999. A comparative study of unit root tests with panel data and a new simple test. *Oxford Bulletin of Economics and statistics*, 61(S1), pp.631-652.

Mahdavi, S. 2008. The level and composition of tax revenue in developing countries: Evidence from unbalanced panel data. *International Review of Economics & Finance*, 17(4), 607-617.

Malawi Revenue Authority, n.d. Understanding Value Added Tax. Available online at: <https://www.mra.mw/individuals/understanding-value-added-tax>. Accessed on 12 September 2018.

Mankiw, G.N. Yagan, D.F. and Weinzierl, M.C. 2009. Optimal Taxation in Theory and Practice. *Journal of Economic Perspective*, 23(4), 147-174.

Manley, D., 2013. A guide to mining taxation in Zambia. Available online at: <https://www.africaportal.org/publications/a-guide-to-mining-taxation-in-zambia/>. Accessed on 24 September 2018.

Manley, D., 2017. Ninth Time Lucky: Is Zambia's Mining Tax the Best Approach to an Uncertain Future. *NRGI Briefing October*.

- Manuel, T., 2002. The South African tax reform experience since 1994. *Address presented at the International Bar Association's Annual Conference, Durban, South Africa, October* (pp. 20-25).
- Marques, A.V., n.d. *General Structure of Petroleum and Ownership: Angola Law and Practice*. AVM Advogados.
- Martinez-Vazquez, J., Vulovic, V. and Liu, Y., 2011. Direct versus indirect taxation: Trends, theory and economic significance. *The Elgar Guide to Tax Systems, Edward Elgar Publishing*, pp.37-92.
- Mascagni, G., Moore, M. and McCluskey, R., 2014. *Tax Revenue Mobilization in Developing Countries: Issues and Challenges*. European Union (Belgium).
- Matlosa, K., 2003. Political culture and democratic governance in Southern Africa. *African Journal of Political Science*, 8(1), pp.85-112.
- Matlosa, K., 2007. *Political parties in Southern Africa: The state of parties and their role in democratization*. International IDEA.
- Mawejje, J. and Francis Munyambonera, E., 2016. Tax revenue effects of sectoral growth and public expenditure in Uganda. *South African Journal of Economics*, 84(4), pp.538-554.
- Mazhar, U. and Méon, P.G., 2017. Taxing the unobservable: The impact of the shadow economy on inflation and taxation. *World development*, 90, pp.89-103.
- Mbatia, C.N., 2017. *Effect of foreign aid dependency on taxation revenue in Sub-Saharan Africa* (Doctoral dissertation, University of Cape Town).
- Mbatia, C.N., 2018. *Effect of foreign aid dependency on taxation revenue in Sub-Saharan Africa* (Doctoral dissertation, University of Cape Town).
- McDonald, M.C.A. and Schumacher, M.L., 2007. *Financial Deepening in Sub-Saharan Africa: Empirical Evidence on the Role of Creditor Rights Protection and Information Sharing* (No. 7-203). International Monetary Fund.
- McGillivray, M. and Morrissey, O., 2001. *A review of evidence on the fiscal effects of aid* (No. 01/13). CREDIT Research Paper.
- McLure, C.E., 1993. Economic, administrative, and political factors in choosing a general consumption tax. *National Tax Journal*, 46(3), pp.345-358.
- McLure, C.E., 1993. Economic, administrative, and political factors in choosing a general consumption tax. *National Tax Journal*, 46(3), pp.345-358.
- McMahon, G. & Schmidt-Hebbel, K. (2000). Macroeconomic Adjustment and Tax Reform in Developing Countries. In Perry, G., Whalley, J. and McMahon, G. eds. *Fiscal Reform and Structural Change in Developing Countries*, Vol. 2, Macmillan Press Ltd, London. pp. 150-196

Medina, L. and Schneider, F., 2018. Shadow economies around the world: what did we learn over the last 20 years? Available online at: <https://www.imf.org/en/Publications/WP/Issues/2018/01/25/Shadow-Economies-Around-the-World-What-Did-We-Learn-Over-the-Last-20-Years-45583>. Accessed on 26 September 2018

Meeusen, W. and van den Broeck, J., 1977. Technical efficiency and dimension of the firm: Some results on the use of frontier production functions. *Empirical economics*, 2(2), pp.109-122.

