

**FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH IN SADC COUNTRIES:  
A PANEL DATA ANALYSIS**

**BY**

**ONIAS MUGOWO  
(11613091)**

A dissertation submitted in fulfilment of the requirements for the award

**MASTER OF COMMERCE IN ECONOMICS (MCOM)**

in the

Department of Economics  
SCHOOL OF MANAGEMENT SCIENCES  
**UNIVERSITY OF VENDA**

SUPERVISOR: PROFESSOR A.B. GYEKYE  
CO-SUPERVISOR: DR. G. DAFULEYA

**MAY, 2017**

## DECLARATION

I, Onias Mugowo (11613091) hereby declare that this dissertation titled “Foreign Direct Investment and Economic Growth in SADC Countries: A Panel Data Analysis” and submitted to the Department of Economics, University of Venda is my own work in design and execution. It has not been submitted in any form for another degree at any university or institution of higher education. Information derived from the published or unpublished work of others has been acknowledged

Signature ..... Date.....

Onias Mugowo (11613091)

## ACKNOWLEDGEMENTS

I would like to thank God Almighty Jehovah for blessing me with this opportunity to study. Thanks are due to Professor Agyapong. B. Gyekye and Dr. Gift Dafuleya for their time and valuable contributions in supervising this research. I would like to extend my gratitude to my father, Mr. Emanuel T. Mugowo, and my mother, Mrs. Rachel Mugowo for all their support, wisdom and remarkably unconditional love, and for always believing in me. To my brothers Munya, Phillip and Onward I thank you all for being pillars of strength in my life. To all my friends, thank you for being an inspiration in my life and for making this research a success.

## DEDICATION

To my family.

## TABLE OF CONTENTS

<b>DECLARATION</b> .....	<b>ii</b>
<b>ACKNOWLEDGEMENTS</b> .....	<b>iii</b>
<b>DEDICATION</b> .....	<b>iv</b>
<b>LIST OF TABLES</b> .....	<b>ix</b>
<b>LIST OF FIGURES</b> .....	<b>x</b>
<b>LIST OF ACRONYMS AND ABBREVIATIONS</b> .....	<b>xi</b>
<b>ABSTRACT</b> .....	<b>xiii</b>
<b>CHAPTER ONE</b> .....	<b>1</b>
<b>INTRODUCTION</b> .....	<b>1</b>
1.1 Background of the Study .....	1
1.2 Problem Statement.....	3
1.3 Purpose and Objectives of the Study.....	4
1.4 Working Hypotheses .....	4
1.5 Justification of the Study.....	5
1.6 Delimitations of the Study .....	5
1.7 Organisation of the Study .....	6
<b>CHAPTER TWO</b> .....	<b>7</b>
<b>FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH IN SADC COUNTRIES</b> .....	<b>7</b>
2.0 Introduction.....	7
2.1 SADC Regional Investment Policy Initiatives to Attract FDI .....	7
2.1.1 Why Does FDI Matter for the SADC Countries? .....	9
2.2 FDI and Economic Growth Trends in SADC .....	10
2.3 Review of FDI and GDP Country-level Dynamics .....	15
2.3.1 Overview .....	15
2.3.2 Angola .....	15
2.3.2.1 <i>Economic Growth, FDI and Economic Policy Trends in Angola</i> .....	16
2.3.3 Botswana.....	17
2.3.3.1 <i>FDI Policy Trends and Economic Performance in Botswana</i> .....	18

2.3.4 Democratic Republic of the Congo .....	19
2.3.4.1 <i>Economic Context and FDI Performance in DRC</i> .....	19
2.3.5 Lesotho.....	20
2.3.5.1 <i>Economic Policies to Attract FDI and Boost Economic Growth in Lesotho</i> .....	20
2.3.6 Madagascar.....	21
2.3.6.1 <i>Economic Policies to Attract FDI and Boost Economic Growth in Madagascar</i> ....	21
2.3.7 Malawi .....	22
2.3.7.1 <i>Economic Context and FDI Performance in Malawi</i> .....	22
2.3.8 Mauritius.....	23
2.3.8.1 <i>Economic Context and FDI Performance in Mauritius</i> .....	23
2.3.9 Mozambique .....	23
2.3.9.1 <i>FDI and Economic Growth Trends in Mozambique</i> .....	24
2.3.10 Namibia .....	24
2.3.10.1 <i>FDI and Economic Growth Trends in Namibia</i> .....	25
2.3.11 Seychelles .....	25
2.3.11.1 <i>FDI and Economic Growth Trends in Seychelles</i> .....	25
2.3.12 South Africa.....	26
2.3.12.1 <i>Economic Policies to Boost FDI and Economic Growth in South Africa</i> .....	26
2.3.12.2 <i>GDP and FDI Developments in South Africa</i> .....	27
2.3.13 Swaziland .....	28
2.3.13.1 <i>FDI and Economic Growth Trends in Swaziland</i> .....	28
2.3.14 Tanzania.....	29
2.3.14.1 <i>FDI and Economic Growth Trends in Tanzania</i> .....	29
2.3.15 Zambia .....	30
2.3.15.1 <i>FDI and Economic Growth Trends in Zambia</i> .....	30
2.3.16 Zimbabwe.....	31
2.3.16.1 <i>Economic Policies to Boost FDI and Economic Growth in Zimbabwe</i> .....	31
2.4 Conclusion.....	32

