



RESEARCH TOPIC

Impact of Tax and Customs Reforms on Economic Growth for Eleven (11) selected SADC Countries; South Africa, Seychelles, Malawi, Madagascar, Tanzania, Zambia, Mauritius, Mozambique, Eswatini, Namibia and Angola.

BY

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RESEARCH TOPIC

Impact of Tax and Customs Reforms on Economic Growth for Eleven (11) selected SADC Countries; South Africa, Seychelles, Malawi, Madagascar, Tanzania, Zambia, Mauritius, Mozambique, Eswatini, Namibia and Angola.

ABSTRACT

This paper examined the impact of tax reforms on economic growth for Eleven (11) selected Southern African Development Community Countries; South Africa, Seychelles, Malawi, Madagascar, Tanzania, Zambia, Mauritius, Mozambique, Eswatini, Namibia and Angola. Using variables Gross Domestic Product (dependant) and Foreign Direct Investment, Tax Revenue and Exchange Rate. The findings review that tax reforms have a positive relationship but no significant impact on GDP growth. I therefore conclude that favourable tax reforms improve revenue generation capacity of governments. However, it is recommended that sustainable economic growth related to tax can be achieved through corrupt free, efficiency in tax policy of government, accountability and transparency of government officials.

Keys words: Tax Reforms, Economic growth

DECLARATION

I hereby declare that the thesis titled " the impact of tax reforms on economic growth for Eleven (11) selected Southern African Development Community Countries; South Africa, Seychelles, Malawi, Madagascar, Tanzania, Zambia, Mauritius, Mozambique, Eswatini, Namibia and Angola. " is the result of research work carried out by me at Selinus University under the guidance of Dr. Salvatore Fava P.hD,

I further declare that it has not been previously submitted either in part or full to this or any other University for any degree. Due acknowledgements have been made whenever anything has been borrowed or cited from other sources.

DEDICATION

I would like to dedicate this piece of work to Zambia Revenue Authority in particular colleagues at Kasumbalesa Border Post 2012 – 2020 and my children Mubukwanu Simwinji, Cleopatra Simwinji and David Mukela Simwinji for the love and support their have rendered unto me.

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| ABSTRACTi |
|--|
| DECLARATION ii |
| DEDICATION iii |
| ACKNOWLEDGMENTiv |
| LIST OF TABLES |
| ACRONYMS |
| CHAPTER ONE |
| 1.0 INTRODUCTION |
| Table 1: SADC Profile 2018 1 |
| 1.1 PROBLEM STATEMENT |
| 1.2 PURPOSE AND SIGNIFICANCE OF THE RESEARCH |
| 1.3 RESEARCH QUESTIONS |
| 1.4 RESEARCH OBJECTIVES |
| 1.5 HYPOTHESIS |
| 1.6 AIMS OF THE RESEARCH |
| 1.7 RESEARCH SCOPE AND ASSUMPTIONS |
| 1.8 CONCLUSION |
| CHAPTER TWO 4 |
| LITERATURE REVIEW |
| 2.0 INTRODUCTION |
| 2.1 EMPIRICAL STUDIES |
| 2.2 CONCEPTUAL FRAMEWORK |
| 2.3 CONCLUSION |
| CHAPTER THREE |
| RESEARCH METHODOLOGY9 |
| 3.0 INTRODUCTION |
| 3.1 RESEARCH DESIGN |

TABLE OF CONTENTS

| 3.2 POPULATION AND SAMPLE OF THE STUDY | Э |
|--|---|
| 3.3 DATA COLLECTION TECHNIQUES | 9 |
| 3.4 EXPECTED SIGNS 10 | D |
| 3.5 MODAL SPECIFICATION | D |
| 3.6 TECHNIQUES OF ANALYSIS AND PRESENTATION 10 | D |
| 3.7 PROBLEM AND LIMITATION OF THE STUDY 1: | 1 |
| CHAPTER FOUR 12 | 2 |
| 4.0 INTRODUCTION | 2 |
| Factors that affected the course of the reforms 14 | 4 |
| Table 3, Malawi: Regression Analysis Between TR and GDP 22 | 1 |
| Table 4, Malawi: Regression Analysis Between FDI and GDP | 2 |
| Table 5, Malawi: Regression Analysis between EXR and GDP 22 | 2 |
| Table 6, Mauritius: Regression Analysis between TR and GDP | 7 |
| Table 7, Mauritius: Regression Analysis between FDI and GDP 27 | 7 |
| Table 8, Mauritius: Regression Analysis between EXR and GDP | 8 |
| Table 9, Zambia: Regression Analysis between TR and GDP | С |
| Table 10, Zambia: Regression Analysis between FDI and GDP | 1 |
| Table 11, Zambia: Regression Analysis between EXR and GDP 32 | 2 |
| Table 12, Tanzania: Regression Analysis between TR and GDP 39 | 5 |
| Table 13, Tanzania: Regression Analysis between FDI and GDP 36 | 6 |
| Table 14, Tanzania: Regression Analysis between EXR and GDP | 6 |
| Table 15, Mozambique: Regression Analysis between TR and GDP 38 | 8 |
| Table 16, Mozambique: Regression Analysis between FDI and GDP 39 | Э |
| Table 16, Mozambique: Regression Analysis between EXR and GDP | Э |
| Table 17, Namibia: Regression Analysis between TR and GDP 43 | 3 |
| Table 18, Namibia: Regression Analysis between FDI and GDP 43 | 3 |
| Table 19, Namibia: Regression Analysis between EXR and GDP | 4 |

| Table 20, Seychelles: Regression Analysis between TR and GDP | 47 |
|---|----|
| Table 21, Seychelles: Regression Analysis between FDI and GDP | 48 |
| Table 22, Seychelles: Regression Analysis between EXR and GDP | 49 |
| Table 23, Angola: Regression Analysis between TR and GDP | 50 |
| Table 24, Angola: Regression Analysis between FDI and GDP | 50 |
| Table 25, Angola: Regression Analysis between EXR and GDP | 51 |
| Table 26, Madagascar: Regression Analysis between TR and GDP | 52 |
| Table 27, Madagascar: Regression Analysis between FDI and GDP | 52 |
| Table 28, Madagascar: Regression Analysis between EXR and GDP | 53 |
| Table 29: Statement and Values | 55 |
| Table 30, Eswatini: Regression Analysis between TR and GDP | 57 |
| Table 31, Eswatini: Regression Analysis between FDI and GDP | 57 |
| Table 33, South Africa: Regression Analysis between TR and GDP | 60 |
| Table 34, South Africa: Regression Analysis between FDI and GDP | 61 |
| Table 35, South Africa: Regression Analysis between EXR and GDP | 61 |
| CHAPTER FIVE | 65 |
| SUMMARY, CONCLUSION AND RECOMMENDATION | 65 |
| 5.1 Introduction | 65 |
| 5.2 Summary | 65 |
| 5.3 Conclusion | 65 |
| 5.4 Policy Recommendations | 65 |
| REFERENCES | 67 |
| APPENDICES | 71 |

LIST OF TABLES

| Table 1: SADC Profile 2018. 1 |
|--|
| Table 2, Shows the expected signs in the coefficient on the explaining variables10 |
| Table 3, Malawi: Regression Analysis between TR and GDP 21 |
| Table 4, Malawi: Regression Analysis between FDI and GDP 22 |
| Table 5, Malawi: Regression Analysis between EXR and GDP |
| Table 6, Mauritius: Regression Analysis between TR and GDP 27 |
| Table 7, Mauritius: Regression Analysis between FDI and GDP 27 |
| Table 8, Mauritius: Regression Analysis between EXR and GDP |
| Table 9 Zambia, Regression Analysis between TR and GDP |
| Table 10, Zambia: Regression Analysis between FDI and GDP 31 |
| Table 11, Zambia: Regression Analysis between EXR and GDP 32 |
| Table 12, Tanzania: Regression Analysis between TR and GDP 35 |
| Table 13, Tanzania: Regression Analysis between FDI and GDP |
| Table 14, Tanzania: Regression Analysis between EXR and GDP |
| Table 15, Mozambique: Regression Analysis between TR and GDP 38 |
| Table 16, Mozambique: Regression Analysis between FDI and GDP |
| Table 16, Mozambique: Regression Analysis between EXR and GDP |
| Table 17, Namibia: Regression Analysis between TR and GDP 43 |
| Table 18, Namibia: Regression Analysis between FDI and GDP |
| Table 19, Namibia: Regression Analysis between EXR and GDP 44 |
| Table 20, Seychelles: Regression Analysis between TR and GDP 47 |
| Table 21, Seychelles: Regression Analysis between FDI and GDP 48 |

| Table 22, Seychelles: Regression Analysis between EXR and GDP 49 |
|---|
| Table 23, Angola: Regression Analysis between TR and GDP |
| Table 24, Angola: Regression Analysis between FDI and GDP |
| Table 25, Angola: Regression Analysis between EXR and GDP 51 |
| Table 26, Madagascar: Regression Analysis between TR and GDP 52 |
| Table 27, Madagascar: Regression Analysis between FDI and GDP 52 |
| Table 28, Madagascar: Regression Analysis between EXR and GDP 53 |
| Table 29: Statement and Values |
| Table 30, Eswatini: Regression Analysis between TR and GDP 57 |
| Table 31, Eswatini: Regression Analysis between FDI and GDP 57 |
| Table 32, Eswatini: Regression Analysis between EXR and GDP 58 |
| Table 33, South Africa: Regression Analysis between TR and GDP 60 |
| Table 34, South Africa: Regression Analysis between FDI and GDP |
| Table 35, South Africa: Regression Analysis between EXR and GDP |

ACRONYMS

- GDP: Gross Domestic Product
- EXR: Exchange Rate
- TR: Tax Revenue
- FDI: Foreign Direct Investment

CHAPTER ONE

1.0 INTRODUCTION

The Southern African Development Community SADC was established as a development coordinating conference (SADC) in 1980 and transformed into a development community in 1992. It is an inter-governmental organization whose goal is to promote sustainable and equitable economic growth and socio- economic development through efficient productive systems, deeper co-operation and integration, good governance and durable peace and security among fifteen Southern African member states.

Table 1: SADC Profile 2018

| Indicator | Information | Indicator | | Data |
|-------------------|-------------------------|------------------------------|--------------|-----------------------|
| Member states | 16 | Trade Total import | | USD \$ 85 243 million |
| | | | | (2018) |
| | | | Total Export | USD \$ 91 575 million |
| | | | | (2018) |
| Year established | 1992 | Average government Debt | | 42.8% |
| | | (2015; % of | GDP) | |
| Land area | 556 781 km ² | Average lif | e Expectancy | 61.0 |
| | | (2018) | | |
| Total Population | 345 million | Average HIV Prevalence rate | | 11.3% |
| (2018) | | (2018) | | |
| GDP Annual | 1.8% | Gender (proportion of seats | | 23% |
| Population (2018) | | held by women in | | |
| | | parliament) -2018 | | |
| GDP (2018) | | USD \$ 721.3 Billion GDP | | 59.4% |
| | | contribution services (2015) | | |
| Inflation (2018) | 7.1% | GDP contribution: Industry | | 20.3% |
| | | (2015 | | |
| Fiscal balance | -3.1% | GDP contribution: | | 20.2% |
| (2018) | | Agriculture | (2015) | |

Source: SADC selected indicates 2018

1.1 PROBLEM STATEMENT

According to International Monetary Fund (2015), sub – Sahara Africa remains the region with the World's lowest ratio on Revenue to GDP, despite huge progress in Revenue collections.

This statement is radically true with respect to SADC countries. The Tax Revenue excluding grants as percentage of GDP declined from 27.2% in 2007 to 24.1% in 2018. This performance is not good enough as it does not significantly reduce the government debt which was 56.1% of GDP as of 2018.

Therefore the question that Peggar for an answer is what is the impact of tax revenue as GDP for SADC countries.

1.2 PURPOSE AND SIGNIFICANCE OF THE RESEARCH

The purpose of the study is to develop a detailed understanding about the impact of Tax reforms on GDP in SADC region. The study used variables GDP (dependant) and Exchange Rate, FDI, Tax Revenue as independent variables.

Therefore, it is hoped that the knowledge obtained from this research will help stir further research in this area of study and will also help fiscal policy makers.

1.3 RESEARCH QUESTIONS

- 1. Did tax Revenue have any significant impact on GDP during 2000-2018?
- 2. Did FDI have any significant impact on GDP during 2000-2018?
- 3. Did exchange rate have any significant impact on GDP during 2000-2018?

1.4 RESEARCH OBJECTIVES

- 1. To run a regression equation which determine whether there is a relationship between GDP and Tax revenue SADC countries during 2000-2018.
- 2. To formulate a framework that will facilitate the fiscal makers make sound decision.

1.5 HYPOTHESIS

- Ho There is no relationship between GDP and Tax revenue in SADC countries during 2000-2018.
- Ha There is a relationship between GDP and Tax Revenue in SADC countries during 2000-2018.

1.6 AIMS OF THE RESEARCH

- 1. To determine the effects on Tax Revenue on GDP in SADC countries.
- 2. To establish short run and long run relationship between Tax Revenue and GDP.
- 3. To identify challenges faced by implementation of the Tax reform in SADC region.
- 4. To identify achievement of Tax reform in SADC region.

1.7 RESEARCH SCOPE AND ASSUMPTIONS

This study will examine the effects of Tax reforms on GDP in SADC countries, during the period 2000-2018. Therefore, the research period is large enough to avoid compromise of the research test.

1.8 CONCLUSION

This chapter introduces the subject under study by providing background to the study. In addition it dealt with the problem statement which was followed by purpose of study, research questions and objectives. Furthermore, the hypothesis of the study has been elucidated. The chapter concluded with research scope and assumptions.

The structure of the rest of the report will be as follows, chapter two explores the literature review. This has been achieved through a thorough review of conceptual framework, economic theories and lastly literature on the subject under study.

Chapter three outlines the research methodology that will be used to investigate the research question. Chapter four will present and analyze the research findings. Chapter five will sum up all the work contained in this study and will recommend based on the findings and gaps contained in this study. Therefore this chapter will rely on the previous chapter and draw conclusions.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter is divided into three sections. The first section explains the conceptual framework involving the variables FDI, exchange Tax Revenue as well as Gross Domestic Product. Theories related to economic growth and Taxation has been covered in the second section.

The third section explores empirical works on the subject under study. The last section concludes the chapter.

2.1 EMPIRICAL STUDIES

A lot of empirical studies have been conducted on the effects of taxes on economic growth and development of a nation. Among them are the studies of (Tosun & Abizabeh, 2015) in their study of economic growth of tax changes in OECD countries from 1980 to 1999 which revealed that economic growth measured by GDP capital has a significant effect on the tax mix of GDP per capital is shown that while the shares of personal and property taxes have responded positively on economic growth, shares of the payroll and goods and services taxes shown a relative decline.

Egen and Skinner (1996) suggests modest effects on the order 0.2 to 0.3 percentage points differences in growth rates in response to major reform. They stated that such small effects can have a large cumulative impact on living standards of people.

Easterly and Rebelo (1993) test the tax rate by their rate by their own method of constructing marginal tax rate plus several other methods of defining the marginal tax rate, in tax regressions, in total 13 different measures tax are employed. The methodology adopted is to include these measures of the marginal tax rate one at a time within a basic regression equation. The basic equation contained the standard determinants of growth notably initial income, school enrolments, assassination, revolutions and war casualties. Estimation of this equation without the inclusion of rates generated the result with an R of 0.29. They concluded that "the evidence that tax rates matter for economic growth is disturbing fragile."

Arnold (2011) find that short term recovery requires increase in demand while long run growth required increase in supply. As short term concessions can be hard to reverse, this implies that policies to alleviate this crisis could compromise long run growth. Widmalm (2001) studies the effect of the tax structure on growth using cross-section data on 3 OECD countries from 1965-1990. However, the use of only three OECD countries limits the viability of this study, as more OECD countries could be used for a more efficient result. The methodology follows that of Levine and Renelt (1992), but used for basic variables (initial income, investment to GDP ratio, population growth, and average tax rate). The share of different tax instruments in revenue is considered first (corporate income tax, personal income tax, property tax, taxes on goods and services, and services, and taxes on wages). The proportion of tax revenue from taxing personal income has a negative and robust correlation with growth. There is also some evidence that progressivity affects growth.

This hypothesis is addressed in (Le and Gordon, 2005) by conducting a tax regression using the top corporate marginal tax rate and top personal marginal tax rate to capture the effect of taxation. They justify this choice by an appeal to entrepreneurial activity being the driver of growth, and the top marginal rate being the one that is likely to be applicable to successful entrepreneurs, they concluded that it is corporate taxes that are most damaging for growth since they reduce entrepreneurial activities and lessen the incentive.

Widmalm (2001) using Learner extreme bond analysis, showed data from 23 countries over the period 1965-1990 that tax on personal income has a negative impact on growth. Unlike the consumption tax. Lee and Gordon (2005) found the corporate income tax rate to have a negative impact on growth by applying the panel estimation method to data from 70 developed and developing countries over the period 1980-1997.