Mendoza, E.G. and Ostry, J.D., 2008. International evidence on fiscal solvency: Is fiscal policy “responsible”? *Journal of Monetary Economics*, 55(6), pp.1081-1093.

Mercier, J., 2013. “Principles of a good tax system”, Available online at: https://www.washingtonpolicy.org/library/docLib/tax_principles.pdf. Accessed on 16 May 2018.

Merryman, S., 2004. "XTFISHER: Stata module to compute Fisher type unit root test for panel data," Statistical Software Components S448201, Boston College Department of Economics.

Mertens, K. and Ravn, M.O., 2012. Empirical evidence on the aggregate effects of anticipated and unanticipated US tax policy shocks. *American Economic Journal: Economic Policy*, 4(2), pp.145-81.

Messere, K.C. and Owens, J.P., 1987. International Comparisons of Tax Levels: Pitfalls and Insights”. *Economic Studies*, (8), pp.83-119.

Ministry of Finance and Development Planning, n.d. Botswana Income Tax Act 1995. <https://www.finance.gov.bw/>

Miranda n.d. Angola tax changes in sync with mining code. Available online at: <https://www.mirandalawfirm.com/en/services/practice-areas/tax>. Accessed on 23 June 2019.

Mkandawire, T. 2010. On tax efforts and colonial heritage in Africa. *The Journal of Development Studies*, 46(10), 1647-1669.

Mlilo, B.N., 2016. *Managing Private-public Joint Venture Companies: The Case of Zimbabwe's Diamond Mining Sector* (Doctoral dissertation, University of the Witwatersrand, Faculty of Commerce, Law and Management, Graduate School of Business Administration).

Morrissey, O., 2015. Aid and domestic resource mobilization with a focus on Sub-Saharan Africa. *Oxford Review of Economic Policy*, 31(3-4), pp.447-461.

Morrissey, O., Von Haldenwang, C., Von Schiller, A., Ivanyina, M. and Bordon, I., 2016. Tax revenue performance and vulnerability in developing countries. *The Journal of Development Studies*, 52(12), pp.1689-1703.

- Munongo, S., 2015. *The effectiveness of tax incentives in attracting foreign direct investment: the case of the Southern African Development Community* (Doctoral dissertation, University of South Africa).
- Murphy, L. and Nagel, T., 2002. *The myth of ownership: Taxes and justice*. Oxford University Press.
- Musgrave, R.A. and Thin, T., 1948. Income tax progression, 1929-48. *Journal of political Economy*, 56(6), pp.498-514.
- Mususa, P., 2018. Political authoritarianism amidst growing inequalities in Southern Africa. The Nordic Africa Institute, Research Unit. ORCID i.d: [0000-0002-8416-2642](https://orcid.org/0000-0002-8416-2642)
- Musviba n.d. South African Tax Guide. Available online at: <http://www.sataxguide.co.za/> Accessed on 22 October 2018.
- Muwanga, G.S., 2017. Estimation of Cob-Douglas and Translog Production Functions With Capital And Gender Disaggregated Labour Inputs In The USA. *Journal of Smart Economic Growth*, 2(3), pp.55-105.
- Ndiaye, M.B.O. and Korsu, R.D., 2014. Tax effort in ECOWAS countries. In *Regional Economic Integration in West Africa* (pp. 137-158). Springer, Cham.
- Ndikumana, L., 2014. Capital flight and tax havens: impact on investment and growth in Africa. *Revue d'economie du developpement*, 22(HS02), pp.99-124.
- Ndofula, E.J., 2014. Economic appraisal of changes to the South African tax system since 1990. Master's Degree Thesis, University of the Western Cape.
- Nellen, A.M., 2002. The AICPA's 10 Guiding Principles. *The Tax Adviser*, 33(2), p.100.
- Newbery, D. and Stern, N., 1987. *The theory of taxation for developing countries*. Oxford University Press.
- Ngawi, J., 2017. Time SADC harnesses capacity to fund programmes. The Herald. Available online: <https://www.herald.co.zw/time-sadc-harnesses-capacity-to-fund-programmes/> Accessed on 20 January 2018.
- Ngwenya, B. and Siziba, T., 2016. An analysis of the factors that have reduced tax revenue collectability in Zimbabwe between 2009 and 2015. *European Business & Management*. Vol. 2, No. 2, 2016, pp. 32-39.
- Nielsen, L., (2011). Classifications of Countries Based on Their Level of Development: How it is done and how it could be done. *Strategy, Policy, and Review Department*. International Monetary Fund.
- Ndlovu, T., 2016. Fiscal histories of Sub-Saharan Africa: the case of Botswana. Available online at: https://www.fes-southafrica.org/fileadmin/user_upload/publications/160826-Fiscal-Histories-Botswana-final-compressed.pdf. Accessed on 12 May 2018.