<b>CHAPTER THREE .....</b>	<b>33</b>
<b>LITERATURE REVIEW.....</b>	<b>33</b>
3.0 Introduction.....	33
3.1 Theoretical Literature Review .....	33
3.1.1 Neoclassical Growth Model .....	33
3.1.2 Endogenous Growth Model .....	35
3.1.3 The Indirect Impact of FDI or FDI Spillovers .....	36
3.2 Review of Empirical Literature .....	39
3.3 Conclusion.....	44
<b>CHAPTER FOUR .....</b>	<b>45</b>
<b>RESEARCH METHODOLOGY .....</b>	<b>45</b>
4.1 Introduction.....	45
4.2 Model Specification .....	45
4.2.1 Theoretical Background of the Model .....	45
4.2.2 Empirical Model .....	46
4.3 Definition of Variables.....	47
4.3.1 Data Sources and Time Domain.....	48
4.4 Estimation Techniques .....	49
4.4.1 Panel Unit Root Test.....	50
4.4.1.1 Im, Pesaran and Shin (IPS) (2003) .....	50
4.4.1.2 Levin, Lin and Chu (LLC) (2002).....	50
4.4.2 Panel Regression Model.....	51
4.4.3 Hausman Specification Test .....	52
4.5 Conclusion.....	52
<b>CHAPTER FIVE .....</b>	<b>53</b>
<b>PRESENTATION, INTERPRETATION AND ANALYSIS OF RESULTS.....</b>	<b>53</b>
5.0 Introduction.....	53
5.1 Descriptive Analysis .....	53
5.2 Panel Unit Root Test Results and Interpretation .....	55

5.3 Empirical Results – Impact of FDI on Economic Growth in SADC Countries .....	56
5.3.1 Overall Results .....	57
5.3.2 Does growth-enhancing potential of FDI depend on the income level of the host country? .....	60
5.4 Conclusion.....	65
<b>CHAPTER SIX .....</b>	<b>66</b>
<b>SUMMARY, CONCLUSION AND POLICY RECOMMENDATIONS .....</b>	<b>66</b>
6.0 Introduction.....	66
6.1 Summary of the Main Findings .....	66
6.2 Conclusion and Policy Recommendations .....	68
6.3 Limitations of the Study and Areas of Further Research .....	69
<b>6. REFERENCES .....</b>	<b>70</b>
<b>APPENDICES .....</b>	<b>84</b>
APPENDIX A: SADC Country List .....	84
APPENDIX B: Panel Unit Root Test for Individual Variables.....	85

## LIST OF TABLES

Table 1: GDP at Market Prices, by Member States, (US\$ Million) .....	13
Table 2: FDI by Member States, (US\$ Million) .....	14
Table 3: The Impact of FDI on Economic Growth: Selected Studies .....	42
Table 4: Variables Used in this Study and their Sources .....	49
Table 5: Descriptive Statistics of Variables .....	53
Table 6: Correlation Matrix of the Variables Included in Specification Model.....	55
Table 7: Panel Unit Root Tests .....	56
Table 8: SADC Countries Panel Data Model Dependent Variable GDP growth per capita ...	57
Table 9: SADC Low and Middle-Income Countries Dependent Variable GDP per capita.....	61

## LIST OF FIGURES

Figure 1: FDI and GDP Trends in the SADC Region .....	11
Figure 2: FDI and GDP at constant prices (2005) in SADC Region.....	11
Figure 3: Share of SADC Total GDP, 2015 .....	12
Figure 4: Angola GDP and FDI .....	16
Figure 5: FDI and GDP Dynamics in South Africa (1980-2015).....	27

## LIST OF ACRONYMS AND ABBREVIATIONS

ADF	Augmented Dickey Fuller
BRICS	Brazil Russia India China South Africa
CMA	Common Monetary Area
COMESA	Common Market for East and Southern Africa
DOLS	Dynamic Ordinary Least Squares
EAC	East African Community
EBA	Extreme Bounce Analysis
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GMM	General Method of Moment
GNI	Gross National Income
HIPC	Highly Indebted Poor Countries
IMF	International Monetary Fund
IPS	Im, Perasan and Shin
$K_{DOM}$	Domestically-owned Physical Capital
LLC	Levin, Lin and Chu
M&As	Mergers and Acquisitions
MDGs	Millennium Development Goals
MNC	Multinational Corporation
OECD	Organisation for Economic Cooperation and Development
OLS	Ordinary Least Squares
OPEC	Organisation of the Petroleum Exporting Countries
RE	Random Effect Model
R&D	Research and Development
SACU	Southern African Customs Union
SADC	Southern African Development Community

TOT	Terms of Trade
UNCTAD	United Nations Conference on Trade and Development
VECM	Vector Error Correction Mechanism
WDI	World Development Indicators
WIR	World Investment Report

## ABSTRACT

The study aimed to empirically examine the impact of foreign direct investment on economic growth in the Southern African Development Community countries for the period 1980-2015. The relation between foreign direct investment and economic growth has been a subject of extensive discussion in the economic literature. The debate revolves around the growth implications of foreign direct investment. The extraordinary increase in global FDI flows in the last three decades triggered an interest to investigate the growth implications of such huge amounts of cross-border capital movements. Owing to this surge in foreign direct investment flows and the effort countries are putting forth to attract it, it would seem straightforward to argue that foreign direct investment would convey net positive effects on economic growth of a host country. From a theoretical standpoint foreign direct investment has been shown to boost economic growth through technology transfer and diffusion. In light of the expected benefits of foreign direct investment, many empirical studies have been conducted on this subject matter. While the explosion of foreign direct investment flows is distinctive, the evidence accumulated on the growth effects remains mixed. Using fixed effect panel data analysis, on the overall, the findings of the study show a negative effect of FDI on economic growth in the SADC countries for the period 1980 to 2015. The findings are not in tandem with theoretical predictions from growth theorists and some empirical studies carried out on the same topic. The findings of the study imply that FDI does not seem to have an independent effect on economic growth for the panel of countries in the SADC region. This maybe because FDI flows to Africa and into the SADC countries, in particular, are channelled mainly to the extractive sector with little to no linkages with the other sectors of the host country economy. The findings of the study also show that the growth-enhancing potential of FDI is higher in middle-income countries than low-income countries in the SADC region.