Angepoulos, Economides and Kammas (2006) find that the taxation of labour income has a negative impact growth, while corporate tax and capital income tax have positive impact on growth. They find these results by applying the panel's method to a sample of 23 OECD countries.

Arnold (2008-2011) uses an error correction panel on data from 21 OECD countries over the 1970-2005. He finds that the taxes on wealth, and in particular periodic taxes on real estate, are the most favourable to growth, followed immediately by taxes on consumption. Individual income taxes are significantly less favourable, and corporate income taxes have the most negative effects on GDP per capital.

5

Xing (2012) uses an empirical analysis based on the error correction model data from OECD countries. First, it finds that personal income tax, the corporate tax or the consumption taxes are associated with a lower per capital income level in the long term. He concludes that in order to promote growth, there is no evidence that personal income taxes are better than corporate income taxes, or the consumption taxes are better than income taxes.

Santiago and Yoo (2012) analysed 69 countries ranked among high-income, middleincome and low – income countries over the period 1970-2009. It uses an error correction model for this purpose. First they find that income taxes, social security contributions and personal income taxes have a strong positive association with growth. Finally, a reduction in income taxes and an increase in value added taxes on sales are also associated with faster growth. However, they report that their results are applicable to high – income and middle-income countries, but not to low – income countries.

Mehrara, Masomib, and Barkhi (2014), looking at the effect of fiscal policy on economic growth and inflation, find that using the PVAR approach a shock in tax revenues in the short term. Long – term economic growth has no effect on growth. They also find that indirect taxes have more effect than other types of taxes at the macroeconomic level. Their analysis is based on a sample of 14 developing countries over the period 1990-2011.

Keho (2010) who adopted the scully regression models and quadratic concludes that higher taxes are strongly correlated with reduced economic growth in Cote d'Ivoire. A similar negative relationship between the tax burden and the economic growth rate in Nigeria and South Africa was reported by Saibu (2015). In another study Keho (2013) adopting the linear programming methodology of Branson and Lovell (2001) finds that higher taxes are associated with reduced economic growth.

Keho (2011) finds that there is a long-term relationship between the different tax returns with the exception of direct taxes and growth in Cote d'Ivoire. It finds a two-way casualty between tax revenues and long – term production, which implies a virtuous circle of taxes and GDP. Direct taxes, however, did not cause GDP in the short and long term. These results suggests that tax revenues depend on economic activity, and reducing the tax burden from direct taxes to indirect taxes is likely to have a positive effect on growth. Ugwunta and Ugwuanyi (2015) applied an estimate of panel data under the assumption of fixed unobservable effect. They find that taxes on income, profits, capital gains, taxes on payroll and labour, property taxes, estates fixed assets and financial transactions

have a negative and insignificant effect. On the other hand, indirect taxes have a positive and insignificant effect on the economic growth of sub-Sahara African countries. A similar result was obtained by N'Yilimon (2014) using the unit root test on the panel data. He suggests that there is no non-linear link between taxation and economic growth in the West African Econo0mic Monetary Union (UEMOA) countries. Dasalegn (2014), using the ordinary least squares method, finds that VAT receipts play a significant and positive role in the effect of VAT on economic growth in Kenya found a significant and negative relationship between the two variables.

Eichengreen and Leblang (2003) found strong negative relationship between exchange rate stability and growth for 12 countries over a period of 20 years and concluded that results of such estimations strongly depend on the time and sample.

Akpan et al (2012) based on the quarterly time series data for the period 1986 to 2010 examined the relationship between exchange rate movement and output growth in Nigeria. Using generalized method of moments (GMM) technique the finding of the study revealed that of changes in the exchange rate and on output.

Abeid Ahmed Ramadha, Zhi Hong Jian, Yapatake Kossele Thales Pacific (2016) School of Economics, Huazhong University of Science and Technology Luoyo, Road examined the effects of FDI on Gross Domestic Product (GDP). The variables used in this analysis are GDP is used as a dependent variable while Total Labour Force, human capital and Gross Fixed Capital Formation variable were regarded as independent variable. By using ordinary least Square method of regression, the results from regression shown FDI is not significant but have positive relationship with economic growth for Mozambique. While for South Africa, FDI and total labour force is significant at the 10% level but have negative and positive relationship respectively with economic growth. It is important for both countries to improve its sectors of electricity supply and logistics and its business climate as well as to improve the governance in order to maintain a long run economic development and growth.

7

2.2 CONCEPTUAL FRAMEWORK



2.3 CONCLUSION

This chapter dealt with first the conceptual framework, then it explored economic and tax theories. In addition, it covered empirical work related to individual countries as well as regions.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

This chapter outlines the research design and methodology that was applied in conducting this study. It describes the research design, population of the study, sample size, sample frame, data collection, methods, data analysis and presentation of the research.

3.1 RESEARCH DESIGN

The research design employed descriptive and Ex post factor research design. Descriptive research design method helps in gathering information about the existing status of the phenomenon in order to describe what exists in respect to variables. According to Coopers and Schindler (2008) descriptive studies are more formalized and typically structured with clearly stated hypothesis or investigative questions. This method is used because it addressed the objective of the study in investigating the relationship between the variables. Regression and correlation analysis was used to determine the relationship between GDP and Tax revenue, foreign direct investment, exchange rate, during the 2000-2018.

3.2 POPULATION AND SAMPLE OF THE STUDY

The target population for this study was 10 SADC countries during period 2000-2018 variables e.g Gross Domestic Product (dependent variable) and Exchange rate, Foreign Direct Investment and Tax revenue.

3.3 DATA COLLECTION TECHNIQUES

The data required for the study obtained from Secondary sources that was used to investigate the relationship between dependent and independent variables. The study used secondary data sources to gather information relevant to the research objectives. Thus study covered data from 2000-2018. The secondary data was collected from websites for revenue authorities, International Monetary and World Bank reports.

3.4 EXPECTED SIGNS

| Table 2, Shows the expected signs in the coefficient on the explaining var |
|--|
|--|

| Variable | Symbol | Expected signs |
|---------------------------|--------|----------------|
| Foreign Direct Investment | FDI | + |
| Exchange Rate | EXR | ± |
| Tax Revenue | TR | + |

- Foreign direct investment inflows are expected to have a positive effect on GDP growth.
- The effect of an exchange rate depreciation are ambiguous as the depend on the relevant elasticity conditions (such as the Marshal – Lerner) pertaining to trade values and volumes.
- Tax revenue is expected to have a positive effect on GDP growth.

3.5 MODAL SPECIFICATION

The theoretical foundation based on the study of Okeye and Eze (2013) and Udeh (2015), who used Pearson product moment correlation techniques to analyze the data collected while t- test statistics were employed in testing the hypotheses.

 $GDP = \beta_0 + \beta_1 TR_1 + \beta_2 FDI + \beta_3 EXR + \varepsilon$

Where y = average lending rate

GDP = Y $\varepsilon = Error Term$

 $\beta_0 = Constant$

TR = Tax Revenue

FDI= Foreign Direct Investment

EXR = Exchange Rate

NOTE: Tax Revenue includes VAT, Corporate Tax, Exercise Duty, Sales Tax, Turnover Tax, and Pay as you earn

3.6 TECHNIQUES OF ANALYSIS AND PRESENTATION

Data obtained was analyzed using Statistical Package for Social Sciences (SPSS) and Microsoft Excel package. The regression and correlation analysis used as analysis techniques. The results obtained from the model is presented in the table to aid in analysis and easy with which inferential statistics was drawn. The choice of these was inspired by the work of Udeh (2015) and Enyipko (2012) who both used regression and correlation techniques.

3.7 PROBLEM AND LIMITATION OF THE STUDY

The conduct of research in Zambia and of course most developing countries is filled with challenges however in this particular research the following challenges were faced:

- Short period of time for research
- Cost of conducting a thorough research was really felt.

CHAPTER FOUR

4.0 INTRODUCTION

Chapter four (4) presents the findings and discussion.

State of Customs and Tax Administration before Introduction of Custom Reforms

Sub-Sahara Africa

Tax based organizational structures. Tax administration was fragmented into a number of separate organizations or departments responsible for direct taxation, indirect taxation, and stamp duties.

Split of the assessment and collection responsibilities between the tax administration and the Treasury.

The lack of headquarters (or divisions) units dedicated policy, planning, and supervision for the key tax administration functions.

A highly centralized organization. In the tax administrations based on the traditional French model, the lack of proper policy and planning capacity was often aggravated by inadequate delegation of authority (in particular, the power to sign the tax rolls prepared by the tax offices for the Treasury and the power to make decisions on tax disputes, which often rested only for the headquarters managers.

A tax office network generally based on a geographical division of the country and the multiplication of local offices in an attempt to provide close monitoring of all taxpayers.

Complex tax legislation. In the area of direct taxation, some countries operated either a general income tax, or a scheduler income tax, or some combination of the two. Regarding indirect taxation, tax systems were characterized by complex turnover taxes and in some cases by first generation.

Complicated and burdensome procedures. Procedures remained largely based on actions by tax official to determine the base and assess the amount of tax to be paid. Apart from turnover taxes and VAT, taxes most often were calculated by the tax offices. Tax payers had to cope with complicated, burdensome formalities to fulfill

12

their tax obligations. In the absence of a unified registration number or due to a variety of numbers for different purposes, taxpayer identification problems complicated the tax offices assessment and collection tasks.

Extensive use of manual procedures due to the lack of IT systems. Except for a few tentative efforts to develop tax administration computer systems, usually limited to tax collection and in most countries to the large taxpayer office (e.g., Benin, Cameroon and Gabon) procedures were essentially manual. As a result, statistics were unreliable, tax data were not secure and there was no proper follow-up of outstanding taxes.

Lack of resources for taxpayer information and education. Information campaigns were sometimes organized when reforms were introduced, but they were rarely pursued in subsequent years. Overall, raising public awareness and educating taxpayers were not a major concern for the tax offices, whose efforts focused primarily on enforcement and audit

- Reforms that we implemented
- Achievements

Obvious weaknesses in human resources management. Human resource management was largely neglected. No country had developed a staff management plan to ensure that staff capacities properly matched the tax administration 's requirements.

Overall, tax administrations' performance was frequently judged unsatisfactory by IMF technical assistance missions in the early 1990s. For many of the 19 Francophone countries the missions main conclusions could be summarized as follows: an inadequate organizational structural with weak policy, planning, and supervision capacities, ineffective and inefficient procedures and taxpayer services; and weak audit and enforcement programs.

Objectives of Tax Reforms

The reform strategies developed with IMF technical assistance to strengthen the capacity of the tax administration and enhance revenue mobilization have generally focused on the following objectives:

- Fostering tax compliance
- Reducing taxpayers services and ensuring consistency and fairness

- Reducing the tax administration's costs
- Increasing transparency and strengthening integrity
- Developing risk management and combating tax fraud
- Strengthening collection enforcement and management of tax arrears

Tax Administration's Organizational Structure

In order to modernize the organizational structure and improve the effectiveness of the tax administration. The following occurred;

- Merging all domestic tax operations and key tax administration functions into a unified tax department organized along functional lines.
- Concentrating headquarters activities on management (including policy and program design, planning, and monitoring) and ensuring that tax operations (assessment, audit and tax collection) are handled by the local offices with appropriate delegation of authority.
- Adopting segmentation to improve the organization and operations of the local tax offices beginning with establishment of a large tax payer office.

Factors that affected the course of the reforms

- i. Several customs administrator, director generals and minister of Finance only held their positions for short terms which undermine the continuity of the reforms.
- ii. The involvement of reforms stakeholders was sub optimal private sectors was sufficiently engaged and consulted in the reforms process.
- iii. Customs stuff which typically the first affected by reforms were not adequately involve and did not adhere to the change.
- iv. There were insufficient budgets for modernization programme. Lack of budget funds dragged the progress related to major expenditures communication systems the upgrade of the infrastructure, the reorganization of border control units and purchase of detection equipment.
- v. Weak governance had hindered projects such as the implementation of targeted post clearance Audits and the strengthening of investigations, internal Audits and inspections.

Challenges Encountered during implementation Tax Reforms

Challenges faced during implementation of tax reforms include the following:

- i. Inadequate knowledge and skills in project and contract management for project managers delayed implementation of major initiatives.
- ii. Loss of skills, knowledge and Expertise for specialized business operations due to staff retirement and integrity related dismissals.
- iii. System availability due to power outages and network down time which lead to delays in service delivery.
- iv. Delays in the procurement process which had an impact on implementation for a number of initiatives.

REFORMS IN TAX ADMINISTRATION

The common reforms in SADC countries include:

- Roll out of Asycuda world
- Roll out of Cargo Scanning at major borders
- Roll out of cargo Tracking
- Roll out of Authorized Economic Operator
- Implementation of Document Validation system
- Implementation of E-payment system
- Implementation of Electronic Fiscal Devices (EFD)

Introduction of business continuity management system

Establishment of business continuity management (BCM) is the capability of the organization continue delivery of products or services at acceptable predefined levels following a disruptive incidence. The BCM has been implemented in five phases of Analysis design, implementation, validation and training and Awareness.

Establishment of Call centre

The objective of the Call centre is to provide credible and promote information to customers on inquiries and complaints. The call centre has been an integral part of receiving customer feedback whereby the information is gathered in the database, analyzed and monitored for decision making.

Integration of collection and accounting processes to increase accuracy and on – time reporting (Revenue Gateway System- RGS)

The objective of this initiative was to streamline and integrate collection and accounting processes and improve performance in reporting of revenue collection. TRA operational systems have been interfaced with commercial banks with a view to harness automation opportunities to facilitate e-payment of taxes through the RGS. The system can perform automatic reconciliation of the taxes paid through banks.

Strategic and governance reforms

Modernize physical and technological infrastructure in order to improvements in the technological infra-structure (Data Centre)

Develop competencies and staff motivation focused on results in order to have human capital development

Improve efficiency in revenue collection in order to implementation of e-tax, covering all taxes and streamlined with banks.

Increase safety and speed in flow of people and goods in order to construction, refurbishing and inspection of infrastructures and the OSBP. Intensify audits and inspections as well as the fight against illicit trade through a risk based approach in order to:

- i. Implementation of fuel marking mechanism
- ii. Operationalization of fiscal gadgets (SGMF)
- iii. Strengthen audits and inspections

Strategic and governance reforms

Broadening the tax through three main vectors:

- i. Strengthening the tax awareness and customs literacy campaigns has contributed to the broadening of the tax base
- ii. Better connecting the tax administration to the tax payers by building new tax offices and
- iii. Simplification of taxation procedures through legislative reform measures and implementation of POS technologies.

Strategic and governance reforms

Boosting internal controls

- Deployment of competent and motivated staff
- Design of an anti-corruption strategy aimed at fighting corruption in its different specifications within the organization and
- Strengthen inspections and raise anti-corruption awareness among the staff

Undertaking strategic projects

- Set up a unit for modernization and strategic projects oversight

Implementation of e-tax project:

- -Queue management
- -Payment via bank
- -Tax payer portal

Optimization of VAT refunds payment:

- -Adoption of Net VAT (2015) and its inclusion in the state budget
- -Setting up of a budget line e.g (16% of the collected VAT) and
- -Year –based principle priority goes to the ongoing requests.
- -Adoption of risk management and tax litigation measures.

Reforms in Taxation of Extractives

- -Unit for taxation of Extractive industry set up with the following functions
- -Undertake risk analysis
- -Undertake inspections and specialized audits
- -Participate in proposal design for law and regulation review with impact in the extractive industry.
- -Provide clarification and ensure the uniform enforcement of specific legislation and
- -Prevent and fight tax evasion in the extractive sector

Reforms in Natural Resources Taxation

Legislation reform

- 2017 Review Taxation of oil operations and mining activities aiming at
 - -Adjust it to the international best practices in the sector
 - -Congregate all relevant tax matters
 - -Allow for an easy consultation and interpretation of the legislation
 - -Ensure an enabling business environment
 - -Ensure efficient tax action through mobilization of additional revenue
 - -Regulation of the transfer pricing in 2017- setting the rules and methods for an arm's length approach for transactions between related parties.

Reforms in Natural Resources Taxation

Both 2014 and 2017 reviews had allowed for:

- -Clarifying the royalty
- -Updating the tax rate on mining production
- -Regulating the oil production -sharing mechanism
- -Providing the terms of fiscal stability attributed to the enterprises
- -Updating the list of goods that operators may import under customs exemptions regime
- -Adoption of specific norms on income tax
- -Setting up of RRT so as to ensure the equitable sharing of the extraordinary direct benefits.

MALAWI REVENUE AUTHORITY

Mission statement

To maximize revenue collection, promote voluntary compliance an trade facilitation through fair, efficient and transparent administration of the laws of Malawi.

Vision Statement

To become a model tax administration known for excellence in service delivery.

Core values

As the Malawi Tax Administration, we wish to establish ourselves as a responsible organization, providing quality service to the Malawi nation that is based on:

Professionalism and Integrity: We ensure competency and efficiency and we focus on achieving excellence while upholding the highest standards of trust, honesty, respect, confidentiality, truthfulness, reliability and honor.