Ngowi, H.P. and Olan'g, S., 2014. Analysis of the Value Added Tax (VAT) 2014 Bill, Tax Administration Bill 2014 And Investment Policy 1997. Action Aid Tanzania (AATZ) For Tax Justice Network -Tanzania

Nsiku, N., 2013. Assessing Investment Incentives in Malawi. *International Institute for Sustainable Development and Trade Knowledge Network: Geneva.*

OECD (2018), *Revenue Statistics in Africa 2018*, OECD Publishing, Paris. Available online at: https://www.un.org/development/desa/dpad/wpcontent/uploads/sites/45/publication/ldc_list.pdf. Accessed on 2 February 2018.

OECD 1996. "Definition of taxes", Available online at: <http://www1.oecd.org/daf/mai/pdf/eg2/eg2963e.pdf>. Accessed 22 April 2018.

OECD 2004. "OECD Glossary of Statistical Terms", Available online at: <https://stats.oecd.org/glossary/glossary.pdf>. Accessed 22 April 2018.

Okner, B.A., 1975. Individual taxes and the distribution of income. In *The Personal Distribution of Income and Wealth* (pp. 45-74). NBER.

Park, D., 2008. *Globalization, Erosion of Tax Base, and the Revenue Potential of Developing Asia's Foreign Exchange Reserve Build-Up* (No. 122). ERD Working Paper Series.

Park, H.M., 2011. Practical guides to panel data modelling: A step-by-step analysis using STATA. *Public Management and Policy Analysis Program, Graduate School of International Relations, International University of Japan*, pp.1-52.

Parliament of Namibia, n.d. <http://www.parliament.gov.na/>

Parman, B.J. and Featherstone, A.M., 2019. A comparison of parametric and nonparametric estimation methods for cost frontiers and economic measures. *Journal of Applied Economics*, 22(1), pp.59-84.

Pechman, J.A. and Okner, B.A., 1974. *Who Bears the Tax Burden?* Brookings Institution: Washington DC.

Pedone, A., 2009. Tax Theory and Tax Practice: The Problems of Defining, Measuring and Assessing Tax Bases Tax Theory and Tax Practice. *Sapienza University of Rome, Department of Public Economics Working Papers.*

Peter, F., 2007. The political egalitarian's dilemma. *Ethical theory and moral practice*, 10(4), pp.373-387.

Peters, B.G., 1991. The politics of taxation. *A Comparative Perspective, Cambridge*, pp.58-64.

Peters-Berries, C., 2010. Regional integration in southern Africa—A guidebook. *Capacity Building International, Germany.*