**Keywords:** *Foreign direct investment, economic growth, panel data analysis, Southern African Development Community.*

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

The relation between foreign direct investment (FDI) and economic growth has been a subject of extensive discussion in the economic literature (Wan, 2010; Jallab, et al., 2008; Dhrifi, 2015). The interest in the subject is primarily driven by the zeal to unravel the growth implications of huge amounts of cross-border capital movements that have been witnessed in recent years (Al-Iriani & Al-Shamsi, 2006). In all these discussions, scholars converge on the following framework definition of FDI: an investment made to acquire a lasting management interest (normally 10 percent of voting stock) in a business enterprise operating in a country other than that of the investor defined according to residency (World Bank, 1996; OECD, 2008). Foreign investment takes two forms: Greenfield investment or Mergers and Acquisitions (M&As). Greenfield investment can be understood to mean an injection of fresh capital for the establishment of a wholly new operation in a foreign country. M&As, on the other hand, involve the acquisition or merging with existing interest of a firm in a foreign country rather than new investment (Wan, 2010). Since M&As involve a mere transfer of ownership of an existing entity, empirical evidence shows that it would result in little change to growth. This is a major concern as large amounts of FDI transactions happening in Southern African Development Community (SADC)<sup>1</sup> refer to M&As. For instance, 60 percent of FDI transactions to South Africa are M&As (Tagg, 2001; Muradzikwa, 2002).

The prominence of globalisation and push by world economies for trade integration in the recent years have seen FDI becoming a central development contrivance for many developing countries, particularly for SADC economies (Regimana, 2012). The growing importance of FDI by multinational corporations (MNCs) as a development catalyst saw it surging to extraordinary levels in the last three decades (Wan, 2010). In 1980, global FDI flows stood at US\$50 billion, and from then increased to as high as US\$1.8 trillion in 2015. In 2015, global FDI flows stood at US\$1.8 trillion representing a 40 percent increase from the amount in the previous year. This was the highest FDI flows recorded since the onset of the global economic and financial crisis<sup>2</sup> that began in 2008 (UNCTAD, 2016). Decomposing these unprecedented

---

<sup>1</sup> SADC 15 Member States are Angola, Botswana, Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe

<sup>2</sup> The global financial crisis was triggered by the U.S. “subprime” crisis in 2007 and blew out to numerous advanced countries via a mixture of direct exposures to subprime assets, the gradual loss of confidence in a number of asset classes and the drying-up of wholesale financial markets.

FDI flows shows that FDI flows to developed economies stood at US\$962 billion and developing countries saw their FDI flows reach a new high of US\$765 billion, 9 percent higher than in 2014. Developing Asia, with FDI flows surpassing half a trillion US dollars, remained the largest FDI recipient in the world. Flows to Africa and Latin America and the Caribbean faltered (UNCTAD, 2016).

Africa faltered in attracting FDI flows compared to huge amounts received in other regions (Lederman & Xu, 2010; Sengupta & Ntembe, 2015; UNCTAD, 2016; Jenkins & Thomas, 2002). Africa registered a 7 percent decline in FDI flows 2015. The decline in FDI flows registered in the developing and transitional economies was attributed to the unrelenting decline in commodity prices, especially prices for crude oil, metals, and minerals (UNCTAD, 2016).

Inadequate financial resources and low savings rates have led the SADC countries to rely more on FDI to boost their long run development prospects and eradicate poverty in accordance with United Nation's (UN) Millennium Development Goals (MDGs). The regional bloc formulated policies and strategies aimed at attracting FDI into the region. In 1996 SADC bloc came up with Protocol on Trade with the aim to promote deepened trade and investment. Recently, the regional bloc went further to liberalise trade among the countries in the region, encourage industrialisation and encourage foreign investment by developing Protocol on Finance and Investment (SADC, 1996; SADC, 2006; Mahembe, 2014). This is also done at a country level, as they craft tailor-made FDI and investment policies that correspond to their resource endowments and maximise competitive advantage.

The SADC region received increased FDI inflows between 1980 and 2015. The recorded FDI inflows to SADC countries stood at US\$372 million in 1980 and rose to US\$17.9 billion in 2015, but remained low compared to other regions (for example, developing Asia). Some countries are more successful in attracting FDI than others, a situation attributed to the differential FDI policy attractiveness among the SADC countries (Michalowski, 2012). In 2015 alone, out of the US\$17.9 billion received in the SADC region, a bigger chunk of it went to Angola (US\$8.7 billion) and Mozambique (US\$3.7 billion) (UNCTAD, 2016). This shows that Angola and Mozambique accounted for 69 percent of FDI flows in the region in 2015, demonstrating evidence of skewness in FDI receipts in the region.

The recent rapid increases and a steady flow of FDI as highlighted above promulgates it as one of the most significant sources of international flows amongst others such as trade, foreign aid and remittances (Regimana, 2012). Its role in accelerating economic growth is well documented in the literature on growth (Grossman & Helpman, 1991; Lucas, 1988; Romer, 1986; Solow, 1956; Swan, 1956). In the neoclassical theoretical framework, FDI inflows may

potentially influence labour growth and technological progress (considered exogenous) through increases in capital, technology transfer and capital formation (Todaro & Smith, 2012; Regimana, 2012). However, the new growth theory treats technological progress as endogenous where FDI inflows through technology creation and spillover, upgrading of human capital accumulation and speedy technological progress may permanently increase growth (Grossman & Helpman, 1991). Despite these different views, both models provide a framework and an insight on the effects of FDI on economic growth (Regimana, 2012).