Service Excellence: We deliver what we promise in an efficient, effective and timely manner and add value that goes beyond what is expected.

Equity and fairness: We endeavor to maintain a respectful co-existence, employ high ethical standards, and demonstrate honesty, fairness, equity, gender balance and impartiality in the delivery of service.

Team work: We share experience, resources and opportunities by working cooperatively to meet our mutual goals, respecting one another's point of views, making the working environment fund and enjoyable and bringing conflict out into the open and dealing with it constructively.

Efficiency and Accountability: We constantly measure ourselves against our commitments and we hold ourselves responsible for our actions and the outcomes of our work, taking pride and ownership in all that we do and say.

Innovation: We develop creative solutions and put them into action, learn by continuously developing and deepening our atmosphere of continuous improvement.

Taxpayer's Charter

This Taxpayer's Charter proclaims that in its dealings with you, MRA will observe and respect the following rights of the taxpayer:

1.0 Impartial Treatment

We will:

- Treat you with courtesy, consideration and respect
- Behave with integrity and honesty
- Act impartially when determining your tax liability
- Make fair and equitable decisions in accordance with the law and
- Resolve your concerns, problems or complaints fairly and as quickly as possible.

2.0 Presumption of Honesty

- We presume that you are telling us the truth and that the information you provide is complete and accurate unless we have other reasons to think otherwise.
- We recognize that people sometimes make mistakes when trying to meet their tax obligations. We differentiate between mistakes and deliberate actions. If you make a mistake, we give you the opportunity to explain. We listen to you and take your explanation into account.

3.0 Access to Information

- You are entitled to complete and accurate information on your rights and obligations under the various Acts administered by the Malawi Revenue Authority.
- You have the right to ask us to change the personal information we hold about you if you think that, the information is incomplete, incorrect, out of date or misleading.

TAXPAYER'S OBLIGATIONS

- The payment of tax is a civic duty of every citizen and in discharging that responsibility, the following duties and obligations attach to the taxpayer.

Registration

- If you are eligible to pay Income Tax, VAT, Customs and Excise duty or any other tax that requires you to be registered and you are not registered by MRA, you have an

obligation to come forward and register, failure to which, MRA has the right to issue you with compulsory registration.

Keeping Records

- You must take reasonable care in keeping complete and accurate information about your tax affairs such as returns, activity statements and other documents. The law sets out the records you must keep for tax purposes.
- Keeping good records allows you to prepare accurate tax returns and activity statements as well as helping you keep track of your financial affairs. Generally, your records must be in English and you must keep them for six years.

Analysis and Discussion of Research Questions

Did Tax Revenue have any significant impact on GDP during 2000-2018 period in Malawi?

| Model | Unstandard | ize Coefficient | | Т | Sig |
|---------|------------|-----------------|---------|---------|-------|
| | В | Std error | Beta | | |
| Contact | 71.31061 | 72.72346 | | 0.98057 | 0.342 |
| TR | -4.29388 | 4.8639 | -0.2294 | -0.882 | 0.342 |

Table 3, Malawi: Regression Analysis Between TR and GDP

Dependent variable: GDP

Source: Research Findings

The model developed from the co-efficient in table

Regression model - GDP = $\alpha + \beta$ (TR) + ϵ

GDP = 71.31061 + -4.29388) and therefore an increase in Tax Revenue would lead to a decrease in GDP value by -4.29

The relationship shows a weak, negative and in significant correlation of 0.2294 or 22.94%. Also the P-value 0.391 > 0.05 showing the relationship is also not significant at 5% probability level.

Therefore, from our analysis, we conclude that Tax Revenue during the period 2000 – 2018 had no significant impact on the GDP growth rate. This is in conformity with the

findings of Andre Gibato (2017) who studied the impact of Taxation on growth in Sub-Sahara Africa.

Did FDI have any significant impact on GDP during 2000-2018 period in Malawi?

Table 4, Malawi: Regression Analysis Between FDI and GDP

| Model | Unstandard | | Τ | Sig | |
|---------|------------|-----------|--------|---------|---------|
| | В | Std error | Beta | | |
| Contact | 71.31061 | 72.72346 | | 0.98057 | 0.342 |
| FDI | 0.275207 | 1.252188 | 0.0643 | 0.2197 | 0.82900 |

Dependent variable: GDP

Source: Research Findings

Regression Model - GDP = $\alpha + \beta$ (FDI) + ϵ

GDP = 71.31061 + 0.275207 (FDI)

Thus model explains that FDI has a positive co-efficient (+0.275207) an therefore an increase of 1% in FDI would lead to an increase in GDP by 0.275 or 275%.

The relationship shows a weak correlation of 0.0643 or 6.4%. Also P-Value (0.829) > 0.05 shows the relationship is not significant at 5% probability level.

Therefore from our analysis, we conclude that FDI during 2000-2018 period had no significant impact on GDP growth.

Did EXR have any significant impact on FDI during 2000 -2018 period in Malawi?

Table 5, Malawi: Regression Analysis between EXR and GDP

| Model | Unstandard | ize Coefficient | | Т | Sig |
|---------|------------|-----------------|----------|---------|---------|
| | В | Std error | Beta | | |
| Contact | 71.31061 | 72.72346 | | 0.98057 | 0.34235 |
| EXR | 0.00123 | 0.011261 | -0.05556 | 0.10922 | 0.10922 |

Dependent variable: GDP

Source: Research Findings

The model developed from the co-efficient in table is

Therefore regression model:

 $\text{GDP} = \boldsymbol{\alpha} + \boldsymbol{\beta} (\text{EXR}) + \boldsymbol{\epsilon}$

Therefore GDP = 71.3106 + 0.00123 (EXR)

Thus model explains that exchange rate has a positive co-efficient 0.00123 and therefore an increase in exchange rate by 1 percent would lead to an increase in GDP by 0.12%. The relationship shows a weak negative correlation 0.055 or 0.5%.

Also the P-value 0.109 > 0.05 shows the relationship is not significant at 5% probability level.

Therefore from our analysis, we conclude that exchange rate during 2000-2018 people had no significant impact on GDP growth rate.

MAURITIUS REVENUE AUTHORITY

Our Vision

To be a world class Revenue Authority respected for its professionalism efficiency, fairness, integrity and its contribution to our economic and social development.

Mission Statement

To continually reform and modernize Revenue Administration in order to manage and operate an effective and efficient Revenue organization comprising of highly motivated ad skilled staff.

The Core Values

MRA upholds the highest standards and integrity so as to gain the respect and confidence and tax payers stakeholders and the public at large.

MRA endeavors to prompt efficient effectiveness and quality service to taxpayers, stakeholders and the public at large in an effort to excess their expectations.

MRA is committed to apply revenue laws impartially and objectively and treat everyone in an equitable manner.

MRA efforts are geared towards the development of the Authority in a manner, which promotes a transparent and accountable administration.

Taxpayer's Charter

This Taxpayer's Charter proclaims that in its dealings with you, MRA will observe and respect the following rights of the taxpayer.

Impartial Treatment

We will:

- Treat you with courtesy, consideration and respect
- Behave with integrity and honesty
- Act impartially when determining your tax liability
- Make fair and equitable decisions in accordance with the law and
- Resolve your concerns, problems or complaints fairly and as quickly as possible.
Presumption of Honesty

- We presume that you are telling us the truth and that the information you provide is complete and accurate unless we have other reasons to think otherwise.
- We recognize that people sometimes make mistakes when trying to meet their tax obligations. We differentiate between mistakes and deliberate actions. If you make a mistake, we give you the opportunity to explain. We listen to you and consider your explanation.

Access to information

- You are entitled to complete and accurate information on your rights and obligations under the various Acts administered by the Malawi Revenue Authority.
- You have the right to ask us to change the personal information we hold about you if you think that the information is incomplete, incorrect, out of date or misleading.

Privacy and confidentiality

In administering the tax laws, we collect information about you. We may get this information from you or from other parties. We respect your privacy and keep your information confidential.

In collecting your personal information, we:

- Do this in a fir and lawful way that is not unreasonably intrusive
- Tell you why we are asking for the personal information, and
- Tell you for what purpose it will be used

In keeping your personal information, we:

- Keep the information safe and secure
- Let you see the personal information we hold about you unless the law requires or allows us to refuse and
- Take reasonable steps to ensure the accuracy of the personal information we hold about you.

In using your personal information, we only;

- Use your information in accordance with the law, and
- Disclose it to another person or organization if we are authorized by the law to do so
- If you think your privacy or the confidentially of your tax information has been breached because of our actions.
- Your first step should be to try and resolve it with the tax officer's manager or Head of Division
- If you are still not satisfied, you can make a formal complaint to the commissioner general through the Head Corporate Affairs.

Provision of accurate and complete information, explanations and advice

- We aim to provide complete, accurate and consistent advice and information to make you aware of your rights and entitlements and to help you to understand and meet your obligations.
- We offer advice and information that give our view of taxation and application of other laws. This advice and information can be oral or written and ranges from the specific to the general i.e. advice given to you personally about how the law applies to your particular circumstances or publication of information about how the law applies generally.
- You have right to receive a complete, simple and accurate tax information through the print and electronic media i.e newspapers, pamphlets, leaflets, websites, radio and television, so as to assist you comply with the tax laws administered by the MRA.
 - -We provide you with clear explanation of decisions we make about your tax affairs, except in limited circumstances where doing so may breach privacy laws or may jeopardize investigations.
 - -We provide tax advice to you as a taxpayer through public ruling, private ruling or oral ruling.
 - -**Public Ruling:** A public ruling is a published statement that sets out our view of how the law applies in circumstances that are common to many tax payers. If a ruling applies to your circumstance and you follow the advice it contains, we are legally bound by it.

-**Private ruling:** You can ask us to give you a written option about the way the law applies to your circumstances in the form of a private ruling. Although we are legally bound by the ruling we give you, you can choose not to use it. In addition, if you disagree with the private ruling, you can ask us to review our decision.

Did TR have any significant impact on GDP during 2000-2018 period in Mauritius?

Table 6, Mauritius: Regression Analysis between TR and GDP

| Model | Unstandardi | ze Coefficient | | Т | Sig |
|----------|-------------|----------------|---------|----------|----------|
| | В | Std error | Beta | | |
| Constant | 6.769315 | 3.380432 | | 2.0025 | 0.06365 |
| TR | 0.001765 | 0.000893 | 0.66925 | 1.975861 | 0.066862 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $GDP = \alpha + \beta (TR) + \epsilon$

GDP = 6.769315 + 0.001765 (TR)

This model indicates that TR has a positive coefficient 0.001765. This implies that a 1% increase in TR is likely to increase GDP by 0.17%. In additional the P-Value (0.066862) > 0.05. Hence, TR has in significant relationship with GDP. However, there is a medium positive correlation of 66.9%. Therefore, from my analysis I conclude that TR has no significant impact but a medium relationship with GDP growth rate during 2000 -2018 in Mauritius.

Did FDI have any significant impact on GDP during 2000-2018 period in Mauritius?

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| Model | Unstandardi | ze Coefficient | | Т | Sig |
|----------|-------------|----------------|----------|----------|----------|
| | В | Std error | Beta | | |
| Constant | 6.769315 | 3.380432 | | 2.0025 | 0.06365 |
| FDI | 0.296173 | 0.91885 | 0.509186 | 1.543492 | 0.143543 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $GDP = \alpha + \beta (FDI) + \epsilon$

GDP = 6.769315 + 0.296173 (FDI)

The model above explains that FDI has a positive coefficient (0.296173) and this means that an increase by 1 % in FDI would increase GDP by 29.6%. The p-value (0.143543) >0.05 shows the relationship is insignificant at a 5% probability level. However, there is a correlation of 50.9%. Therefore, from analysis. I conclude that the FDI during the period 2000-2018 a positive but no significant impact on GDP grow in Mauritius.

Did EXR have any significant impact on GDP during 2000-2018 period in Mauritius?

Table 8, Mauritius: Regression Analysis between EXR and GDP

| Model | Unstandardi | ze Coefficient | | Т | Sig |
|----------|-------------|----------------|---------|----------|---------|
| | В | Std error | Beta | | |
| Constant | 6.769315 | 3.380432 | | 2.0025 | 0.06365 |
| EXR | -0.11887 | 0.111867 | -0.3771 | -1.06261 | 0.30477 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $GDP = \alpha + \beta (EXR) + \epsilon$

GDP = 6.769315 + -0.11887 (EXR)

The model indicates that EXR has a negative coefficient (-0.11887) and therefore an increase by 1% in EXR would lead to a decrease in GDP by 11.88%. The relationship shows a negative and weak insignificant correlation of 37.7% also P-value (0.30477) > (0.05) shows the relationship is not significant at a 5% probability level. Therefore, from my analysis I conclude that EXR during 2000 to 2018 period had no significant impact on GDP grow rate in Mauritius.

ZAMBIA REVENUE AUTHORITY

Mission statement

To optimize and sustain revenue collection and administration for a prosperous Zambia.

Values

Our commitment to serving Government, taxpayers, employees and other stakeholders is reflected in our corporate values:

- -Taxpayer focus
- -Integrity
- -Professionalism
- -Innovation
- -Networking

Tax Payer Charter

VAT Refund

ZRA undertake to pay the refund within 30 days from the date of lodgment of a VAT refund claim.

Income Tax Refund

ZRA undertake to pay the refund within 45 days of submission of lodgment of an income tax return.

Customs Deposit refund (Except refunds for Estreated deposits)

- i. ZRA undertake to pay the refund within 48 hours of the submission of a refund claim
- ii. ZRA shall issue a tax clearance within 48 hours upon receipt of an application.
- iii. ZRA undertake to allow our clients their right to appeal; inform them of their rights and obligations and treat them equitably, and in accordance with the law.

Information

i. ZRA undertake to provide clear information on tax matters.

- ii. ZRA undertake to acknowledge comments, complaints and queries within 5 working days of their receipt.
- iii. ZRA undertake to respond to all comments complaints and queries within 14 days of their referral to the appropriate manager.
- iv. ZRA shall treat tax matters with privacy and confidentiality.

Taxpayer Obligation

- Cooperate with ZRA officers at all times
- -Submit tax returns and pay taxes on time
- -Provide honest and accurate information to ZRA, including current contact address.
- -Demand an official ZRA receipt on all payment
- -Do not offer ZRA officers any payments other than those authorized by the law

Analysis and Discussion

Research Questions

Did Tax Revenue have any significant impact on GDP for Zambia during 2000-2018 period?

Table 9, Zambia: Regression Analysis between TR and GDP.

| Model | Unstandardize Coefficient | | | Т | Sig |
|---------|---------------------------|-----------|-------|---------|--------|
| | В | Std error | Beta | | |
| Contact | 0.05393 | 0.164802 | | 0.3272 | 0.7479 |
| TR | 1.003146 | 0.006387 | 0.999 | -2,7948 | 2.135 |

Dependent variable: GDP

Source: Research Findings

The model develops from the co-efficient in the above table.

$$=$$
 GDP $=$ f(TR) $=$ GDP $=$ β (TR) $+ \epsilon$

Therefore: GDP = 0.05393 + 1.00346 (TR)

The model explains that Tax Revenue has a positive co-efficient (0.01466) and therefore an increase in Tax Revenue would likely lead to an increase in GDP value. It explains that an increase in 1 percent in Tax Revenue would increase the GDP value by 1.4%. The relationship show a strong correlation of 0.999 and also P value (2.13) > 0.05 shows the relationship is not significant at 5% probability level.

Did Foreign Direct Investment have any significant impact on Gross Domestic Product for Zambia during 2000-2018 period?

Table 10, Zambia: Regression Analysis between FDI and GDP

| Model | Unstandardize Coefficient | | | Т | Sig |
|---------|---------------------------|-----------|----------|---------|----------|
| | В | Std error | Beta | | |
| Contact | 0.05393 | 0.164802 | | 0.3272 | 0.7479 |
| FDI | -0.01466 | 0.006387 | -0.26454 | -2.2948 | 0.036568 |

Dependent variable: GDP

The model developed from the coefficient in the above table 2.

Regression model in GDP = β (FDI) + ϵ

Therefore:

GDP = 0.05393 + (-0.0466) FDI

Thus model explains that FDI has a negative coefficient (-0.01466) and therefore an increase in FDI would likely lead to a decrease in GDP. It explains that an increase of 1 percent in FDI would decrease GDP by 1.466%. The relationship shows a weak and negative correlation of -0.26454 or -26.4%. However, the P value 0.0365 < 0.05 indicating the relationship is significant at 5% probability level.

Did Exchange Rate have any significant impact on GDP during 2000-2018 period in Zambia?

| Model | Unstandardize Coefficient | | | Τ | Sig |
|---------|---------------------------|-----------|--------|---------|--------|
| | В | Std error | Beta | | |
| Contact | 0.053937 | 0.164802 | | 0.3272 | 0.747 |
| EXR | -0.00428 | 0.005574 | 0.1603 | -0.7672 | 0.4518 |

Table 11, Zambia: Regression Analysis between EXR and GDP

Dependent variable: GDP

The model developed from the co-efficient in table

Therefore the regression model

$GDP = \beta(EXR) + \epsilon$

Thus model explains that Exchange rate has a negative co-efficient -0.00428 and therefore an increase in exchange rate by 1 percent would lead to a decrease in GDP by 0.428 percent.