- Pitt, M.M. and Lee, L.F., 1981. The measurement and sources of technical inefficiency in the Indonesian weaving industry. *Journal of development economics*, 9(1), pp.43-64.
- Pivovarsky, M.A., Clements, M.B.J., Gupta, M.S. and Tiongson, M.E., 2003. *Foreign aid and revenue response: does the composition of aid matter?* (No. 3-176). International Monetary Fund.
- Polo, M., 1998. Electoral competition and political rents. Working Papers 144, *IGIER (Innocenzo Gasparini Institute for Economic Research)*, Bocconi University.
- Profeta, P. 2004. *Public finance and political economics in tax design and reforms. Tax systems and tax reforms in Europe*, London, Routledge, 55-75.
- Profeta, P., 2003. Tax Systems and Tax Reforms in Europe: Public Finance and Political Economics.
- Quak, E. 2018. Tax coordination and tax harmonization within the regional economic communities in Africa. K4D Helpdesk Report. Brighton, UK: Institute of Development Studies.
- Rahman, S.A. and Wadud, M.A., 2014. Tax and Spend, Spend and Tax, Fiscal Synchronization or Fiscal Neutrality: Evidence from Bangladesh. *The International Journal of Applied Economics and Finance*, 8(3), p.98.
- Ramsey, F.P., 1927. A Contribution to the Theory of Taxation. *The Economic Journal*, 37(145), pp.47-61.
- Reinsberg, B., Stubbs, T., Kentikelenis, A. and King, L., 2017. Do IMF programs help raise tax revenue? Available online at: http://wp.peio.me/wp-content/uploads/2018/01/PEIO11_paper_38.pdf. Accessed on 2 May 2018.
- Republic of Mauritius, 2018. Budget Speech 2018/2019. Available online at: http://budget.mof.govmu.org/budget2018-19/2018_19budgetspeech.pdf. Accessed on 15 September 2018.
- Reynolds, M. and Smolensky, E., 1977. Post-fiscal distributions of income in 1950, 1961, and 1970. *Public Finance Quarterly*, 5(4), pp.419-438.
- Ricciuti, R., Savoia, A. and Sen, K., 2018. How do political institutions affect fiscal capacity? Explaining taxation in developing economies. *Journal of Institutional Economics*, pp.1-30.
- Robinson, Z., 2005. Corporate tax rates in the SADC region: determinants and policy implications. *South African journal of economics*, 73(4), pp.722-740.
- Romer, C.D. and Romer, D.H., 2010. The macroeconomic effects of tax changes: estimates based on a new measure of fiscal shocks. *American Economic Review*, 100(3), pp.763-801.

Rossouw, J., 2017. *Convergence the Southern African Development Community (SADC): Dream or reality?* A Paper presented at the bi-ennial ESSA conference Grahamstown, South Africa. 30 August to 1 September 2017.

Rothstein, B., 2009. Creating political legitimacy: Electoral democracy versus quality of government. *American behavioural scientist*, 53(3), pp.311-330.

Rothstein, B., 2012. Political legitimacy for public. *The Sage handbook of public administration*, pp.407-419.

Ruiz, M., Sharpe, R. and Romero, M.J., 2011. Approaches and Impacts: IFI Tax Policy in Developing Countries. *EURODAD and Actionaid*. Available online at: http://www.actionaid.org.uk/doc/lib/ifi_tax_policy_developing_countries.pdf. Accessed on 21 August 2018.

Rustomjee, C., 2016. Vulnerability and Debt in Small States. *Centre for International Governance Innovation (CIGI)*. Policy Brief No. 83 • July 2016.

SADC Bankers n.d. Available on <https://www.sadcbankers.org>. Accessed on 26 June 2018.

SADC n.d. Available online at: <http://www.sadc.int/about-sadc/overview/strategic-pl/regional-indicativestrategic-development-plan/> Accessed on 17 August 2018].

SADC n.d. Available online at: <https://www.sadc.int/>

SADC, 2017. SADC Selected Economic and Social Indicators. Available online: [https://www.sadc.int/files/7115/4021/7218/Selected Indicators 2017.pdf](https://www.sadc.int/files/7115/4021/7218/Selected_Indicators_2017.pdf). Accessed on 27 June 2018).

SADC. 2006. Protocol on Finance and Investment. Available online at: [http://www.sadc.int/files/4213/5332/6872/Protocol on Finance Investment2006.pdf](http://www.sadc.int/files/4213/5332/6872/Protocol_on_Finance_Investment2006.pdf). Accessed on 18 August 2018.

SADC. 2006. Protocol on Finance and Investment. Available online at: [https://www.sadc.int/files/4213/5332/6872/Protocol on Finance Investment2006.pdf](https://www.sadc.int/files/4213/5332/6872/Protocol_on_Finance_Investment2006.pdf) Accessed on 25 June 2018

SADC. 2011. SADC Statistics Yearbook.

Sahn, D. E., and Younger, S. D., 2003. "Estimating the Incidence of Indirect Taxes in Developing Countries," 2003, in Francois Bourguignon and Luiz Pereira da Silva, editors, *Techniques and Tools for Evaluating the Poverty Impact of Economic Policies*, New York: Oxford University Press.