The extraordinary increases in global FDI flows and cross-country popularity to engrave FDI attraction among economic development plans, it would seem straightforward to argue that FDI undoubtedly exerts a positive influence on the economic growth of a host country. Therefore, early growth theorists postulated that FDI exerts a positive influence on the economic growth of a host nation (Nahidi & Badri, 2014). Empirical work carried out to establish this theoretical proposition, both at the firm level and at the national level has yielded mixed results. Carkovic & Levine (2002) carried out a study using recent econometrics methodology in which they aimed to examine the effect of FDI on economic growth and found little support that FDI has an exogenous positive effect on economic growth. The studies by (Mahembe & Odhiambo, 2015; Yabi, 2010; Azman-Saini, et al., 2010) correlate with Carkovic & Levine (2002) findings. However, the majority of the empirical studies find a positive relationship between FDI and economic growth, although, this relationship, in some cases, is subject to the 'absorptive capacity' of the host country (Borensztein, et al., 1998). Perhaps the most valuable contribution of FDI to sustainable long-run growth and development emanates from the FDI spillover potential (Farole & Winkler, 2014). In a study by Blomstrom & Kokko (2003), the findings indicated that, although FDI spillovers in the form of foreign technology transfers and managerial know-how exert a positive influence on growth, the diffusion of these spillovers depend on the local conditions in the host country. Therefore, the contribution of FDI to economic growth in host countries has long been the subject of intense debate.

## **1.2 Problem Statement**

FDI's role in the growth process of an economy has been a topical issue of discussion in many countries (Ghosh & Van den Berg, 2006; Lensink & Morrissey, 2006). These discussions have provided immense insights into the relationship between FDI and economic growth. In the developing world, FDI is considered as the most stable and largest component of capital flows (UNCTAD, 2016). Many reasons have been given highlighting the importance of FDI inflows, including employment creation, technological know-how, and enhanced competitiveness (Kobrin, 2005; Adams, 2009). In theory, FDI has been shown to boost economic growth through technology transfer and diffusion. In light of the expected benefits of FDI, many studies

have been conducted (Tiwari & Mutascu, 2011; Melnyk, et al., 2014; Yormirzoev, 2015). Most of the studies focused on the channels through which FDI may help to raise growth in recipient countries. In particular, it has been discussed as to what extent FDI may enhance technological transfer through spillover effects of knowledge and new capital goods, that is, the process of technological diffusion (Hermes & Lensink, 2003). While the explosion of FDI flows is distinctive, the evidence accumulated on the growth effects remains mixed, with some finding a positive relationship, see (Soumia & Abderrezak, 2013; Suleiman, et al., 2013) and others finding that FDI exert a negative influence on the economic growth of a host country, see (Mahembe & Odhiambo, 2015; Herve, 2016). The varying results may be due to challenges related to using cross-sectional data versus panel data, assuming homogenous characteristics of nations versus heterogeneous characteristics of nations and differences in model specifications and methodology, sample size and time period (Seetanah & Khadaroo, 2007; Regimana, 2012). So, the difficulty in proving a positive effect from FDI on economic growth provides a strong incentive for further empirical research. This research, therefore, aims to establish the impact of FDI on economic growth by extending the period of review and do so with a focused approach on the SADC economies. The new time period and recent data that this study is bringing may produce new findings.

### **1.3 Purpose and Objectives of the Study**

This study aims to empirically assess the impact of FDI on economic growth in the Southern African Development Community (SADC) economies. The study is aimed to assess the relationship between these variables for the period 1980-2015.

*In particular:*

- ❖ To examine whether FDI has a positive impact on economic growth in SADC economies
- ❖ To examine whether the growth-enhancing potential of FDI, if any, differs according to the income level in SADC economies.

### **1.4 Working Hypotheses**

The study is underpinned by the following hypotheses:

- ❖ There is a positive statistically significant relationship between FDI and economic growth in the SADC economies.
- ❖ The growth-enhancing potential of FDI differs according to the income level in SADC economies.

## **1.5 Justification of the Study**

FDI flows to the SADC countries have, on average, been on the rise (UNCTAD, 2016). In spite of the contribution to growth by FDI and the extraordinary increases in FDI flows into the SADC region, the evidence accumulated so far on the growth implications of FDI remains mixed. Further, the crafting and adoption of policies aimed at attracting as much FDI as possible, both at a national and regional level, need to be supported by extensive research. On the backdrop of the two factors mentioned above, carrying out further empirical research remains inevitable. For this reason, this study is justified in that, it aims to establish whether FDI impact positively or negatively on economic growth, with a particular focus on the Southern African Development Community economies. The study will contribute to the existing body of knowledge through the extension of the period of review by using data for the most recent periods which other studies conducted on the same topic have not covered. Moreover, investigating the impact of FDI on economic growth has important policy implications. If FDI has a positive impact on economic growth after controlling for endogeneity and other growth determinants, then this weakens arguments for restricting FDI. If, however, we find that FDI does not exert a positive impact on growth, then this would suggest a reconsideration of the rapid expansion of tax incentives, infrastructure subsidies, import duty exemptions, and other measures that countries have adopted to attract FDI. While no single study will resolve these policy issues, this study contributes to these debates.

## **1.6 Delimitations of the Study**

The study will focus on the SADC region. The dearth of FDI and economic growth literature focused on the SADC region motivated the choice of the study area. We believe this study needed a more focused treatment so as to make up for this shortfall. Moreover, SADC has seen an unprecedented increase in FDI flows in the last few years, and therefore warrant empirical research to unravel the growth implications of such huge cross-border capital movement. All the 15 members of the SADC regional bloc are included in this study. The study will include data for the 35 years period between 1980 and 2015, a period long enough to capture all the trends in both FDI flows and economic growth in all the SADC economies.