The relationship shows a weak correlation of 16.03%. In addition P-value (0.4548) > 0.05 indicate no significant. Therefore from our analysis, we conclude that exchange rate during 2000-2018 period had no significant impact on gross domestic growth.

TANZANIA REVENUE AUTHORITY

Mission

We make it easy to pay tax and make lives better".

Vision

To increase domestic Revenue through enhancement of voluntary tax compliance.

Integrity

We believe in being fair and honest in all our dealing with taxpayers and other stakeholders.

Professionalism

We are committed to applying the law consistently, responsibility and with credibility using the skills and knowledge as prerequisite in administering our requirements.

TANZANIA REVENUE AUTHORITY OBLIGATIONS

- In discharging its responsibility of collecting Government Revenue, TRA is committed to observe the following obligations to taxpayers/ stakeholders.
- To issue correct tax assessment in accordance with tax laws.
- To collect taxes in accordance to the existing tax laws, regulations and procedures.
- To provide high quality services to taxpayers and other stakeholders.
- To handle all enquiries from taxpayers and other stakeholders to enable them fulfill their obligations.
- To manage all complaints from taxpayers and stakeholders with a view of providing
 7 solutions and enable the TRA to improve service delivery.
- To recruit competent staff to ensure quality service delivery to taxpayers and stakeholders.
- To educate taxpayers and other stakeholders on their rights and obligations.
- To make available tax forms and provide timely and accurate information in a simple language.
- To facilitate effective communication to taxpayers and other stakeholders.
- To cooperate with taxpayers and other stakeholders in a manner that shows respect, dignity and a customer focused attitude.

- To cooperate with the Tax Appeals Board/ Tribunal and Courts of Law by ensuring timely attendance and provision of evidence in order to resolve tax disputes. In the process, TRA will respect judicial decisions.
- To provide advice to the Government and other government organs on matters pertaining to fiscal policy and its implementation.
- To offer professional training on tax matters to stakeholders.
- To provide feedback on tax evasion information provided by taxpayers and the public, and in case of tax recovery, the informer will be awarded three percent of tax collected if the amount of reward will not exceed Tsh. 20 million.

TAXPAYER'S OBLIGATION

Every taxpayer has the following obligations:

Registration: Any person who is eligible to register for tax purposes must register in accordance **with** the tax laws.

Filing Returns : Any person who registers for tax purposes must file a tax return within the periods prescribed and pay the tax assessed within the due dates stipulated under the respective tax laws.

Accuracy of Returns, Customs

Declaration and Refund Claim

Any person who files a tax return, makes a customs declaration or lodges a refund claim, has an obligation to ensure that the return, refund claim or customs declaration is complete and has true disclosure of the transaction(s) covered in that document.

Timely Payment of Taxes

Every taxpayer has a duty to pay taxes promptly as they fall due in order to avoid the penalties and/or interest prescribed under the tax laws.

Issuance and demand of fiscal receipts/Tax invoice

- Every taxpayer (seller of goods and/or service) has a duty to issue fiscalized receipts/tax invoice

- Every buyer has a duty to demand fiscalized receipts/tax invoice for possession of goods or services obtained in accordance to the laws.

Cooperation with TRA Officers

- Every taxpayer has a duty to cooperate with TRA officers by disclosing or producing relevant information or documents when required.
- Every person has a duty to cooperate with TRA officers in order to carry out their lawful duties without intimidating, abusing, mistreating, threatening or influencing them in any manner whatsoever.

Did Tax Revenue Authority have any significant impact on the GDP during 2000-2018 period in Tanzania?

Table 12, Tanzania: Regression Analysis between TR and GDP

| Model | Unstandardized Coefficient | | | Т | Sig |
|-------------|----------------------------|-----------|---------|--------|--------|
| | В | Std error | Beta | | |
| Constant | 6.58930 | 0.860273 | | 7.6595 | 1.46 |
| Tax Revenue | 0.00229 | 0.008033 | 0.05344 | 0.254 | 0.7792 |

Dependent variable: GDP

Source: Research Findings

The model developed from the co-efficient in table is therefore:

 $GDP = \alpha + \beta (TR) + \epsilon$

GDP = 6.58930 + 0.0229(TR)

This model explains that TR has a positive co-efficient (0.00229) and therefore an increase by 1 percent in TR would lead to 0.22% increase in GDP growth. The relationship shows a weak positive correlation of 5.4%. Also P- value of 0.2854 > 0.05 show the relationship is in significant at 5% probability level. Therefore from our analysis, I can conclude that Tax Revenue during the 2000-2018 period had no significant impact on GDP growth.

These result are in conformity with Andre (2017) who investigated the impact of taxation on growth in Sub-Sahara Africa using a sample of 32 countries.

Did FDI have a significant on the GDP during 2000-2018 period in Tanzania?

| Model | Unstandardi | zed Coefficient | | Т | Sig |
|----------|-------------|-----------------|----------|--------|--------|
| | В | Std error | Beta | | |
| Constant | 6.58930 | 0.860273 | | 7.6595 | 1.46 |
| FDI | -0.01136 | 0.026533 | -0.08365 | 0.4283 | 0.6745 |

Table 13, Tanzania: Regression Analysis between FDI and GDP

Dependent variable: GDP

Source: Research Findings

The model developed from the co-efficient in table is therefore:-

 $GDP = \alpha + \beta (TR) + \epsilon$

GDP = 6.58930 + (-0.01136) FDI

Thus model explains that FDI has a negative coefficient (-0.01136) and therefore an increase by 1 percent in FDI would lead to a decrease in GDP by 1.13%.

The relationship shows weak negative correlation of 8.3%. Also P-value 0.6745 > 0.05 percentage probability level. Therefore, from my analysis, I conclude that FDI during 2000-2018 period had no effect on GDP growth rate in Tanzania.

Did Exchange Rate have any impact on GDP during 2000-2018 period in Tanzania?

Table 14, Tanzania: Regression Analysis between EXR and GDP

| Model | Unstandardized Coefficient | | | Т | Sig |
|----------|----------------------------|-----------|----------|----------|----------|
| | В | Std error | Beta | | |
| Constant | 6.58930 | 0.860273 | | 7.6595 | 1.46 |
| EXR | -0.00022 | 0.000554 | -0.05184 | -0.39371 | 0.699333 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient in the above table is:

 $\text{GDP} = \boldsymbol{\alpha} + \boldsymbol{\beta} (\text{EXR}) + \boldsymbol{\epsilon}$

Therefore GDP = 6.58930 + -0.00022(EXR)

This model explains that exchange rate (EXR) has a negative coefficient (-0.00022) and therefore an increase in exchange rate would lead to a decrease in GDP value.

It explains that an increase in 1 percent of exchange rate would to lead to a decrease by 0.02% in GDP value.

The relationship shows a weak negative correlation of 5.18%. Also the P-value 0.699333 > 0.05 indicates the non-existence of significance with GDP.

Therefore from my analysis it is appropriate to conclude that Exchange rate during 2000-2018 had no significant impact on GDP growth.

In addition, the model R^2 0.019564 indicates that 1.95% variation can be explained by independent variables while 81% can be explained by other factors.

Mission Statement

Our mission is to increase voluntary compliance by protecting taxpayer rights and to collect taxes and other revenues by providing high-quality service.

Vision

Our vision is to be an exemplary models as an administration that promotes formal economy by embracing economic activities, that provides voluntary compliance by protecting taxpayer rights and collects taxes and other revenues by offering quality service.

Core Values

- Justice
- Solution oriented
- Flexibility
- Effectiveness
- Reliability
- Participation
- Transparency
- Responsibility

- Continuous Development
- Impartiality
- Efficiency
- Competency

Research Question

Did Tax Revenue have any significant impact on GDP growth during 2000-2018 period in Mozambique?

Table 15, Mozambique: Regression Analysis between TR and GDP

| Model | Unstandardized Coefficient | | | Т | Sig |
|----------|----------------------------|-----------|----------|---------|----------|
| | В | Std error | Beta | | |
| Constant | 10.8106 | 3.577 | | 3.021 | 0.00858 |
| TR | -0.15307 | 0.349295 | -0.35528 | -0.3824 | 0.667458 |

Dependent variable: GDP

Source: Research Findings

The model developed from the table above is:

 $GDP = \alpha + \beta (TR) + \epsilon$

GDP = 10.8106 + -0.15307 (TR)

This model explains that TR has a negative coefficient (-0.15307) and therefore an increase in Tax revenue by 1 percent would lead to a decrease in GDP value by 15.3%.

The relationship shows a weak negative correlation of 35.5%. Also P – value 0.667458 > 0.05 implies that the relationship is not significant at 5% probability level.

Therefore from my analysis, I conclude that Tax revenue during 2000-2018 period had no significant impact on GDP growth in Mozambique.

Did Foreign Direct Investment have an impact on GDP growth during 2000-2018 period in Mozambique?

| Model | Unstandardi | zed Coefficient | | Τ | Sig |
|----------|-------------|-----------------|----------|---------|----------|
| | В | Std error | Beta | | |
| Constant | 10.8106 | 3.577 | | 3.021 | 0.00858 |
| FDI | 0.04768 | 0.091779 | -0.16417 | 0.51952 | 0.610979 |

Table 16, Mozambique: Regression Analysis between FDI and GDP

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $GDP = \alpha + \beta (FDI) + \epsilon$

GDP = 10.8106 + 0.04768 (FDI)

The model explains that FDI has a positive coefficient 0.04768 and therefore 1 percent increase in FDI would lead to an increase of 4.76% in GDP value.

The relationship shows a weak negative correlation of 16.4%.

In addition P-value 0.610979 > 0.05 shows the relationship is not significant at 5% probability level.

Therefore, from my analysis I conclude that foreign direct investment during 2000-2018 had a positive but no significant impact on GDP growth in Mozambique.

Did Exchange rate have any significant impact on GDP during 2000-2018 period in Mozambique?

| Model | Unstandard | | Τ | Sig | |
|----------|------------|-----------|----------|----------|----------|
| | В | Std error | Beta | | |
| Constant | 10.8106 | 3.577 | | 3.021 | 0.00858 |
| EXR | -0.06962 | 0.060222 | -0.49044 | -1.15614 | 0.265708 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $\text{GDP} = \boldsymbol{\alpha} + \boldsymbol{\beta} (\text{EXR}) + \boldsymbol{\epsilon}$

GDP =10.8106 + -0.06962 (EXR)

The model explains that EXR has a negative coefficient -0.06962 and therefore an increase by 1 percent in EXR would lead to a decrease in GDP value by 6.9%.

In addition, P - value 0.265708 > 0.05 implies that the relationship is not significant at 5% probability level.

Therefore, from my analysis I conclude that EXR during 2000 -2018 period had no significant impact on GDP growth in Mozambique. This is further supported by R^2 0.25395 which implies that 25% of variation has been explained by the independent variable while 75% is a explained by other factors.

NAMIBIA REVENUE AUTHORITY

The National Revenue Authority (NRA) was established on the 13th September 2002 through an Act of Parliament called the National Revenue Authority Act, 2002 (Act No. 11). Prior to the establishment of the NRA, government Revenue collection was fragmented and undertaken by the then customs and excise department, income tax department, government Gold and Diamond office and several other MDAs. One of the most outstanding reforms in the Sierra Leone Tax system was the bringing together of these revenue collecting agencies under the umbrella of the National Revenue Authority. The NRA has since played a vital role n formulating and implementing tax reforms that have resulted in increased revenue mobilization and trade facilitation.

Vision

To have an equitable, effective, simple and transparent tax system.

Mission

To maximize revenue collection for national development and to buttress sustainable economic growth through:

- Formulating and implementing policies and procedures which promotes effective, efficient transparent and accountable tax system
- Designing simple and effective business processes
- Developing and enhancing human capacity for improved service delivery
- Understanding and enhancing the business environment by liaising and collaborating with relevant MDAs, local and international instructions, taxpayers and other relevant stakeholders.

Core Values

Our activities will be guide by the following core values;

Integrity

We are committed to the highest standards of trust and honesty.

Transparency

We will act in accordance with the letter and spirit of the Law at all times and ensure full disclosure of information as and when required by law.

Accountability

We will ensure that appropriate mechanism exists for staff to be held accountable for their decision and actions.

Equity

We value individual differences and treat customers with dignity and respect.

Discipline

We will ensure our staff conducts themselves in accordance with the NRA Code of Conduct and other established principles of good governance at all times.

Collaboration

We will work in collaboration with stakeholders and associated institutions to improve our services delivery and overall performance.

Staff development

We will ensure a conducive working environment and create learning opportunities for our staff to enable them achieve their full potential.

Service Excellence

We will provide quality service to our taxpayers and other stakeholders, in order to facilitate tax compliance and minimize its associated costs.

Research Question

Did Tax Revenue have any significant impact on GDP during 2000-2018 period in Namibia?

| Model | Unstan | | Т | Sig | |
|----------|-------------|-----------|----------|----------|----------|
| | Coefficient | | | | |
| | В | Std error | Beta | | |
| Constant | 1.711585 | 6.65070 | | 0.257354 | 0.800402 |
| TR | 0.442535 | 0.277842 | 0.011752 | 1.59276 | 0.132064 |

Table 17, Namibia: Regression Analysis between TR and GDP

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $GDP = \alpha + \beta (TR) + \epsilon$

GDP = 1.711585 + 0.442535 (TR)

This model explains that TR has a positive coefficient (0.442535) and therefore an increase by 1 percent in TR would lead to an increase in GDP value by 44.25%.

The relationship shows a moderate positive correlation of 1.2%. Also P - value 0.132064 > 0.05 shows the relationship is not significant at a 5% probability level.

Therefore, from my analysis I conclude that TR during 2000-2018 period had positive but not significant impact on GDP growth in Namibia.

Did FDI have any significant impact on GDP during 2000-2018 period in Namibia?

| Table | 18. | Namibia: | Regression | Analysis | between | FDI and | GDP |
|-------|-----|----------|------------|----------|---------|----------------|-----|
| | , | | | | | | |

| Model | Unstan | dardized | | Т | Sig |
|----------|-------------|-----------|----------|----------|----------|
| | Coefficient | | | | |
| | В | Std error | Beta | | |
| Constant | 1.711585 | 6.65070 | | 0.257354 | 0.800402 |
| FDI | -0.52533 | 0.28178 | -0.09189 | -2.85083 | 0.08197 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $GDP = \alpha + \beta (FDI) + \epsilon$

GDP = 1.711585 + -0.52533 (FDI)

This model explains that FDI has a negative coefficient (-0.52533) and therefore an increase by 1 percent in FDI would lead to a decrease by 52.5% in GDP value.

The relationship shows a weak and negative correlation of 9.2%. However, the P- value 0.08197 > 0.05 shows the relationship is significant at a 5% probability level.

Therefore, from my analysis, I conclude that FDI during 2000-2018 period had a negative and no significant impact on GDP growth in Namibia.

Did EXR have any significant impact on GDP during 2000-2018 period in Namibia?

Table 19, Namibia: Regression Analysis between EXR and GDP

| Model | Unstan | dardized | | Т | Sig |
|----------|-------------|-----------|----------|----------|----------|
| | Coefficient | | | | |
| | В | Std error | Beta | | |
| Constant | 1.711585 | 6.65070 | | 0.257354 | 0.800402 |
| EXR | -0.80854 | 0.28361 | -0.43612 | -2.85083 | 0.012146 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $\text{GDP} = \boldsymbol{\alpha} + \boldsymbol{\beta} (\text{EXR}) + \boldsymbol{\epsilon}$

GDP = 1.711585 + -0.80854 (EXR)

This model explains that EXR has a negative coefficient (-0.80854) and therefore an increase by 1 percent in EXR would lead to a decrease by 80.8% in GDP value.

The relationship shows that a moderate negative correlation of 43.6%. In addition, P – value 0.012146 < 0.05 shows the relationship is significant at a 5% probability level.

Therefore from my analysis I conclude that EXR during 2000-2018 period at a negative but a significant impact on GDP growth in Namibia.

Lastly the R^2 0.358759 implies that 35.8% of the variation is explained by the independent variables of the study, thus 64.2% of variation is explained by other factors.

SEYCHELLES REVENUE AUTHORITY

The Seychelles Revenue Commission (SRC) is an authority that was established through the enactment of the Seychelles Revenue Commission Act 2009 as the body responsible for the administration of Revenue laws. The SRC Act also mandates SRC to operate as an independent Authority with responsibility to conduct its affairs in a transparent and efficient manner. However, the Ministry of Finance remains the parent Ministry with the responsibility to oversee major issues affecting revenue. SRC is head by a Revenue Commissioner (CEO) who is responsible to the Ministry of Finance for the management of SRC and the administration of all revenue laws.

Mission

Optimize revenue collection and facilitate trade to improve the socio-economic well-being of Seychelles.