Sahn, D. E., and Younger, S. D., 2003. "Estimating the Incidence of Indirect Taxes in Developing Countries," 2003, in Francois Bourguignon and Luiz Pereira da Silva, editors, *Techniques and Tools for Evaluating the Poverty Impact of Economic Policies*, New York: Oxford University Press.

Saksena, A., 2009. Relevance of Ideology Today. *Economic and Political Weekly*, pp.65-69.

Santos de Souza, S., 2013. The political economy of tax reform in Latin America: A critical review. *Woodrow Wilson Center Update on the Americas*.

SAOPRA, n.d. The Seychelles Tax System- SAOPRA Seychelles. Available online at: <http://saopra.sc/seychelles-tax-system.html>. Accessed on 21 September 2018.

Saunders, M., Lewis, P. and Thornhill, A., 2009a. *Research methods for business students*. Pearson education.

Saunders, M., Lewis, P. and Thornhill, A., 2009b. Understanding research philosophies and approaches. *Research Methods for Business Students*. 4. 106-135.

Schnellenbach, J., 2005. Tax morale and the legitimacy of economic policy. *Available at SSRN* 753884.

Schmidt, P. and Sickles, R.C., 1984. Production frontiers and panel data. *Journal of Business & Economic Statistics*, 2(4), pp.367-374.

Schneider, F. 2002, July. Size and measurement of the informal economy in 110 countries. In *Workshop of Australian National Tax Centre, ANU, Canberra*.

Schneider, F. 2010. The influence of the economic crisis on the shadow economy in Germany, Greece and the other OECD countries in 2010: what can be done. *Institute of Economics, Johannes Kepler University of Linz*.

Schneider, F., Buehn, A. and Montenegro, C.E., 2010. Shadow economies all over the world: New estimates for 162 countries from 1999 to 2007. *World Bank policy research working paper*, (5356).

Scotland, J., 2012. Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, 5(9).

Seidl, C., 1994. Measurement of Tax Progressivity with Non-constant Income Distributions. In *Models and measurement of welfare and inequality* (pp. 337-360). Springer, Berlin, Heidelberg.

Seidl, C., 1994. Measurement of Tax Progressivity with Non-constant Income Distributions. In *Models and measurement of welfare and inequality* (pp. 337-360). Springer, Berlin, Heidelberg.

Seidl, C., Pogorelskiy, K. and Traub, S., 2012. *Tax progression in OECD countries: An integrative analysis of tax schedules and income distributions*. Springer Science & Business Media.

Seleteng, M. and Motelle, S., 2015. Sources of Economic Growth in the Southern Africa Development Community. *Economic Research Southern Africa (ERSA)*.

Seligman, E.R.A., 1909. *Progressive taxation in theory and practice* (Vol. 9, No. 4). American economic association.

Seligman, E.R.A., 1909. *Progressive taxation in theory and practice* (Vol. 9, No. 4). American economic association.

Seychelles Revenue Commission (n.d). <https://www.src.gov.sc/pages/resources/into.aspx>.

Shikongo, A.S., 2018. *Revenue productivity of the tax system in Namibia* (Doctoral dissertation, University of Namibia).

Shoup, C., 1988. The value added tax and developing countries. *The World Bank Research*

Sicat, G.P. and Virmani, A., 1988. Personal income taxes in developing countries. *The World Bank Economic Review*, 2(1), pp.123-138.

Slemrod, J., 2016. Tax Systems in Developing Countries. *Development*, 12, p.12.

Smith, A., Islam, A. and Moniruzzaman, M., 2011. Consumption taxes In Developing Countries-The case of the Bangladesh VAT. Available at SSRN 2028663.

Spiro, P.S. 2005. Tax policy and the underground economy. *Size, Causes and Consequences of the Underground Economy*, Christopher Bajada and Friedrich Schneider, eds., Ashgate Publishing.

Standard Bank, 2017. The Foreign Account Tax Compliance Act, (FATCA). Available online at: <https://www.centralbank.org.sz/media/releases/FATCA.pdf>. Accessed on 12 September 2018.

Stiglitz, J.E., 2015. Reconstructing macroeconomic theory to manage economic policy. In *Fruitful Economics* (pp. 20-56). Palgrave Macmillan, London.

Stock, J.H. and Watson, M.W., 2003. *Introduction to econometrics* (Vol. 104). Boston: Addison Wesley.