## **1.7 Organisation of the Study**

The study is organised as follows: Chapter One serves as an introduction to the study and highlights the statement of the problem, Chapter Two gives a background of the FDI flows to the SADC region and also gives economic growth trends in the regional bloc, Chapter Three presents a review of relevant studies. The review of literature provides some theoretical and empirical background of the study, Chapter Four highlights the data used for modelling and some methodological aspects related to the estimations, Chapter Five presents the empirical results and their interpretation, and Chapter Six provides a closure to the study by giving a summary, concluding remarks, policy recommendations and study limitations.

## CHAPTER TWO

### FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH IN SADC COUNTRIES

#### 2.0 Introduction

The prominence of globalisation and push by world economies for trade integration in the recent years have seen FDI becoming a central development catalyst for many developing countries, particularly for SADC economies (Regimana, 2012). FDI by its nature is less volatile and longer term source of foreign capital to supplement domestic resources. For this reason, countries have crafted ways to attract and promote it. The SADC region, possibly more than most developing regions, needs considerable externally sourced capital to address the low savings rate and foreign exchange demands. This externally sourced capital could lead to the region leaping into sustainable levels of growth away from the prevalence of poverty (Mahembe & Odhiambo, 2015; Wentworth, et al., 2015). Consequently, country governments have, therefore, realised the importance of FDI for the overall development of their countries.

#### 2.1 SADC Regional Investment Policy Initiatives to Attract FDI

The key to economic growth, sustainable development, and socio-political stability is investment. It may be domestic investment (private sector or government), FDI or even joint ventures and “smart” partnerships. All these forms of investment are good for the economy. They all provide a sound basis for which infrastructure is improved, jobs created, poverty alleviated and redistribution of activities strengthened (Muradzikwa, 2002). Domestic investment complimented by FDI are powerful development enablers. Well channelled they can create jobs, diversify national economies, develop infrastructure networks, and provide opportunities for broad-based entrepreneurship. Attracting FDI has been placed at the centre of the development integration agenda of SADC since its inception in 1980. Governments are increasingly realising the potential for FDI to achieve not only economic growth but developmental objectives as well. This has led to a trend of increasing government policy space in FDI regulation, as well as the desire to formulate better coordinated regional FDI policies (Markowitz, 2016).

SADC member states recognise that making a favourable investment climate is fundamental to broadening the horizons of their economies, creating new labour skills, developing infrastructure, and enhancing their participation in regional and global value chains (OECD, 2015). Therefore, they have begun to re-examine their FDI policies with the view to aligning them with the international trend toward sustainable FDI. Over the years, the regional bloc fashioned policies, protocols, and processes intended to boosting FDI and enhancing

economic growth. The SADC Treaty which is the founding document for SADC, sets out the main objectives of SADC regional bloc which are; to achieve development and economic growth, alleviate poverty, enhance the standard and quality of life of the peoples of Southern Africa and support the socially disadvantaged through regional integration (SADC, 1992; Mahembe, 2014). The SADC Trade Protocol sought to extend market boundaries by further liberalising intra-regional trade. These have various consequences for individual member states with respect to investment, industrialisation, trade and economic growth (Muradzikwa, 2002).

In 2006, SADC passed Finance and Investment Protocol (FIP), a regional investment legal framework aimed at expediting the SADC integration process through creating a conducive environment for investment in the region and thus boost foreign, intraregional and domestic investment flows. The protocol focuses on investment, finance and macroeconomic policy implications of regional economic integration and supplement initiatives to promote intra-regional trade. It further aims to accelerate economic growth, foster sustainable development and reduce poverty throughout the SADC region (Mahembe, 2014). Operationalising this protocol potentially increased the attractiveness of SADC as an FDI destination. This is because investors had access to a wider range of skills and resources as well as the potential to form regional value chains since policies and regulations are coordinated throughout the region (Markowitz, 2016).

Since FIP came into force in April 2010, the increased coordination of investment policies has been placed at the centre of the regional integration agenda. To fulfil the underlying goal of SADC FIP, one of the action tasks identified under the SADC Regional Action Programme on Investment (RAPI) has been to develop a regional guidance, based on country experiences and international good practices. This led to the formulation of the SADC Investment Policy Framework (IPF) in 2015, with the overarching goal of facilitating coordinated improvement of investment policy framework across Member states in support of the developmental integration agenda. The SADC IPF provides a reference point for policy-makers to achieve greater convergence of the investment policies across the region (Markowitz, 2016).

There are still disparities in the region's investment policy frameworks but all countries have made efforts to reform over the last five to ten years. Reforms have resulted in the removal of obstacles to FDI so that foreign investors can now participate in most sectors of national economies. The standards of treatment of FDI have been improved, with the principle of non-discrimination recognised across the region. If exceptions exist, they are primarily motivated by the aim of increasing local participation in investment projects and to provide special support to local enterprises. To further attract FDI, all SADC member states have set up

investment promotion agencies, even though their performance varies from one country to another; signed bilateral investment treaties (BITs), offered generous tax incentives to mention but a few (Markowitz, 2016).

Despite reforms, the response to investment policy changes has been mixed. Although inward FDI to the region has been marked by a steady increase over the past decade, total world FDI has grown faster, with other emerging markets attracting higher levels. Poor FDI performance in the region can be attributed to the bad image that most African countries have acquired over the years due to civil wars, political instability, poor economic performance, poverty, diseases etc. (Gechamo, 2012). The protracted civil war in Angola that took 27 years of armed conflict, rebel groups in Mozambique and the Democratic Republic of Congo, political instability in Zimbabwe, violent strikes in South Africa are a few mentions that contributed to low FDI flows to Southern Africa in the past ten to fifteen years. There is also a wide disparity among SADC countries in attracting and retaining FDI, including across national sectors. In addition, few countries have succeeded to attract significant amounts of investment beyond the extractive sector. This suggests that the investment regime could still be inadequate or lack consistency. One major concern is that quite a substantial amounts of the FDI activities taking place in SADC refer to M&As: 60 percent of South Africa's FDI inflows are M&As (Tagg, 2001; Muradzikwa, 2002). All the above mentioned issues raise concern, especially for investment projects that span several national jurisdictions, for instance in infrastructure. Addressing these challenges is essential to put the SADC region on a sustainable and inclusive growth path (Markowitz, 2016).