Vision

To be a modern, fair and effective customer - oriented revenue administration.

Taxpayer's Charter

- Deliver quality and efficient services
- Settling tax affairs promptly
- Confidentiality
- Encouraging voluntary compliance

Assist and Communicate Clearly

- Provide helpful materials such as Brochures and leaflets
- Be courteous in our dealings
- Give relevant information
- Improve services and are open to suggestions

Be fair and Just

- High standards services
- Same level of service to all taxpayers
- Allow taxpayers to exercise their rights

Raise Standards and Promote Accountability

- Set high standards in relation to response time and service quality
- Publish service standards and review them regularly.

Taxpayer's Obligation

What we expect from you:

- You must register as a taxpayer
- You must submit your returns and make payments of the correct amount of tax on time
- You must maintain up to date and accurate records relevant to your dealings with us;
- You must notify us promptly of any mistakes made
- You must provide appropriate facilities and documents to SRC Auditors to enable them to conduct tax audits appropriately.
- You must lodge your representations/ appeal within the prescribed time.

Did TR have any significant impact on GDP during 2000-2018 period in Seychelles.

Table 20, Seychelles: Regression Analysis between TR and GDP

| Model | Unstan | dardized | | Т | Sig |
|----------|-------------|-----------|----------|----------|----------|
| | Coefficient | | | | |
| | В | Std error | Beta | | |
| Constant | -110.978 | 62.12413 | | 1.78639 | 0.09426 |
| TR | 5.153989 | 2.531058 | 0.238169 | 2.036298 | 0.059776 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $GDP = \alpha + \beta (TR) + \epsilon$

GDP = -110.978 + 5.153989 (TR)

The model indicates that TR has a positive coefficient (5.153989) and therefore an increase of 1% in TR would lead to a 5.15% in GDP. The relationship shows a positive insignificant correlation of 1.7%. Also P-value (0.947115) > 0.05 shows the relationship is not significant at a 5% probability level. Therefore, from my analysis I conclude that TR during 2000 - 2018 period had a positive but insignificant impact on GDP grow in Seychelles.

Did FDI have any significant impact on GDP during 2000-2018 period in Seychelles?

| Model | Unstan | dardized | | Т | Sig |
|----------|-------------|-----------|----------|----------|----------|
| | Coefficient | | | | |
| | В | Std error | Beta | | |
| Constant | -110.978 | 62.12413 | | 1.78639 | 0.09426 |
| FDI | 0.007392 | 0.109595 | 0.017743 | 0.067449 | 0.947115 |

 Table 21, Seychelles: Regression Analysis between FDI and GDP

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $GDP = \alpha + \beta (FDI) + \epsilon$

GDP = -110.978 + 0.007392 (FDI)

The model indicates that FDI has a positive coefficient (0.007392) and therefore a 1% increase in FDI would lead to 0.73% in GDP value. The relationship shows a weak correlation of 1.7%. In addition the P-value 0.947115 > 0.05 shows the relationship is not significant at a 5% probability level. Therefore, from my analysis I conclude that FDI during 2000 – 2018 period had a positive but not significant impact on GDP growth in Seychelles.

Did EXR have any significant impact on GDP during 2000-2018 period in Seychelles?

| Model | unstandardized Coefficient | | | Т | Sig |
|----------|----------------------------|-----------|----------|----------|----------|
| | В | Std error | Beta | | |
| Constant | -110.978 | 62.12413 | | 1.78639 | 0.09426 |
| EXR | -3.52436 | 1.752417 | -0.21684 | -2.01114 | 0.062638 |

Table 22, Seychelles: Regression Analysis between EXR and GDP

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $\text{GDP} = \alpha + \beta (\text{EXR}) + \epsilon$

GDP = -110.978+ -3.52436 (EXR)

This model explains that EXR has a negative coefficient (-3.52436) and therefore an increase by 1 percent in EXR would lead to a decrease by 352.4% in GDP value.

The relationship shows that a moderate negative correlation of 21.6 %. In addition, P - value 0.062638 > 0.05 shows the relationship is not significant at a 5% probability level.

Therefore, from my analysis I conclude that EXR during 2000-2018 period at a negative and no significant impact on GDP growth in Seychelles.

ANGOLA REVENUE AUTHORITY

Did TR have any significant impact on GDP during 2000-2018 period in Angola?

| Model | unstandardized Coefficient | | | Т | Sig |
|----------|----------------------------|-----------|----------|----------|----------|
| | В | Std error | Beta | | |
| Constant | 7.773701 | 7.908565 | | 0.982947 | 0.341223 |
| TR | 0.203579 | 0.34587 | 0.418782 | 0.668376 | 0.514048 |

Table 23, Angola: Regression Analysis between TR and GDP

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $\text{GDP} = \boldsymbol{\alpha} + \boldsymbol{\beta} (\text{TR}) + \boldsymbol{\epsilon}$

GDP = 7.773701 + 0.203579 (TR)

The model indicates that TR has a positive coefficient (0.203579) and therefore an increase of 1% in TR would lead to a 20.4% in GDP value. The relationship shows a positive insignificant correlation of 41.9%. Also P-value (0.514048) > 0.05 shows the relationship is not significant at a 5% probability level. Therefore, from my analysis I conclude that TR during 2000 – 2018 period had a positive but insignificant impact on GDP grow in Angola.

Did FDI have any significant impact on GDP during 2000-2018 period in Angola?

Table 24, Angola: Regression Analysis between FDI and GDP

| Model | Unstan | dardized | | Т | Sig |
|----------|-------------|-----------|----------|----------|----------|
| | Coefficient | | | | |
| | В | Std error | Beta | | |
| Constant | 7.773701 | 7.908565 | | 0.982947 | 0.341223 |
| FDI | -0.01108 | 0.005822 | -0.12119 | -1.90341 | 0.076356 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $\text{GDP} = \alpha + \beta \text{ (FDI)} + \epsilon$

GDP = 7.773701+ -0.01108 (FDI)

The model indicates that FDI has a negative coefficient (-0.01108) and therefore a 1% increase in FDI would lead to a decrease by 0.01% in GDP value. The relationship shows a weak negative correlation of 12.1%. In addition the P-value 0.076356 > 0.05 shows the relationship is not significant at a 5% probability level. Therefore, from my analysis, I conclude that FDI during 2000 – 2018 period had a negative and insignificant impact on GDP growth in Angola.

Did EXR have any significant impact on GDP during 2000-2018 period in Angola?

| Table 25, Angola: | Regression | Analysis between | EXR and GDP |
|---------------------|------------|------------------|--------------------|
| _ , _ | | | |

| Model | Unstandardized | | | Т | Sig |
|----------|----------------|-----------|---------|----------|----------|
| | Coefficient | | | | |
| | В | Std error | Beta | | |
| Constant | 7.773701 | 7.908565 | | 0.982947 | 0.341223 |
| EXR | -0.05192 | 0.032905 | -5.5095 | -1.57776 | 0.135472 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $\text{GDP} = \boldsymbol{\alpha} + \boldsymbol{\beta} (\text{EXR}) + \boldsymbol{\epsilon}$

GDP = 7.773701+ -0.05192 (EXR)

This model explains that EXR has a negative coefficient (-0.05192) and therefore an increase by 1 percent in EXR would lead to a decrease by 5.2% in GDP value.

The relationship shows that a moderate negative correlation of -5.5095. In addition, P – value 0.135472 > 0.05 shows the relationship is not significant at a 5% probability level.

Therefore, from my analysis I conclude that EXR during 2000 – 2018 period had a negative and no significant impact on GDP growth in Angola.

MADAGASCAR REVENUE AUTHORITY

Did TR have any significant impact on GDP during 2000-2018 period in Madagascar?

| Model | Unstandardized | | | Т | Sig |
|----------|----------------|-----------|----------|----------|----------|
| | Coefficient | | | | |
| | В | Std error | Beta | | |
| Constant | -7.16436 | 13.50418 | | -0.53053 | 0.603512 |
| TR | 0.93615 | 1.321191 | 0.144813 | 0.708565 | 0.792709 |

Table 26, Madagascar: Regression Analysis between TR and GDP

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $GDP = \alpha + \beta (TR) + \epsilon$

GDP = -7.16436 + 0.93615 (TR)

The model indicates that TR has a positive coefficient (0.93615) and therefore an increase of 1% in TR would lead to a 93.6% in GDP value. The relationship shows a weak correlation of 14.5%. Also P-value (0.792709) > 0.05 shows the relationship is not significant at a 5% probability level. Therefore, from my analysis, I conclude that TR during 2000 - 2018 period had a strong positive but insignificant impact on GDP grow in Madagascar.

Did FDI have any significant impact on GDP during 2000-2018 period in Madagascar?

Table 27, Madagascar: Regression Analysis between FDI and GDP

| Model | Unstan | dardized | | Т | Sig |
|----------|-------------|-----------|----------|----------|----------|
| | Coefficient | | | | |
| | В | Std error | Beta | | |
| Constant | -7.16436 | 13.50418 | | -0.53053 | 0.603512 |
| FDI | -0.0574 | 0.214555 | -0.03307 | -0.26752 | 0.792709 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $GDP = \alpha + \beta (FDI) + \epsilon$

GDP = -7.16436 + -0.0574 (FDI)

The model indicates that FDI has a negative coefficient (-0.0574) and therefore a 1% increase in FDI would lead to a decrease by 57.5% in GDP value. The relationship shows a weak negative correlation of 3.3%. In addition the P-value 0.792709 > 0.05 shows the relationship is not significant at a 5% probability level. Therefore, from my analysis, I conclude that FDI during 2000 – 2018 period had a negative and insignificant impact on GDP growth in Madagascar.

Did EXR have any significant impact on GDP during 2000-2018 period in Madagascar?

| Model | Unstandardized Coefficient | Т |
|-------|----------------------------|---|

| Table 28, Madagascar: Regression Analysis between EXR and GDP | |
|---|--|
| | |

| Model | Unstandardized | | Т | Sig | |
|----------|----------------|-----------|----------|----------|----------|
| | В | Std error | Beta | | |
| Constant | -7.16436 | 13.50418 | | -0.53053 | 0.603512 |
| EXR | 0.000751 | 0.001961 | 0.079413 | 0.382856 | 0.707197 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $GDP = \alpha + \beta (EXR) + \epsilon$

GDP = -7.16436 + 0.000751 (EXR)

This model explains that EXR has a positive coefficient (0.000751) and therefore an increase by 1 percent in EXR would lead to a decrease by 0.07% in GDP value.

The relationship shows that a moderate positive correlation of 7.9%. In addition, P – value 0.707197 > 0.05 shows the relationship is not significant at a 5% probability level.

Therefore, from my analysis I conclude that EXR during 2000 - 2018 period had a positive and no significant impact on GDP growth in Madagascar.

ESWATINI REVENUE AUTHORITY

Organization Overview

Mandate

The Swaziland Revenue Authority (SRA) is a semi- autonomous institution established by the Revenue Authority Act, 2008 as part of the government's reform strategy for revenue administration. The mandate of the SRA is to assess and collect revenue on behalf of the government, administer and enforce the revenue laws listed in the schedule of the Revenue Authority Act. These revenue laws include the income Tax order, 1975 (as amended) ; the customs and Excise Act 1971 (as amended) and the value Added Tax (VAT) Act, 2011. SRA Officially took over the revenue collection function on 1 January 2011.

The organization has five departments, domestic taxes, customs and Excise, Finance, Corporate Service, Business Strategy and Development. In addition to these departments, the organization has divisions that report to the Commissioner General being Legal Services. Internal Audit, Risk, assurance, and internal affairs.

Vision

To be modern, credible and customers centric Revenue Authority.

Mission

To provide an effective and efficient revenue and customs administration, driven by a high performance culture that promotes compliance through fair, transparent and equitable application of the law.

Table 29: Statement and Values

| Value | Statement |
|------------------------|---|
| Performance excellence | Strive for professionalism and continuous improvements |
| Customer centricity | Focus efforts on delivering high-level customer's service and |
| | recognizing the impact of actions on internal and external |
| | customers. |
| Innovative | Continuously implement new idea that re-engineer service |
| | offering and the way in which SRA operates |
| Integrity | Promote honesty trust and openness in conducting business |
| Transparency and | Open in operations and communication whilst being |
| Accountability | responsible for actions and decisions. |

Source: Swaziland Revenue Authority Website

Swaziland Revenue Authority (2018) report are as followings:

Performance

Revenue collection increased to E8.45bln as compared to E 6.65bln for 2015. Tax revenue to GDP increased to 14.7% for 2015 cost of revenue collection declined to 4.6% Tax compliance increased to 44.3% . 53 208-tax payers represents 6.9% increase VAT compliance was 88%.

Taxpayer Charter

The Charter sets out the way we conduct ourselves when dealing with you. It will help you understand:

Rights of a taxpayer

- Your importance tax obligations
- The service and other standards you can expect from us, and
- What you can do you're dissatisfied with our decisions, actions or services, or you want o the lodge a complaint.

It for everyone who deals with us on Income tax, sales (VAT), customs, Excise and other laws we administer.

- To be presumed honest and compliant
- To be treated fairly with your legal right and freedoms fully respected

- To have access to professional services and assistance from us to give you information that you can rely on
- To expect us to explain to you the decisions we made about your tax affairs
- To appeal or seek a review
- To be represented and advised
- To entitlements, deductions, allowances and refunds
- To minimize your tax liability within the bounds of the law
- To have overpayments of tax or duties refunded to you within 45 days
- To request a payment plan
- To have access to your information
- To preserve privileged communications from disclosure
- To have privacy, confidentiality and for trade secrets to be safeguarded
- To complain and to expect that your views will be heard and addressed
- To expect us to administer taxes and duties in ways that minimize compliance costs.

Taxation obligations

In return, the Authority expects the client:

- To be honest in all your dealings with us
- To maintain the records required by law
- To be accurate and take reasonable care in preparing all documents you submit to us and in choosing those who act for you.
- To register immediately when starting in business and to notify us promptly of relevant changes of circumstances
- To lodge returns or other information by the due date
- To notify us of other information by the due date
- To notify us of any mistakes promptly
- To disclose non privileged documentation
- To cooperate fully with us
- To be aware of your personal responsibility
- To pay your taxes and duties on time
- To be aware liability for penalties and Domestic tax

Did TR have any significant impact on GDP during 2000-2018 period in Eswatini?

| Model | Unstandardized | | | Т | Sig |
|----------|----------------|-----------|----------|----------|----------|
| | Coefficient | | | | |
| | В | Std error | Beta | | |
| Constant | 2.660462 | 2.171226 | | 1.225327 | 0.239345 |
| TR | -0.00127 | 0.00151 | -0.21583 | -0.84076 | 0.413682 |

Table 30, Eswatini: Regression Analysis between TR and GDP

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $GDP = \alpha + \beta (TR) + \epsilon$

GDP = 2.660462 + -0.00127 (TR)

The model indicates that TR has a negative coefficient (-0.00127) and therefore an increase of 1% in TR would lead to a 0.127% in GDP value. The relationship shows a negative weak correlation of 21.58%. Also P-value (0.413682) > 0.05 shows the relationship is not significant at a 5% probability level. Therefore, from my analysis, I conclude that TR during 2000 – 2018 period had a strong positive but insignificant impact on GDP grow in Eswatini.

Did FDI have any significant impact on GDP during 2000-2018 period in Eswatini?

Table 31, Eswatini: Regression Analysis between FDI and GDP

| Model | Unstan | dardized | | Т | Sig |
|----------|-------------|-----------|----------|----------|----------|
| | Coefficient | | | | |
| | В | Std error | Beta | | |
| Constant | 2.660462 | 2.171226 | | 1.225327 | 0.239345 |
| FDI | -0.0238 | 0.275922 | 0.011055 | -0.08624 | 0.932417 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $\text{GDP} = \alpha + \beta \text{ (FDI)} + \epsilon$

GDP = -7.16436 + -0.0238 (FDI)

The model indicates that FDI has a negative coefficient (-0.0238) and therefore a 1% increase in FDI would lead to a decrease by 2.38% in GDP value. The relationship shows a weak correlation of 1.10%. In addition the P-value 0.932417 > 0.05 shows the relationship is not significant at a 5% probability level. Therefore, from my analysis, I conclude that FDI during 2000 – 2018 period had a negative and no significant impact on GDP growth in Eswatini.

Did EXR have any significant impact on GDP during 2000-2018 period in Eswatini?

| Table 32, | Eswatini: | Regression | Analysis | between | EXR | and GD | P |
|-----------|-----------|-------------------|----------|---------|-----|--------|---|
| | | | | | | | |

| Model | Unstandardized | | | Τ | Sig |
|----------|----------------|-----------|----------|----------|----------|
| | Coefficient | | | | |
| | В | Std error | Beta | | |
| Constant | 2.660462 | 2.171226 | | 1.225327 | 0.239345 |
| EXR | 0.397249 | 2.061446 | 0.057429 | 0.192704 | 0.849776 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $\text{GDP} = \boldsymbol{\alpha} + \boldsymbol{\beta} (\text{EXR}) + \boldsymbol{\epsilon}$

GDP = -7.16436 + 0.397249 (EXR)

This model explains that EXR has a positive coefficient (0.397249) and therefore an increase by 1 percent in EXR would lead to an increase by 39.7% in GDP value.