Stotsky, J.G. and WoldeMariam, A. 1997. "Tax effort in sub-Saharan Africa", *IMF Working Paper, No. 97- 107*. International Monetary Fund.

Stroup, M.D., 2005. An index for measuring tax progressivity. *Economics Letters*, 86(2), pp.205-213.

Sugden, R. (2011). The Behavioural Economist and the Social Planner: To Whom Should Behavioural Welfare Economics Be Addressed? *Papers on Economics and Evolution* 1121, Jena: Max-Planck-Institute for Economics.

Sugden, R. (2011). The Behavioural Economist and the Social Planner: To Whom Should Behavioural Welfare Economics Be Addressed? *Papers on Economics and Evolution* 1121, Jena: Max-Planck-Institute for Economics.

- Sugden, R., 2013. The behavioural economist and the social planner: to whom should behavioural welfare economics be addressed? *Inquiry*, 56(5), pp.519-538.
- Tanzi, V. and Zee, H., 2001. Tax Policy for Developing Countries. International Monetary Fund.
- Tanzi, V. and Zee, H.H. 2001. *Tax policy for developing countries* (Vol. 27).International Monetary Fund.
- Teera, J.M., 2003. Determinants of tax revenue Share in Uganda. *Centre for Public Economics Working Paper 09b-03, University of Bath*.
- Temu, E., 2014. *Factors undermining tax reforms in Tanzania: A case of large taxpayers* (Doctoral dissertation, Mzumbe University).
- Tenhunen, S. 2007. *Essays on the Theory of Optimal Taxation*. Doctoral Thesis. Tampere University Press.
- Tenhunen, S. 2007. *Essays on the Theory of Optimal Taxation*. Doctoral Thesis. Tampere University Press.
- Tetlow, G. and Stojanovic, A., 2018. Understanding the economic impact of Brexit. *Institute for Government*, pp.2-76.
- The Institute for Fiscal Studies, 2010. The Mirlees Review: Dimensions of Tax Design, Oxford University Press. Available from: <http://www.ifs.org.uk/mirrleesReview/dimensions>. Accessed on 16 June 2015.
- Theodossiadis, L., 2005. Tax Reforms and Macroeconomic Stabilization in Mozambique. Master's Thesis, School of Management and Economics, Lund University.
- Thornhill, C. and Van Dijk, H.G., 2002. The functioning of the Southern African Development Community (SADC) and the primary characteristics of the member states. *Journal of Public Administration*, 37(3), pp.187-211.
- Thornton, J. 2014. Does foreign aid reduce tax revenue: Further evidence. *Applied Economics*, 46(4), 359-373.
- Trepelkov, A. and Verdi, M., 2018. "Design and assessment of tax incentives in developing countries", Available online at: <http://www.un.org/esa/ffd/publications/design-and-assessment-of-tax-incentives-in-developing-countries.html#>. Accessed on 3 August 2018.
- Trepelkov, Tonino and Halka (eds.) 2017, "United Nations Handbook on Selected Issues in Protecting the Tax Base of Developing Countries" (United Nations).
- Trepelkov, Tonino and Halka (eds.) 2017, "United Nations Handbook on Selected Issues in Protecting the Tax Base of Developing Countries" (United Nations).

Trotman-Dickenson, D.I., 2016. *Economics of the public sector*. Macmillan International Higher Education.

Turvey, R., 2007. Vulnerability assessment of developing countries: the case of small-island developing states. *Development Policy Review*, 25(2), pp.243-264.

Ulriksen, Katera and Msami, 2019. Bargaining strategies in recent tax reforms in Tanzania. Available online at: <https://ecpr.eu/Filestore/PaperProposal/f245bbc0-3d9a-4218-93de-abae4ea35831.pdf>. Accessed on 24 September 2018.

Umar, H.S., Girei, A.A. and Yakubu, D., 2017. Comparison of Cobb-Douglas and Translog frontier models in the analysis of technical efficiency in dry-season tomato production. *Agrosearch*, 17(2), pp.67-77.

Umar, M.A., Derashid, C. and Ibrahim, I., 2017. Challenges of tax revenue generation in developing countries: Adopting the carrot and stick approach. *Journal of Humanities and social sciences*, 22(1), pp.30-34.