### **2.1.1 Why Does FDI Matter for the SADC Countries?**

There is no doubt that investment is a major ingredient to economic growth. However, what is yet to be established is whether FDI is by its nature more important than alternative types of investment, with specific mention of domestic investment. Rodrik (2003) states that "one dollar of FDI is worth no more (and no less) a dollar of any kind of investment" (cited in Farole and Winkler 2014, 9). One major question that has been asked is why countries put so much effort to attract FDI? As seen in section 2.1 above, the SADC region has written policies, protocols etc. to attract FDI in the region. According to Farole and Winkler (2014), one simple answer is that, for many developing countries, domestic capital accumulation remains too low to stimulate sufficient growth. In this case, FDI represents an important source of private capital; and given the relatively long term outlook of direct investors (as compared to portfolio investors), FDI is considered a less risky source of capital as it tends to be less vulnerable to rapid outflows in response to exogenous economic shocks.

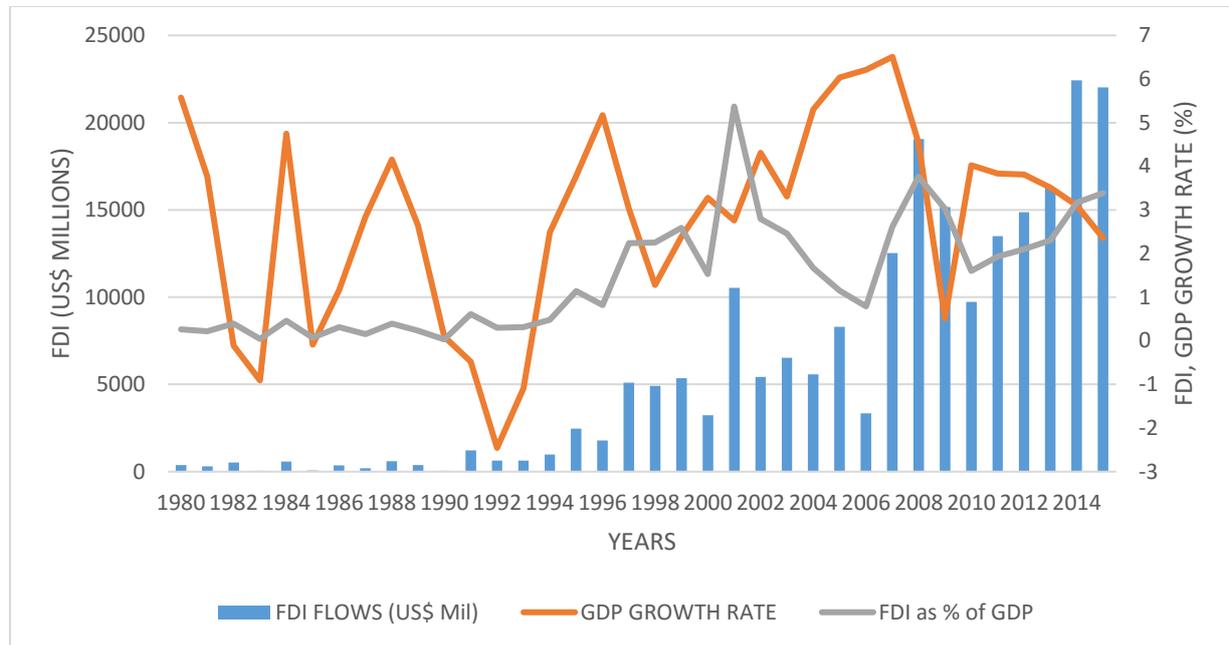
The most important reason to attract FDI is its potential to deliver substantially greater dynamic benefits to host economies through the spillovers that they deliver. In the context of FDI, spillovers generally refer to the diffusion of knowledge – unintentional or otherwise – from MNCs affiliates to domestic firms. This is because MNCs firms are seen to enjoy technological and other advantages that result in higher levels of productivity (Hoekman & Javorcik, 2006). Spillovers, therefore, comprises both technology and all forms of codified and tacit knowledge related to production, including management and organisational practices. It also includes the benefits that can accrue to local actors from linking into the global networks of multinational investors. Knowledge spillovers can diffuse from foreign firms to local producers within the same industry (intra-industry or horizontal spillovers) or to another industry (inter-industry or vertical spillovers). In the latter case, they can affect local input or services suppliers in the upstream sectors (backwards spillovers) and local customers in the downstream sectors (forward spillovers) (Farole & Winkler, 2014).

## **2.2 FDI and Economic Growth Trends in SADC**

Global FDI flows grew from US\$50 billion in 1980 to US\$1.8 trillion in 2015. In 2015 alone, global flows of FDI rose by 40 percent to US\$1.8 trillion, the highest since the global economic and financial crisis began in 2008 (UNCTAD, 2016). Somehow, Africa has, on average, been unsuccessful in attracting FDI in spite of very large increases in global FDI flows (Lederman & Xu, 2010; Sengupta & Ntembe, 2015; UNCTAD, 2016; Jenkins & Thomas, 2002). FDI flows to Africa fell to US\$54 billion in 2015, registering a 7 percent decline in the previous year's FDI flows. The primary catalyst to the decline in FDI flows in developing and transitional economies were the continued decline in the commodity prices, especially for crude oil and metals and minerals (UNCTAD, 2016).