The relationship shows that a moderate positive correlation of 5.7%. In addition, P – value 0.849776 > 0.05 shows the relationship has no significant at a 5% probability level.

Therefore, from my analysis I conclude that EXR during 2000 – 2018 period had a positive and no significant impact on GDP growth in Eswatini.

SOUTH AFRICA REVENUE SERVICES

SARS was established in terms of the South Africa Revenue Service Act, 1997 (Act No. 34 of 1997) as an organ of state within the public administration, but as an institution outside the public service. It is listed as a National public entity in schedule 3A of the public Finance Management Act 1999 (PFMA). In terms of the SARS Act 1997, the Commissioner for SARS is the Chief Executive Officer and Accounting Authority of SARS.

Vision

To administer our tax customs and Excise duties in a manner that encourages fiscal citizenship and increased revenue for the state.

Mission

To optimize revenue yield, facilitate trade and enlist new tax contributors by promoting awareness of the obligation to comply with South African tax and Customs laws and to provide quality and responsive service to the public.

Values

Fairness

Just and reasonable treatment in accordance with acceptable rules and free from favoritism and bias.

Trust

Firm belief the reliability, truth or ability of someone or something.

Honesty

Quality of being upright sincere and freedom from deceit and fraud.

Integrity

Guide by values and having an ability to demonstrate moral judgment and doing the right thing consistently.

Respect

The ability to be considerate towards others.

Transparency

Full, accurate and timely disclosure of information or a clear, unhindered honesty in the way SARS does business.

SOUTH AFRICA REVENUE AUTHORITY

Did TR have any significant impact on GDP during 2000-2018 period in South Africa?

| Table 33. | South Afri | ca: Regression | n Analysis | between TR | and GDP |
|-----------|-------------|----------------|------------|------------|---------|
| Table 55 | , bouth min | ca. Regression | ii marysis | between II | |

| Model | Unstandardized | | | Т | Sig |
|----------|----------------|-----------|----------|----------|----------|
| | Coefficient | | | | |
| | В | Std error | Beta | | |
| Constant | 1.358851 | 5.13548 | | 0.264601 | 0.794918 |
| TR | 0.274164 | 0.218418 | -0.14414 | 1.255228 | 0.2286 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $GDP = \alpha + \beta (TR) + \epsilon$

GDP = 1.358851+0.274164 (TR)

The model indicates that TR has a positive coefficient (0.274164) and therefore an increase of 1% in TR would lead to a 27.4% in GDP value. The relationship shows a negative weak correlation of 14.4%. Also P-value (0.2286) > 0.05 shows the relationship is not significant at a 5% probability level.

Therefore, from my analysis, I conclude that TR during 2000 – 2018 period had a positive but not significant impact on GDP grow in South Africa.
Did FDI have any significant impact on GDP during 2000-2018 period in South Africa?

| Model | Unstan | dardized | | Τ | Sig |
|----------|----------|-----------|----------|----------|----------|
| | Coef | ficient | | | |
| | В | Std error | Beta | | |
| Constant | 1.358851 | 5.13548 | | 0.264601 | 0.794918 |
| FDI | -0.19377 | 0.242837 | -0.06704 | -0.79793 | 0.437362 |

 Table 34, South Africa: Regression Analysis between FDI and GDP

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $\text{GDP} = \boldsymbol{\alpha} + \boldsymbol{\beta} \text{ (FDI)} + \boldsymbol{\epsilon}$

GDP = 1.358851+ -0.19377 (FDI)

The model indicates that FDI has a negative coefficient (-0.19377) and therefore a 1% increase in FDI would lead to a decrease by 19.3% in GDP value. The relationship shows a negative weak correlation of 6.7%. In addition the P-value 0.437362 > 0.05 shows the relationship is not significant at a 5% probability level. Therefore, from my analysis, I conclude that FDI during 2000 – 2018 period had a negative and no significant impact on GDP growth in South Africa.

Did EXR have any significant impact on GDP during 2000-2018 period in South Africa?

| Model | Unstan | dardized | | Т | Sig |
|----------|----------|-----------|----------|----------|----------|
| | Coef | ficient | | | |
| | В | Std error | Beta | | |
| Constant | 1.358851 | 5.13548 | | 0.264601 | 0.794918 |
| EXR | -0.58544 | 0.149103 | -0.66751 | -3.92637 | 0.001347 |

Dependent variable: GDP

Source: Research Findings

The model developed from the coefficient above table is:

 $\text{GDP} = \boldsymbol{\alpha} + \boldsymbol{\beta} (\text{EXR}) + \boldsymbol{\epsilon}$

GDP = 1.358851 + -0.58544 (EXR)

This model explains that EXR has a negative coefficient (-0.58544) and therefore an increase by 1 percent in EXR would lead to a decrease by 58.5% in GDP value.

The relationship shows that a moderate negative correlation of 66.75%. In addition, P - value 0.001347 < 0.05 shows the relationship has significant at a 5% probability level.

Therefore, from my analysis I conclude that EXR during 2000 – 2018 period had a positive and significant impact on GDP growth in South Africa.

South Africa Revenue Services' vision, mission, people and values are as follows

Vision

"To collect all revenues due, ensure optimal compliance with tax and customs legislation and provide a customs and excise service that will facilitate legitimate trade as well as protect our economy and society"

Mission

"To optimize revenue yield, facilitate trade and enlist new tax contributors by promoting awareness of the obligation to comply with South African tax and customs laws, and to provide quality and responsive service to the public".

Values

Integrity Guided by values and having an ability to demonstrate moral judgment and doing the right thing consistently.

Accountability

Assuming responsibility for actions, products, decisions and policies within the scope of employment position.

Transparency

Full, accurate and timely disclosure of information or a clear, unhindered honesty in the way SARS does business.

Fairness

Just and reasonable treatment in accordance with acceptable rules and free from favoritism and bias.

Respect

The ability to be considerate towards others.

Honest

Being upright, truthful, sincere and free from deceit or fraud.

Trust

Firm belief in the reliability, truth or ability of someone or something.

DISCUSSION OF RESULTS

The study sort to determine the impact of Tax and Customs Reforms on Economic growth for 11 selected SADC Countries; South Africa, Seychelles, Malawi, Madagascar, Tanzania, Zambia, Mauritius, Mozambique, Eswatini, Namibia and Angola during 2000 – 2018.

The study found:

- That TR had no significant impact on GDP growth in the SADC Countries during 2000 2018 period. These findings also agree with Andre Gbato (2017) who we empirically tested the impact of taxation on long run growth of a sample of 32 countries in Sub-Sahara Africa is results indicated a zero effect on Taxation on long run growth.
- ii. The EXR had no significant impact on GDP growth in SADC Countries during 2000 2018. These findings are conformity with the findings of Eichengreen and Leblang (2003) found strong negative relationship between exchange rate and growth.
- iii. The FDI had no significant impact on GDP growth in SADC Countries during 2000 2018. These results are in agreement with the findings of Mohamed. Singh and Liew (2013) used the VECM to investigate the short-run and long run causal relationship between FDI domestic investment and economic growth in Malaysia for the period 1970-2008. The empirical results found no causal relationship between FDI and economic growth in both the short and long run.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents the summary of findings, conclusions and recommendations of the study it also highlights suggestions for further research.

5.2 Summary

The study sort to investigate the effect of tax reforms on Economic Growth for selected SADC Countries. South Africa, Seychelles, Malawi, Madagascar, Tanzania, Zambia, Mauritius, Mozambique, Eswatini, Namibia and Angola during 2000 – 2018.

Descriptive and Ex-post factual Research Design was used to carry out the objective of the study. The research used regression and correlation analysis technique to identify the relationship between GDP growth (Dependant Variable) and Tax Revenue, Foreign Direct Investment and Exchange Rate (Independent Variable).

5.3 Conclusion

From the findings, the study concludes that: South Africa, Seychelles, Malawi, Madagascar, Tanzania, Zambia, Mauritius, Mozambique, Eswatini, Namibia and Angola during 2000 – 2018 have undertaken various tax and customs reforms that have lead to substation increase in Tax Revenue. In addition, there has been a simplification of tax system including rates and procedures and improved tax and administration. Modernization of tax administration which involved better integration of tax department with a force on integration of VAT and Income Tax operations and improved tax administration that facilitates dialogue with taxpayers leading to improved relations.

5.4 Policy Recommendations

Based on the findings the following recommendations are put forward;

i. ICT to enhance administrative efficiency: The revenue authorities in the case countries have initiated an array of initiatives to exploit ICT with a view to enhancing efficiency in tax administration. These include, for instance, the ASYCUDA++ for customs; ITAX and eFilling for domestic revenue; the computerized registration of motor

vehicles and drivers; and the introduction of electronic cash registers fro VAT, among others.

- ii. There is agent need for appropriate utilization of tax revenue by Governments on expenditure lines that have relationship with economic growth.
- iii. Tax revenues can be enhanced by formation of short tax holidays.
- iv. Minimizing corruption in tax collection: Although the issue of integrity is high on the agenda in all the three revenue authorities and institutional mechanisms are established to prevent, reveal and curb corruption, the critical tasks for the authorizes are to ensure that the systems, policies, regulation, policies and procedures are not only established but filter down throughout the organisation to be fully functional and effective (PwC 2007).
- v. Prudential management of macroeconomic variable leading to stable exchange rate that has minimum adverse effects on GDP growth.
- vi. Governments should be consistence and predictability in their policy in order to still investor confidence that might enhance gains from FDI.
- vii. Strengthening taxpayers' rights: An important element of administrative accountability is the rights of taxpayers' vis-à-vis the tax authority. Though still in their infancy in the countries which part of this study, tax appeals boards and tax tribunals are important institutions to securing taxpayers' rights and to stabling fair and transparent procedures to addressing tax disputes.
- viii. Concerning corporate taxes, governments should first reduce exemptions especially in the contest of investment codes. Then the increase in tax base should be followed by reduction in the different tax rate. Another area of reforms concerns the depreciation system governments should first reduce the number of asset classes. This action would then be followed by application of a single depreciating rate for each category.
- ix. With regards, indirect taxes there potential could be improved through further reforms of VAT (Gupita 2007) argue that it has a greater potential to improve the performance of economic in developing countries compared to taxes on traditional products for a number of reasons. It should therefore be to improve policy on VAT to make some regressive. This involves the removal of VAT exemptions to increase this plate.

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APPENDICES

ZAMBIA

REGRESSION ANALYSIS

SUMMARY OUTPUT

| Regression St | tatistics | | | | | | | |
|-------------------|--------------|----------------|----------|----------|----------------|-----------|-------------|-------------|
| Multiple R | 0.999262 | | | | | | | |
| R Square | 0.998524 | | | | | | | |
| Adjusted R Square | 0.998229 | | | | | | | |
| Standard Error | 0.051139 | | | | | | | |
| Observations | 19 | | | | | | | |
| ANOVA | | | | | | | | |
| | df | SS | MS | F | Significance F | | | |
| Regression | 3 | 26.53415 | 8.844717 | 3382.01 | 1.9E-21 | | | |
| Residual | 15 | 0.039228 | 0.002615 | | | | | |
| Total | 18 | 26.57338 | | | | | | |
| | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% | Lower 95.0% | Upper 95.0% |
| Intercept | 0.053937 | 0.164802 | 0.327283 | 0.747977 | -0.29733 | 0.405203 | -0.29733 | 0.405203 |
| X Variable 1 | 1.003146 | 0.010353 | 96.89546 | 2.13E-22 | 0.981079 | 1.025213 | 0.981079 | 1.025213 |
| X Variable 2 | -0.01466 | 0.006387 | -2.29489 | 0.036583 | -0.02827 | -0.00104 | -0.02827 | -0.00104 |
| X Variable 3 | -0.00428 | 0.005574 | -0.76728 | 0.454822 | -0.01616 | 0.007603 | -0.01616 | 0.007603 |

DESCRIPTIVE STATISTICS

| GDP | | TR | | FDI | | EXR | |
|--------------------|----------|--------------------|----------|--------------------|----------|--------------------|----------|
| Mean | 14.54895 | Mean | 14.55316 | Mean | 5.463158 | Mean | 5.578947 |
| Standard Error | 0.278747 | Standard Error | 0.276266 | Standard Error | 0.475617 | Standard Error | 0.535444 |
| Median | 14.7 | Median | 14.7 | Median | 5.2 | Median | 4.8 |
| Mode | 14.9 | Mode | 16.5 | Mode | 7.1 | Mode | 3.6 |
| Standard Deviation | 1.21503 | Standard Deviation | 1.204215 | Standard Deviation | 2.073165 | Standard Deviation | 2.333947 |
| Sample Variance | 1.476299 | Sample Variance | 1.450134 | Sample Variance | 4.298012 | Sample Variance | 5.44731 |
| Kurtosis | 0.537488 | Kurtosis | 0.584767 | Kurtosis | -0.59758 | Kurtosis | 0.343525 |
| Skewness | -0.4526 | Skewness | -0.52149 | Skewness | 0.09504 | Skewness | 1.290161 |
| Range | 4.9 | Range | 4.8 | Range | 7.9 | Range | 7.4 |
| Minimum | 11.7 | Minimum | 11.7 | Minimum | 1.5 | Minimum | 3.1 |
| Maximum | 16.6 | Maximum | 16.5 | Maximum | 9.4 | Maximum | 10.5 |
| Sum | 276.43 | Sum | 276.51 | Sum | 103.8 | Sum | 106 |
| Count | 19 | Count | 19 | Count | 19 | Count | 19 |

CORRELATION

| | Column 1 | Column 2 | Column 3 | Column 4 |
|-----|----------|----------|----------|----------|
| GDP | 1 | | | |
| TR | 0.999002 | 1 | | |
| FDI | -0.26454 | -0.24398 | 1 | |
| EXR | 0.160302 | 0.160214 | -0.36907 | 1 |

TREND ANALYSIS



MALAWI

| SUMMARY | UTPUT | | | | | | | |
|--------------|--------------|-------------------|----------|----------|-------------------|--------------|-------------|--------------------|
| Regression | Statistics | | | | | | | |
| Multiple R | 0.238028 | | | | | | | |
| R Square | 0.056658 | | | | | | | |
| Adjusted R | -0.13201 | | | | | | | |
| Square | | | | | | | | |
| Standard | 17.31092 | | | | | | | |
| Error | | | | | | | | |
| Observations | 19 | | | | | | | |
| ANOVA | | | | | | | | |
| | Df | SS | MS | F | Significance F | | | |
| Regression | 3 | 269.9726 | 89.99086 | 0.300302 | 0.824673 | | | |
| Residual | 15 | 4495.018 | 299.6679 | | | | | |
| Total | 18 | 4764.991 | | | | | | |
| | | | | | | | | |
| | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% | Lower 95.0% | <i>Upper 95.0%</i> |
| Intercept | 71.31061 | 72.72346 | 0.980572 | 0.342356 | -83.6958 | 226.317 | -83.6958 | 226.317 |
| X Variable 1 | -4.29388 | 4.863932 | -0.8828 | 0.391273 | -14.6611 | 6.073342 | -14.6611 | 6.073342 |
| X Variable 2 | 0.275207 | 1.252188 | 0.219781 | 0.829005 | -2.39377 | 2.944182 | -2.39377 | 2.944182 |
| X Variable 3 | 0.00123 | 0.011261 | 0.109228 | 0.91447 | -0.02277 | 0.025233 | -0.02277 | 0.025233 |
| | | | | | | | | |

DESCRIPTIVE

| GDP | | TR | | FDI | | EXR | |
|--------------------|----------|--------------------|----------|--------------------|----------|--------------------|----------|
| Mean | 7.635789 | Mean | 15.14105 | Mean | 3.309474 | Mean | 348.2105 |
| Standard Error | 3.732656 | Standard Error | 0.207421 | Standard Error | 0.749828 | Standard Error | 89.67929 |
| Median | 4.7 | Median | 15.2 | Median | 2.1 | Median | 150.5 |
| Mode | 5.7 | Mode | 14.1 | Mode | 1.4 | Mode | #N/A |
| Standard Deviation | 16.27027 | Standard Deviation | 0.904126 | Standard Deviation | 3.268424 | Standard Deviation | 390.903 |
| Sample Variance | 264.7217 | Sample Variance | 0.817443 | Sample Variance | 10.68259 | Sample Variance | 152805.1 |
| Kurtosis | 17.43126 | Kurtosis | 0.898704 | Kurtosis | 0.22812 | Kurtosis | 6.0095 |
| Skewness | 4.091289 | Skewness | 1.034851 | Skewness | 1.257399 | Skewness | 2.257875 |
| Range | 78.5 | Range | 3.2 | Range | 10.1 | Range | 1580.4 |
| Minimum | -4.9 | Minimum | 14.1 | Minimum | 0.1 | Minimum | 59.5 |
| Maximum | 73.6 | Maximum | 17.3 | Maximum | 10.2 | Maximum | 1639.9 |
| Sum | 145.08 | Sum | 287.68 | Sum | 62.88 | Sum | 6616 |
| Count | 19 | Count | 19 | Count | 19 | Count | 19 |