UN, 2015. Addis Ababa Action Agenda of the Third International Conference on Financing for Development (Addis Ababa Action Agenda) (No. A/RES/69/313) Resolution adopted by the General Assembly.

UNCTAD, 2015. *International Tax and Investment Policy Coherence*. World Investment Report 2015.

United Nations, 2018. Design and Assessment of Tax incentives in developing countries. Available online at: https://www.un.org/esa/ffd/wp-content/uploads/2018/02/tax-incentives_eng.pdf. Accessed on 12 September 2018.

Vanheukelom, J. and Bertelsmann-Scott, T., 2016. The Political Economy of Regional Integration in Africa: The Southern African Development Community (SADC). Available online at: <https://ecdpm.org/wp-content/uploads/ECDPM-2016-Political-Economy-Regional-Integration-Africa-SADC-Report.pdf>. Accessed on 27 June 2018.

Van Heerden, Y., 2014. *Personal income tax reform to secure the South African revenue base using a micro-simulation tax model* (Doctoral dissertation, University of Pretoria).

Vogt, W. P., Gardner, D. C. and Haeffele, M. L., 2012. When to use archival designs: *Literature reviews and secondary data analyses*. Guilford Publications.

Von Haldenwang, C. and Ivanyna, M., 2011. *Assessing the tax performance of developing countries*. Discussion Paper 20/2010. Bonn: German Development Institute.

Von Haldenwang, C., Morrissey, O., Ivanyna, M., Bordon, I. and von Schiller, A., 2013. Study on the vulnerability and resilience factors of tax revenues in developing countries.

Wallace, M. and Wray, A., 2016. *Critical reading and writing for postgraduates*. Sage.

Weier, A., 2006, February. Legal definitions of taxation terms—implications for the design of environmental taxes and charges. In *50th annual conference of the Australian Agricultural and Resource Economics Society*, Sydney (pp. 8-10).

Whalley, J., 2002. Taxes and trade. *World Bank, Washington, DC* [www.worldbank.org/].

Wilford, A., Woody, S. and Brady, D., *What's the Deal with Base Erosion?* Policy paper Issue 179. National Taxpayers Union.

Williamson, J.G., 1961 "Public Expenditure and Revenue: An International Comparison." *The Manchester School of Economic and Social Studies*) pp. 43- 56.

Winer, S.L., Profeta, P. and Hettich, W., 2013. *The political economy of taxation*. Oxford University Press.

World Bank, 2008. Enhancing the Effectiveness of External Support in Building Tax Capacity in Developing Countries. Available online at:

<http://pubdocs.worldbank.org/en/858011469113510187/Enhancing-the-Effectiveness-of-External-Support-in-Building-Tax-Capacity.pdf>. Accessed on 13 February 2018.

World Bank, 2015. Tax reforms are necessary to help Tanzania. Available online at: <https://www.worldbank.org/en/news/press-release/2015/07/03/tax-reforms-are-necessary-to-help-tanzania-finance-development-and-solidify-economic-growth>. Accessed on 24 September 2018.

World development indicators 2018. Washington, D.C.: The World Bank.

Yaguchi, Y., 1994. A panel data approach to the intercountry meta-production function. *ISU General Staff Papers* 1994010108000018181, Iowa State University, Department of Economics.

Yaya K, 2015. "Institutions, Economic Structure and Tax Revenue in UEMOA Countries: A Pool Mean Group Analysis," *Journal of Empirical Economics, Research Academy of Social Sciences*, vol. 4(4), pages 216-230.

Yogo, U.T. and Ngo Njib, M.M., 2018. Political competition and tax revenues in developing countries. *Journal of International Development*, 30(2), pp.302-322.

Yohou, H.D. and Goujon, M., 2017. Reassessing Tax Effort in Developing Countries: a Proposal of a Vulnerability-Adjusted Tax Effort Index (VATEI). *Development*, p.186.

Zolt, E. M. 2014. Politics and Taxation: An Introduction. 67 *Tax Law Review* 453. Available from: http://papers.ssrn.com/sol3/papers.cfmabstract_id=2559925. [Accessed on 22 April 2015]

Zolt, E.M., 2015. *Tax Incentives: Protecting the tax base*. UN.

Appendix A: Size of the shadow economy in the SADC