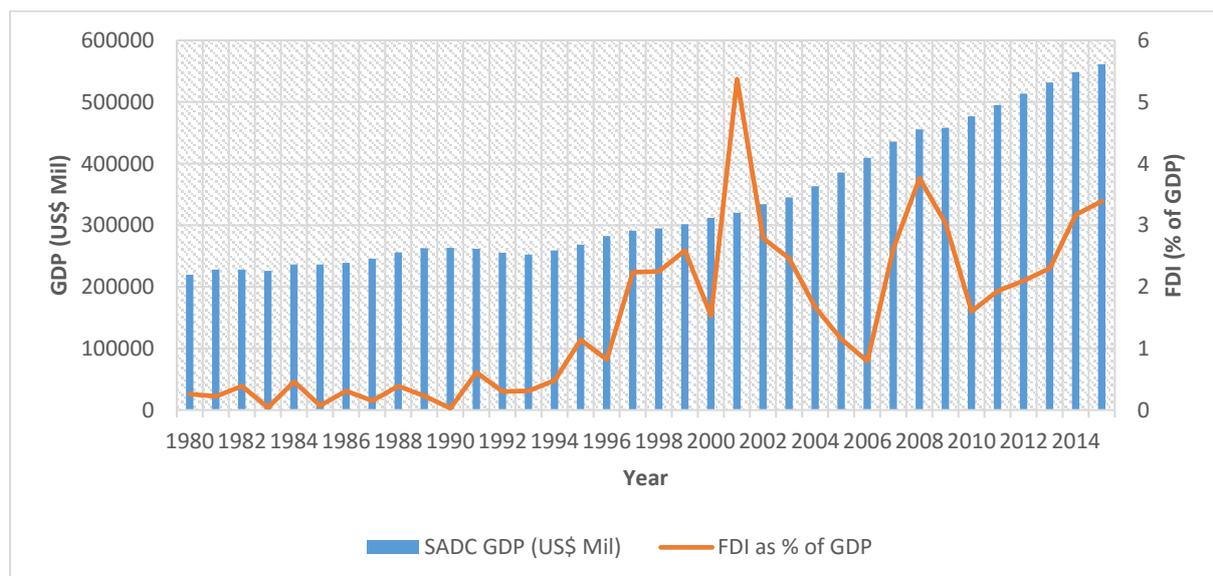
SADC countries, owing to inadequate resources to finance long-term development and poor saving rate, have been looking at FDI to boost economic growth. FDI flows to the SADC countries have, on average, been on the rise from a mere US\$372 million in 1980 to US\$17.9 billion in 2015 as shown in figure 1 below. FDI flows into the SADC region and GDP growth rate followed an almost similar trend since 1980, figure 1 below shows that in 1980 FDI as a percent of GDP was 0.26% with 5.57% as the registered GDP growth rate for the same year. FDI picked up the pace in the 2000s and so did the GDP growth rate, registering a staggering 7.36% growth rate in 2007. In 2015, FDI as a percent of GDP was 3.34% and the registered GDP growth rate in the same year was 2.35%. The slowdown in the GDP growth for the SADC region may be attributed to the slowdown in commodity prices witnessed in the recent years on the world commodity markets. The SADC economy is highly dependent on natural

resources with mining and agriculture constituting a substantial segment of economic activity (UNESCO, 2015). FDI mainly goes in the resource sectors of these economies.



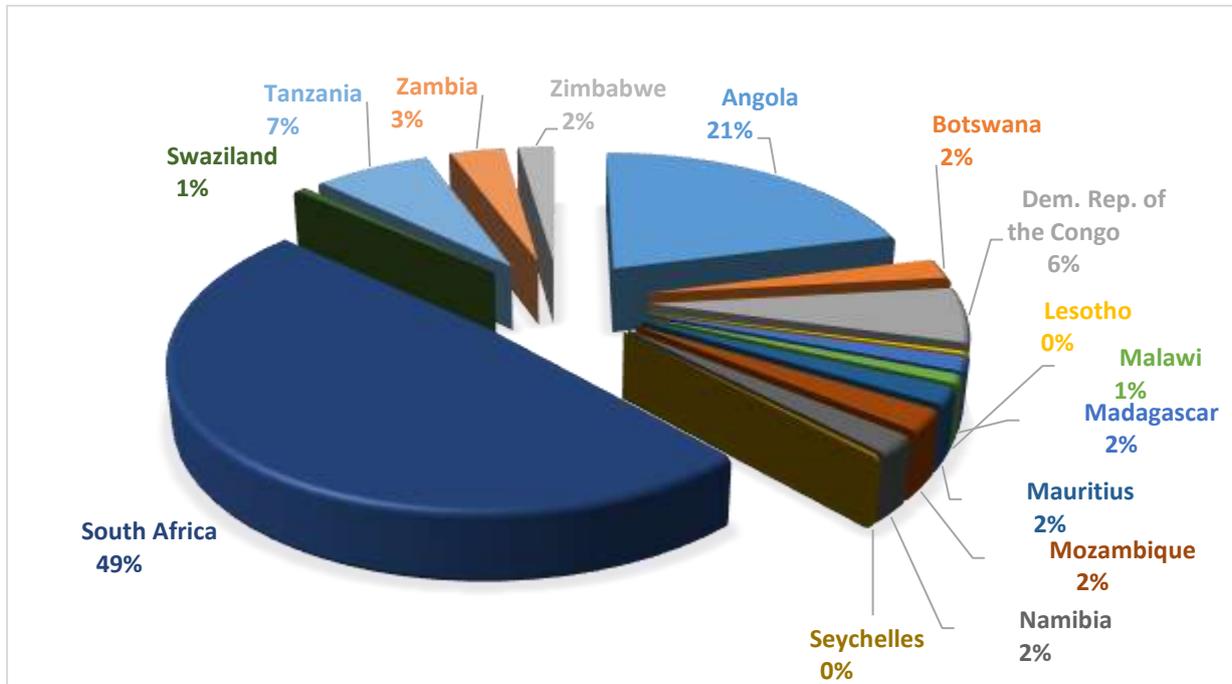
**Figure 1: FDI and GDP Trends in the SADC Region**  
Source: UNCTAD, 2016

Figure 2 shows GDP in US\$ millions for the SADC region since 1980 to 2015. The SADC economy was at US\$220 billion in 1980. The real GDP grew at an average of 2.82% since 1980 to reach an estimated US\$561 billion in 2015. FDI as a percent of GDP started slow and picked up pace, with the highest recorded in 2001 at 5.32%.