CORRELATION

| | GDP | TR | FDI | EXR |
|-----|----------|----------|----------|-----|
| GDP | 1 | | | |
| TR | -0.22942 | 1 | | |
| FDI | 0.064366 | -0.03127 | 1 | |
| EXR | -0.05556 | 0.369422 | 0.054813 | 1 |
| | | | | |

TREND ANALYSIS



TANZANIA

REGRESSION ALYSIS

SUMMARY OUTPUT

| Regression St | tatistics | | | | | | | |
|-------------------|--------------|----------------|----------|----------|----------------|-----------|-------------|-------------|
| Multiple R | 0.139873 | | | | | | | |
| R Square | 0.019564 | | | | | | | |
| Adjusted R Square | -0.17652 | | | | | | | |
| Standard Error | 0.975172 | | | | | | | |
| Observations | 19 | | | | | | | |
| ANOVA | | | | | | | | |
| | df | SS | MS | F | Significance F | | | |
| Regression | 3 | 0.284644 | 0.094881 | 0.099774 | 0.958901 | | | |
| Residual | 15 | 14.26442 | 0.950961 | | | | | |
| Total | 18 | 14.54906 | | | | | | |
| | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% | Lower 95.0% | Upper 95.0% |
| Intercept | 6.589305 | 0.860273 | 7.659555 | 1.46E-06 | 4.755678 | 8.422933 | 4.755678 | 8.422933 |
| X Variable 1 | 0.002293 | 0.008033 | 0.285402 | 0.779239 | -0.01483 | 0.019414 | -0.01483 | 0.019414 |
| X Variable 2 | -0.01136 | 0.026533 | -0.4283 | 0.674521 | -0.06792 | 0.04519 | -0.06792 | 0.04519 |
| X Variable 3 | -0.00022 | 0.000554 | -0.39371 | 0.699333 | -0.0014 | 0.000963 | -0.0014 | 0.000963 |

DESCRIPTIVE

| GDP | | TR | | FDI | | EXR | |
|---------------------------|----------------------|---------------------------|-------------------|---------------------------|----------------------|---------------------------|----------------------|
| Mean Standard Error | 6.265789 0.206255 | Mean Standard Error | 22.11 6.792818 | Mean Standard Error | 5.296842 2.112433 | Mean Standard Error | 1439.479 104.4427 |
| Median | 6.38 | Median | 12 | Median | 3.1 | Median | 1320.3 |
| Mode | 6.7 | Mode | 11.4 | Mode | 2.6 | Mode | #N/A |
| Standard Deviation | 0.899045 | Standard Deviation | 29.60921 | Standard Deviation | 9.207881 | Standard Deviation | 455.255 |
| Sample Variance | 0.808281 | Sample Variance | 876.7051 | Sample Variance | 84.78508 | Sample Variance | 207257.1 |
| Kurtosis | -0.12173 | Kurtosis | 6.456496 | Kurtosis | 18.25486 | Kurtosis | -0.65386 |
| Skewness | -0.57942 | Skewness | 2.783087 | Skewness | 4.237993 | Skewness | 0.609516 |
| Range | 3.1 | Range | 97.61 | Range | 41.3 | Range | 1463.4 |
| Minimum | 4.5 | Minimum | 9.39 | Minimum | 1.7 | Minimum | 800.4 |
| Maximum | 7.6 | Maximum | 107 | Maximum | 43 | Maximum | 2263.8 |
| Sum | 119.05 | Sum | 420.09 | Sum | 100.64 | Sum | 27350.1 |
| Count | 19 | Count | 19 | Count | 19 | Count | 19 |

CORRELATION

| | GDP | TR | FDI | EXR |
|-----|----------|----------|----------|-----|
| GDP | 1 | | | |
| TR | 0.054344 | 1 | | |
| FDI | -0.08365 | -0.06074 | 1 | |
| EXR | -0.05184 | 0.255535 | -0.33794 | 1 |

TREND ANALYSIS



MOZAMBIQUE

REGRESSION ANALYSIS

| SUMMARY OUTP | UT | | | | | | | | |
|-------------------|--------------|----------------|----------|----------|----------------|-----------|-------------|--------------------|--|
| | | | | | | | | | |
| Regression St | atistics | | | | | | | | |
| Multiple R | 0.503941 | | | | | | | | |
| R Square | 0.253956 | | | | | | | | |
| Adjusted R Square | 0.104748 | | | | | | | | |
| Standard Error | 2.308293 | | | | | | | | |
| Observations | 19 | | | | | | | | |
| | | | | | | | | | |
| ANOVA | | | | | | | | | |
| | df | SS | MS | F | Significance F | | | | |
| Regression | 3 | 27.2062 | 9.068733 | 1.70202 | 0.209317 | | | | |
| Residual | 15 | 79.92327 | 5.328218 | | | | | | |
| Total | 18 | 107.1295 | | | | | | | |
| | | | | | | | | | |
| | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% | Lower 95.0% | <i>Upper 95.0%</i> | |
| Intercept | 10.8106 | 3.577712 | 3.021652 | 0.008586 | 3.184888 | 18.43631 | 3.184888 | 18.43631 | |
| X Variable 1 | -0.15307 | 0.349295 | -0.43824 | 0.667458 | -0.89758 | 0.59143 | -0.89758 | 0.59143 | |
| X Variable 2 | 0.047681 | 0.091779 | 0.51952 | 0.610979 | -0.14794 | 0.243305 | -0.14794 | 0.243305 | |
| X Variable 3 | -0.06962 | 0.060222 | -1.15614 | 0.265708 | -0.19798 | 0.058735 | -0.19798 | 0.058735 | |

DESCRIPTIVE DATA

| GDP | | TR | | FDI | | EXR | |
|--------------------|----------|--------------------|----------|--------------------|----------|--------------------|----------|
| Mean | 6.705263 | Mean | 16.6 | Mean | 14.29579 | Mean | 32.25789 |
| Standard Error | 0.559682 | Standard Error | 0.938021 | Standard Error | 2.763764 | Standard Error | 3.302102 |
| Median | 6.9 | Median | 14.8 | Median | 7.8 | Median | 27.5 |
| Mode | 6.9 | Mode | 12.2 | Mode | #N/A | Mode | #N/A |
| Standard Deviation | 2.439598 | Standard Deviation | 4.088738 | Standard Deviation | 12.04697 | Standard Deviation | 14.39353 |
| Sample Variance | 5.951637 | Sample Variance | 16.71778 | Sample Variance | 145.1294 | Sample Variance | 207.1737 |
| Kurtosis | 1.176709 | Kurtosis | -1.25902 | Kurtosis | -0.76308 | Kurtosis | 1.180732 |
| Skewness | -0.29794 | Skewness | 0.549259 | Skewness | 0.74831 | Skewness | 1.497662 |
| Range | 10.9 | Range | 12.4 | Range | 38.1 | Range | 48.4 |
| Minimum | 1.1 | Minimum | 11.9 | Minimum | 1.4 | Minimum | 15.2 |
| Maximum | 12 | Maximum | 24.3 | Maximum | 39.5 | Maximum | 63.6 |
| Sum | 127.4 | Sum | 315.4 | Sum | 271.62 | Sum | 612.9 |
| Count | 19 | Count | 19 | Count | 19 | Count | 19 |

CORRELATION MATRIX

| | GDP | TR | FDI | EXR |
|-----|----------|----------|----------|-----|
| GDP | 1 | | | |
| TR | -0.35528 | 1 | | |
| FDI | -0.16417 | 0.840022 | 1 | |
| EXR | -0.49044 | 0.721837 | 0.448204 | 1 |

TREND ANALYSIS



ANGOLA

REGRESSION ANALYSIS

| SUMMARY (| OUTPUT | | | | | | | |
|--------------|--------------|----------|----------|----------|----------------|-----------|----------|----------|
| Regression | statistics | | | | | | | |
| Multiple R | 0.635922 | | | | | | | |
| R Square | 0.404397 | | | | | | | |
| Adjusted R | 0.285277 | | | | | | | |
| Square | | | | | | | | |
| Standard | 4.659377 | | | | | | | |
| Error | | | | | | | | |
| Observations | 19 | | | | | | | |
| | | | | | | | | |
| ANOVA | | | | | | | | |
| | $d\!f$ | SS | MS | F | Significance F | | | |
| Regression | 3 | 221.1051 | 73.70169 | 3.39486 | 0.045729 | | | |
| Residual | 15 | 325.6469 | 21.70979 | | | | | |
| Total | 18 | 546.7519 | | | | | | |
| | Coefficients | Standard | t Stat | P-value | Lower 95% | Upper 95% | Lower | Upper |
| | | Error | | | | | 95.0% | 95.0% |
| Intercept | 7.773701 | 7.908565 | 0.982947 | 0.341223 | -9.08301 | 24.63041 | -9.08301 | 24.63041 |
| X Variable 1 | 0.203579 | 0.304587 | 0.668376 | 0.514048 | -0.44563 | 0.852791 | -0.44563 | 0.852791 |
| X Variable 2 | -0.01108 | 0.005822 | -1.90341 | 0.076356 | -0.02349 | 0.001328 | -0.02349 | 0.001328 |
| X Variable 3 | -0.05192 | 0.032905 | -1.57776 | 0.135472 | -0.12205 | 0.018219 | -0.12205 | 0.018219 |

DESCRIPTIVE STATISTICS

| GDP | | TR | | FDI | | EXR | |
|----------------|----------|----------------|----------|----------------|----------|-------------------|----------|
| Mean | 5.775895 | Mean | 17.32632 | Mean | 52.06937 | Mean | 95.31053 |
| Standard Error | 1.264393 | Standard Error | 1.386228 | Standard Error | 49.14478 | Standard Error | 12.36778 |
| Median | 4.8 | Median | 16.6 | Median | 1.7 | Median | 87.2 |
| Mode | 4.8 | Mode | #N/A | Mode | #N/A | Mode | #N/A |
| Standard | 5.511362 | Standard | 6.042428 | Standard | 214.2171 | Standard | 53.90991 |
| Deviation | | Deviation | | Deviation | | Deviation | |
| Sample | 30.37511 | Sample | 36.51094 | Sample | 45888.98 | Sample | 2906.279 |
| Variance | | Variance | | Variance | | Variance | |
| Kurtosis | -1.13852 | Kurtosis | -0.28759 | Kurtosis | 18.93173 | Kurtosis | 3.347779 |
| Skewness | 0.289136 | Skewness | 0.614492 | Skewness | 4.347827 | Skewness | 1.352742 |
| Range | 17.358 | Range | 20 | Range | 942.05 | Range | 242.9 |
| Minimum | -2.358 | Minimum | 9.2 | Minimum | -6.05 | Minimum | 10 |
| Maximum | 15 | Maximum | 29.2 | Maximum | 936 | Maximum | 252.9 |
| Sum | 109.742 | Sum | 329.2 | Sum | 989.318 | Sum | 1810.9 |
| Count | 19 | Count | 19 | Count | 19 | Count | 19 |
| | | | | | | | |

CORRELATION

| | GDP | TR | FDI | GDP |
|-----|----------|----------|----------|-----|
| GDP | 1 | | | |
| TR | 0.418782 | 1 | | |
| FDI | -0.12119 | 0.470736 | 1 | |
| EXR | -0.5095 | -0.7844 | -0.40259 | 1 |
| | | | | |

TREND ANALYSIS



NAMIBIA

REGRESSION ANALYSIS

| SUMMARY C | DUTPUT | | | | | | | |
|----------------|--------------|----------|----------|----------|-------------------|-----------|----------|--------------------|
| Regression Sta | tistics | | | | | | | |
| Multiple R | 0.598965 | | | | | | | |
| R Square | 0.358759 | | | | | | | |
| Adjusted R | 0.230511 | | | | | | | |
| Square | | | | | | | | |
| Standard | 2.63406 | | | | | | | |
| Error | | | | | | | | |
| Observations | 19 | | | | | | | |
| | | | | | | | | |
| ANOVA | | | | | | | | |
| | df | SS | MS | F | Significance F | | | |
| Regression | 3 | 58.22699 | 19.409 | 2.797383 | 0.076049 | | | |
| Residual | 15 | 104.0741 | 6.938271 | | | | | |
| Total | 18 | 162.3011 | | | | | | |
| | | | | | | | | |
| | Coefficients | Standard | t Stat | P-value | Lower 95% | Upper 95% | Lower | <i>Upper 95.0%</i> |
| | | Error | | | | | 95.0% | |
| Intercept | 1.711585 | 6.650702 | 0.257354 | 0.800402 | -12.4641 | 15.88722 | -12.4641 | 15.88722 |
| X Variable 1 | 0.442535 | 0.277842 | 1.59276 | 0.132064 | -0.14967 | 1.034741 | -0.14967 | 1.034741 |
| X Variable 2 | -0.52533 | 0.281787 | -1.86429 | 0.08197 | -1.12595 | 0.075281 | -1.12595 | 0.075281 |
| X Variable 3 | -0.80854 | 0.283613 | -2.85083 | 0.012146 | -1.41304 | -0.20403 | -1.41304 | -0.20403 |

DESCRIPTIVE STATISTICS

| GDP | TR | | | FDI | | EXR | |
|--------------------|----------|--------------------|----------|--------------------|----------|--------------------|----------|
| Mean | 4.131579 | Mean | 28.86842 | Mean | 5.568421 | Mean | 9.189474 |
| Standard Error | 0.688886 | Standard Error | 0.638898 | Standard Error | 0.637936 | Standard Error | 0.604123 |
| Median | 4.7 | Median | 29.4 | Median | 5.5 | Median | 8.3 |
| Mode | 1.1 | Mode | 30.1 | Mode | 1.4 | Mode | 7.3 |
| Standard Deviation | 3.002786 | Standard Deviation | 2.78489 | Standard Deviation | 2.780698 | Standard Deviation | 2.633311 |
| Sample Variance | 9.016725 | Sample Variance | 7.755614 | Sample Variance | 7.732281 | Sample Variance | 6.934327 |
| Kurtosis | 1.547187 | Kurtosis | -0.77197 | Kurtosis | -0.93409 | Kurtosis | -0.51417 |
| Skewness | 0.727412 | Skewness | -0.06464 | Skewness | 0.159385 | Skewness | 0.890976 |
| Range | 12.7 | Range | 9.9 | Range | 9.5 | Range | 8.3 |
| Minimum | -0.5 | Minimum | 23.7 | Minimum | 1.4 | Minimum | 6.4 |
| Maximum | 12.2 | Maximum | 33.6 | Maximum | 10.9 | Maximum | 14.7 |
| Sum | 78.5 | Sum | 548.5 | Sum | 105.8 | Sum | 174.6 |
| Count | 19 | Count | 19 | Count | 19 | Count | 19 |

CORRELATION MATRIX

| GDP | TR | FDI | EXR |
|----------|--|--|--|
| 1 | | | |
| 0.011752 | 1 | | |
| -0.09189 | 0.405845 | 1 | |
| -0.43612 | 0.28381 | -0.32159 | 1 |
| | | | |
| | GDP 1 0.011752 -0.09189 -0.43612 | GDP TR 1 1 0.011752 1 -0.09189 0.405845 -0.43612 0.28381 | GDPTRFDI10.0117521-0.091890.4058451-0.436120.28381-0.32159 |

TREND ANALYSIS



MADAGASCAR

REGRESSION ANALYSI

| SUMMARY OUTPUT | | | | | | | | |
|-------------------|--------------|----------|----------|----------|-------------------|----------|----------|----------|
| Regression Stat | tistics | | | | | | | |
| Multiple R | 0.196517 | | | | | | | |
| R Square | 0.038619 | | | | | | | |
| Adjusted R Square | -0.15366 | | | | | | | |
| Standard Error | 5.034875 | | | | | | | |
| Observations | 19 | | | | | | | |
| | | | | | | | | |
| ANOVA | | | | | | | | |
| | df | SS | MS | F | Significance F | | | |
| Regression | 3 | 15.27478 | 5.091595 | 0.200852 | 0.89417 | | | |
| Residual | 15 | 380.2494 | 25.34996 | | | | | |
| Total | 18 | 395.5242 | | | | | | |
| | | | | | | | | |
| | Coefficients | Standard | t Stat | P-value | Lower 95% | Upper | Lower | Upper |
| | | Error | | | | 95% | 95.0% | 95.0% |
| Intercept | -7.16436 | 13.50418 | -0.53053 | 0.603512 | -35.9478 | 21.61912 | -35.9478 | 21.61912 |
| X Variable 1 | 0.93615 | 1.321191 | 0.708565 | 0.489461 | -1.8799 | 3.752203 | -1.8799 | 3.752203 |
| X Variable 2 | -0.0574 | 0.214555 | -0.26752 | 0.792709 | -0.51471 | 0.399915 | -0.51471 | 0.399915 |
| X Variable 3 | 0.000751 | 0.001961 | 0.382856 | 0.707197 | -0.00343 | 0.00493 | -0.00343 | 0.00493 |

DESCRIPTIVE STATISTICS

| GDP | | TR | | FDI | | EXR | |
|--------------------|----------|--------------------|-----------|--------------------|----------|--------------------|----------|
| Mean | 3.036842 | Mean | 9.3526316 | Mean | 2.569474 | Mean | 2122.316 |
| Standard Error | 1.075409 | Standard Error | 0.2227379 | Standard Error | 1.391708 | Standard Error | 145.8332 |
| Median | 3.9 | Median | 8.9 | Median | 1.8 | Median | 2025.1 |
| Mode | 3.9 | Mode | 8.3 | Mode | 1.8 | Mode | #N/A |
| Standard Deviation | 4.687597 | Standard Deviation | 0.9708922 | Standard Deviation | 6.066313 | Standard Deviation | 635.6722 |
| Sample Variance | 21.97357 | Sample Variance | 0.9426316 | Sample Variance | 36.80015 | Sample Variance | 404079.2 |
| Kurtosis | 6.798898 | Kurtosis | -0.939986 | Kurtosis | 2.68719 | Kurtosis | -0.44727 |
| Skewness | -2.25601 | Skewness | 0.6133324 | Skewness | 1.483139 | Skewness | 0.556034 |
| Range | 22.3 | Range | 3 | Range | 25.2 | Range | 2099.4 |
| Minimum | -12.6 | Minimum | 8.3 | Minimum | -5.2 | Minimum | 1238.3 |
| Maximum | 9.7 | Maximum | 11.3 | Maximum | 20 | Maximum | 3337.7 |
| Sum | 57.7 | Sum | 177.7 | Sum | 48.82 | Sum | 40324 |
| Count | 19 | Count | 19 | Count | 19 | Count | 19 |

CORRELATION MATRIX

| | GDP | TR | FDI | EXR |
|-----|----------|----------|----------|-----|
| GDP | 1 | | | |
| TR | 0.144813 | 1 | | |
| FDI | -0.03307 | 0.357538 | 1 | |
| EXR | 0.079413 | -0.22126 | -0.27616 | 1 |

TREND ANALYSIS



MAURITIUS

REGRESSION ANALYSIS

| SUMMARY O | UTPUT | | | | | | | |
|--------------|--------------|----------|----------|----------|----------------|----------|----------|--------------------|
| Regression | statistics | | | | | | | |
| Multiple R | 0.732029 | | | | | | | |
| R Square | 0.535867 | | | | | | | |
| Adjusted R | 0.44304 | | | | | | | |
| Square | | | | | | | | |
| Standard | 1.111196 | | | | | | | |
| Error | | | | | | | | |
| Observations | 19 | | | | | | | |
| | | | | | | | | |
| ANOVA | | | | | | | | |
| | $d\!f$ | SS | MS | F | Significance F | | | |
| Regression | 3 | 21.3839 | 7.127966 | 5.772766 | 0.007868 | | | |
| Residual | 15 | 18.52136 | 1.234758 | | | | | |
| Total | 18 | 39.90526 | | | | | | |
| | Coefficients | Standard | t Stat | P-value | Lower 95% | Upper | Lower | <i>Upper 95.0%</i> |
| | 55 | Error | | | | 95% | 95.0% | 11 |
| Intercept | 6.769315 | 3.380432 | 2.0025 | 0.06365 | -0.43591 | 13.97454 | -0.43591 | 13.97454 |
| X Variable 1 | 0.001765 | 0.000893 | 1.975861 | 0.066862 | -0.00014 | 0.003669 | -0.00014 | 0.003669 |
| X Variable 2 | 0.296173 | 0.191885 | 1.543492 | 0.143543 | -0.11282 | 0.705165 | -0.11282 | 0.705165 |
| X Variable 3 | -0.11887 | 0.111867 | -1.06261 | 0.30477 | -0.35731 | 0.119568 | -0.35731 | 0.119568 |

DESCRIPTIVE STATISTICS

| GDP | | TR | | FDI | | EXR | |
|-----------------------|----------|--------------------|----------|--------------------|----------|--------------------|----------|
| Mean | 4.084211 | Mean | 102.1579 | Mean | 2.634211 | Mean | 30.66842 |
| Standard Error | 0.341588 | Standard Error | 85.38174 | Standard Error | 0.364468 | Standard Error | 0.607654 |
| Median | 3.8 | Median | 18 | Median | 2.8 | Median | 30.0 |
| Mode | 3.3 | Mode | 15.1 | Mode | 0.6 | Mode | #N/A |
| Standard Deviation | 1.488946 | Standard Deviation | 372.1704 | Standard Deviation | 1.58868 | Standard Deviation | 2.648′ |
| Sample Variance | 2.216959 | Sample Variance | 138510.8 | Sample Variance | 2.523904 | Sample Variance | 7.015614 |
| Kurtosis | 2.41178 | Kurtosis | 18.9983 | Kurtosis | -0.91575 | Kurtosis | -0.5278 |
| Skewness | 0.961193 | Skewness | 4.358621 | Skewness | 0.052024 | Skewness | 0.362 |
| Range | 6.6 | Range | 1630 | Range | 5.4 | Range | 9.1 |
| Minimum | 1.6 | Minimum | 9 | Minimum | 0.2 | Minimum | 26. |
| Maximum | 8.2 | Maximum | 1639 | Maximum | 5.6 | Maximum | 35. |
| Sum | 77.6 | Sum | 1941 | Sum | 50.05 | Sum | 582. |
| Count | 19 | Count | 19 | Count | 19 | Count | 1 |
| | | | | | | | |

CORRELATION MATRIX

| | GDP | TR | FDI | EXR |
|-----|----------|----------|----------|-----|
| GDP | 1 | | | |
| TR | 0.66925 | 1 | | |
| FDI | 0.509186 | 0.454288 | 1 | |
| EXR | -0.3771 | -0.39996 | 0.034136 | 1 |

TREND ANALYSIS



SYCHELLES

REGRESSION ANALYSIS

| SUMMARY OUTPUT | | | | | | | | | |
|-------------------------|--------------|----------|----------|----------|----------------|----------|----------|----------|--|
| Regression Statistics | | | | | | | | | |
| Multiple R | 0.509939 | | | | | | | | |
| R Square | 0.260037 | | | | | | | | |
| Adjusted R Square | 0.112045 | | | | | | | | |
| Standard Error 22.94433 | | | | | | | | | |
| Observations | 19 | | | | | | | | |
| | | | | | | | | | |
| ANOVA | | | | | | | | | |
| | df | SS | MS | F | Significance F | | | | |
| Regression | 3 | 2775.031 | 925.0105 | 1.757097 | 0.198447 | | | | |
| Residual | 15 | 7896.635 | 526.4423 | | | | | | |
| Total | 18 | 10671.67 | | | | | | | |
| | | | | | | | | | |
| | Coefficients | Standard | t Stat | P-value | Lower 95% | Upper | Lower | Upper | |
| | | Error | | | | 95% | 95.0% | 95.0% | |
| Intercept | -110.978 | 62.12413 | -1.78639 | 0.09426 | -243.392 | 21.43658 | -243.392 | 21.43658 | |
| X Variable 1 | 5.153989 | 2.531058 | 2.036298 | 0.059776 | -0.24083 | 10.54881 | -0.24083 | 10.54881 | |
| X Variable 2 | 0.007392 | 0.109595 | 0.067449 | 0.947115 | -0.2262 | 0.240988 | -0.2262 | 0.240988 | |
| X Variable 3 | -3.52436 | 1.752417 | -2.01114 | 0.062638 | -7.25954 | 0.21083 | -7.25954 | 0.21083 | |

DESCRIPTIVE STATISTICS

| GDP | | TR | | FDI | | EXR | |
|--------------------|----------|--------------------|----------|--------------------|----------|--------------------|----------|
| Mean | -1.72895 | Mean | 27.76842 | Mean | 24.57158 | Mean | 9.661579 |
| Standard Error | 5.586028 | Standard Error | 0.622298 | Standard Error | 12.12087 | Standard Error | 0.899084 |
| Median | 4.3 | Median | 27.3 | Median | 8.7 | Median | 12.1 |
| Mode | 1.2 | Mode | 27.1 | Mode | 8.2 | Mode | 13.3 |
| Standard Deviation | 24.34893 | Standard Deviation | 2.712533 | Standard Deviation | 52.83367 | Standard Deviation | 3.919018 |
| Sample Variance | 592.8704 | Sample Variance | 7.357836 | Sample Variance | 2791.396 | Sample Variance | 15.3587 |
| Kurtosis | 17.88689 | Kurtosis | -0.50488 | Kurtosis | 16.73526 | Kurtosis | -1.99038 |
| Skewness | -4.176 | Skewness | -0.31318 | Skewness | 4.021679 | Skewness | -0.22947 |
| Range | 111.4 | Range | 9.4 | Range | 234.2 | Range | 9.38 |
| Minimum | -101 | Minimum | 22.3 | Minimum | 2.8 | Minimum | 4.52 |
| Maximum | 10.4 | Maximum | 31.7 | Maximum | 237 | Maximum | 13.9 |
| Sum | -32.85 | Sum | 527.6 | Sum | 466.86 | Sum | 183.57 |
| Count | 19 | Count | 19 | Count | 19 | Count | 19 |

CORRELATION
| | GDP | TR | FDI | EXR |
|-----|----------|----------|----------|-----|
| GDP | 1 | | | |
| TR | 0.238169 | 1 | | |
| FDI | 0.017743 | 0.319286 | 1 | |
| EXR | -0.21684 | 0.601353 | 0.320174 | 1 |

TREND ANALYSIS



ESWATINI

REGRESSION ANALYSIS

| SUMMARY OUTPUT | | | | | | | | |
|-------------------|--------------|----------------|----------|----------|--------------|----------|----------|-------------|
| Regression St | atistics | | | | | | | |
| Multiple R | 0.221447 | | | | | | | |
| R Square | 0.049039 | | | | | | | |
| Adjusted R Square | -0.14115 | | | | | | | |
| Standard Error | 1.796923 | | | | | | | |
| Observations | 19 | | | | | | | |
| | | | | | | | | |
| ANOVA | | | | | | | | |
| | df | SS | MS | F | Significance | | | |
| | | | | | F | | | |
| Regression | 3 | 2.49762 | 0.83254 | 0.257838 | 0.854581 | | | |
| Residual | 15 | 48.43396 | 3.228931 | | | | | |
| Total | 18 | 50.93158 | | | | | | |
| | | | | | | | | |
| | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper | Lower | Upper 95.0% |
| | | | | | | 95% | 95.0% | |
| Intercept | 2.660462 | 2.171226 | 1.225327 | 0.239345 | -1.9674 | 7.288321 | -1.9674 | 7.288321 |
| X Variable 1 | -0.00127 | 0.00151 | -0.84076 | 0.413682 | -0.00449 | 0.001949 | -0.00449 | 0.001949 |
| X Variable 2 | -0.0238 | 0.275922 | -0.08624 | 0.932417 | -0.61191 | 0.564318 | -0.61191 | 0.564318 |
| X Variable 3 | 0.397249 | 2.061446 | 0.192704 | 0.849776 | -3.99662 | 4.791116 | -3.99662 | 4.791116 |

DESCRIPTIVE STATISTICS

| GDP | | TR | | FDI | | EXR | |
|--------------------|----------|--------------------|----------|--------------------|----------|--------------------|----------|
| Mean | 2.978947 | Mean | 77.8 | Mean | 1.8 | Mean | 1.158211 |
| Standard Error | 0.385905 | Standard Error | 64.51306 | Standard Error | 0.44551 | Standard Error | 0.059738 |
| Median | 2.3 | Median | 13 | Median | 1.7 | Median | 1.1 |
| Mode | 3.8 | Mode | 11.8 | Mode | 1.7 | Mode | 1.2 |
| Standard Deviation | 1.682121 | Standard Deviation | 281.2059 | Standard Deviation | 1.941935 | Standard Deviation | 0.260392 |
| Sample Variance | 2.829532 | Sample Variance | 79076.76 | Sample Variance | 3.771111 | Sample Variance | 0.067804 |
| Kurtosis | -1.06439 | Kurtosis | 18.9973 | Kurtosis | 0.830646 | Kurtosis | 0.323424 |
| Skewness | 0.380601 | Skewness | 4.358458 | Skewness | 0.636257 | Skewness | 1.140835 |
| Range | 5.1 | Range | 1228.5 | Range | 7.8 | Range | 0.82 |
| Minimum | 0.8 | Minimum | 10.5 | Minimum | -1.4 | Minimum | 0.88 |
| Maximum | 5.9 | Maximum | 1239 | Maximum | 6.4 | Maximum | 1.7 |
| Sum | 56.6 | Sum | 1478.2 | Sum | 34.2 | Sum | 22.006 |
| Count | 19 | Count | 19 | Count | 19 | Count | 19 |

CORRELATION MATRIX

| GDP | TR | FDI | EXR |
|----------|--|---|--|
| 1 | | | |
| -0.21583 | 1 | | |
| 0.011055 | -0.00429 | 1 | |
| 0.057429 | -0.06001 | 0.61167 | 1 |
| | GDP 1 -0.21583 0.011055 0.057429 | GDP TR 1 -0.21583 0.011055 -0.00429 0.057429 -0.06001 | GDP TR FDI 1 -0.21583 1 -0.21583 1 1 0.011055 -0.00429 1 0.057429 -0.06001 0.61167 |

TREND ANALYSIS



SOUTH AFRICA

REGRESSION ANALYSIS

SUMMARY OUTPUT

| Regression St | tatistics | | | | | | | |
|-------------------|--------------|----------------|----------|----------|----------------|--------------|----------------|----------------|
| Multiple R | 0.721594 | | | | | | | |
| R Square | 0.520698 | | | | | | | |
| Adjusted R Square | 0.424837 | | | | | | | |
| Standard Error | 1.418952 | | | | | | | |
| Observations | 19 | | | | | | | |
| ANOVA | | | | | | | | |
| | $d\!f$ | SS | MS | F | Significance F | | | |
| Regression | 3 | 32.80971 | 10.93657 | 5.431826 | 0.009899 | | | |
| Residual | 15 | 30.20136 | 2.013424 | | | | | |
| Total | 18 | 63.01107 | | | | | | |
| | Coefficients | Standard Error | t Stat | P-value | Lower 95% | Upper 95% | Lower 95.0% | Upper 95.0% |
| Intercept | 1.358851 | 5.13548 | 0.264601 | 0.794918 | -9.58716 | 12.30487 | -9.58716 | 12.30487 |
| X Variable 1 | 0.274164 | 0.218418 | 1.255228 | 0.2286 | -0.19138 | 0.739711 | -0.19138 | 0.739711 |
| X Variable 2 | -0.19377 | 0.242837 | -0.79793 | 0.437362 | -0.71136 | 0.323827 | -0.71136 | 0.323827 |
| X Variable 3 | -0.58544 | 0.149103 | -3.92637 | 0.001347 | -0.90324 | -0.26763 | -0.90324 | -0.26763 |

DESCRIPTIVE STATISTICS

| GDP | TR | | | FDI | | EXR | |
|--------------------|----------|--------------------|----------|--------------------|----------|--------------------|----------|
| Mean | 2.744737 | Mean | 25.78458 | Mean | 1.582105 | Mean | 9.184211 |
| Standard Error | 0.429235 | Standard Error | 0.411036 | Standard Error | 0.319478 | Standard Error | 0.602881 |
| Median | 2.9 | Median | 25.743 | Median | 1.17 | Median | 8.3 |
| Mode | 3.2 | Mode | #N/A | Mode | #N/A | Mode | 7.3 |
| Standard Deviation | 1.870993 | Standard Deviation | 1.791664 | Standard Deviation | 1.392574 | Standard Deviation | 2.627898 |
| Sample Variance | 3.500615 | Sample Variance | 3.21006 | Sample Variance | 1.939262 | Sample Variance | 6.905848 |
| Kurtosis | 0.153771 | Kurtosis | 0.029306 | Kurtosis | 4.677479 | Kurtosis | -0.50905 |
| Skewness | -0.3773 | Skewness | 0.340672 | Skewness | 1.928687 | Skewness | 0.891962 |
| Range | 7.2 | Range | 6.878 | Range | 5.75 | Range | 8.3 |
| Minimum | -1.6 | Minimum | 23.088 | Minimum | 0.23 | Minimum | 6.4 |
| Maximum | 5.6 | Maximum | 29.966 | Maximum | 5.98 | Maximum | 14.7 |
| Sum | 52.15 | Sum | 489.907 | Sum | 30.06 | Sum | 174.5 |
| Count | 19 | Count | 19 | Count | 19 | Count | 19 |

CORRELATION

| | GDP | TR | FDI | EXR |
|-----|----------|----------|----------|-----|
| GDP | 1 | | | |
| TR | -0.14414 | 1 | | |
| FDI | -0.06704 | -0.12361 | 1 | |
| EXR | -0.66751 | 0.516261 | -0.13333 | 1 |

TREND ANALYSIS