**Figure 2: FDI and GDP at constant prices (2005) in SADC Region**  
Source: UNCTAD, 2016

South Africa holds the biggest chunk of the SADC GDP amounting to 49% in 2015. The second biggest economy in the SADC region is Angola, holding 21% stake of the 2015 SADC GDP. The smallest countries measured by the size of GDP are Lesotho and Seychelles holding 0.003% and 0.002% stake respectively. For all the member states, their share of SADC total GDP in 2015 are shown in figure 3 below.



**Figure 3: Share of SADC Total GDP, 2015**

Source: UNCTAD, 2015

Table 1 below summarises GDP for the 15 member states at market prices in US\$ millions with averages recorded for the periods 1980 to 1989, 1990 to 1999 and 2000 to 2004. Detailed GDP in US\$ millions for the SADC member states is given in table 1 below, for the last decade from 2005 to 2015. From the GDP figures given in table 1, South Africa is the biggest economy in SADC, followed by Angola and DRC – all these nations are resource rich. Angola is endowed with oil and gas, South Africa gold and platinum, while DRC boasts diamonds, gold to mentions but a few. With the exception of South Africa with an economy that is a little diversified, the rest of the SADC member states rely more on agriculture and mining commodities. Manufacturing is minimal in these countries. The target sectors of MNCs is mainly mining and much less FDI goes into manufacturing.

**Table 1: GDP at Market Prices, by Member States, (US\$ Million)**

SADC MEMBER STATES	YEAR													
	1980-1989 (Average)	1990-1999 (Average)	2000-2004 (Average)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Angola	8 543	11 821	16 161	36 971	52 381	65 266	88 539	73 189	83 369	111 043	125 514	138 442	147 750	136 359
Botswana	1 288	4 487	6 637	9 919	10 138	10 938	10 945	10 267	12 787	15 771	14 792	14 979	15 813	14 399
DRC	10 842	11 434	8 906	11 968	14 489	16 366	19 143	16 004	21 564	25 842	29 320	32 677	35 910	38 915
Lesotho	348	748	867	1 360	1 423	1 596	1 623	1 726	2 188	2 510	2 387	2 149	2 174	1 860
Madagascar	2 841	3 325	4 528	5 039	5 508	7 343	9 413	8 544	8 730	9 893	9 920	10 605	10 674	9 711
Malawi	2 276	3 080	3 286	3 657	3 998	4 433	5 322	6 185	6 959	8 005	5 721	5 150	5 990	6 110
Mauritius	1 438	3 698	5 302	6 488	6 852	7 788	9 635	8 840	9 716	11 261	11 446	11 925	12 631	11 554
Mozambique	5 004	3 457	5 448	7 724	8 312	9 469	11 555	11 243	10 455	13 135	15 344	16 123	17 449	14 715
Namibia	2 145	3 567	4 470	6 862	7 689	8 553	8 346	8 954	10 911	12 602	13 032	12 759	11 881	12 593
Seychelles	236	595	803	919	1 017	1 033	969	849	970	1 075	1 129	1 444	1 559	1 557
South Africa	82 100	137 816	155 440	257 671	271 811	299 033	287 100	297 217	375 298	417 056	397 871	366 251	350 227	314 979
Swaziland	767	1 678	1 994	3 087	3 167	3 360	3 225	3 607	4 524	4 960	4 874	4 613	4 548	4 015
Tanzania	9 315	8 882	14 614	17 024	18 610	21 715	27 389	28 574	31 408	33 879	39 088	44 385	48 057	46 265
Zambia	3 420	3 605	4 602	8 332	12 758	14 062	17 896	15 300	20 265	23 712	24 965	26 839	26 976	21 921
Zimbabwe	8 648	9 929	7 056	7 843	7 012	6 962	6 451	8 157	9 457	10 956	12 472	13 490	14 197	14 419
			<b>Total SADC GDP</b>	<b>384 863</b>	<b>425 165</b>	<b>477 919</b>	<b>507 551</b>	<b>498 657</b>	<b>608 601</b>	<b>701 700</b>	<b>707 875</b>	<b>701 831</b>	<b>705 835</b>	<b>649 379</b>

Source: SADC Statistics, 2014; UNCTAD, 2016

**Table 2: FDI by Member States, (US\$ Million)**

The SADC MEMBERS STATES	YEAR													
	1980-1989 (average)	1990-1999 (Average)	2000-2004 (Average)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>Angola</b>	133.575	573.9381	2108.361	-1303.84	-37.7149	-893.342	1678.971	2205.298	-3227.21	-3023.77	-6897.95	-7120.02	1921.7	8680.94
<b>Botswana</b>	62.67	15.83034	260.8651	421.3812	486.39	494.6816	520.9178	208.6993	218.38	1371.086	487.1712	398.4573	515.1847	393.5764
<b>DRC</b>	-3.875	3.315	236.8597	266.6	256.1189	1808.033	1726.843	663.8029	2939.27	1686.9	3312.143	2098.249	1843.173	1673.5
<b>Lesotho</b>	6.586368	23.15438	37.97092	70.3145	58.2336	104.34	194.031	92	51	149	138	123	162	169
<b>Madagascar</b>	4.366	176.493	85.55292	86.01968	294.5128	773.2959	1169.36	1066.058	808.1533	809.7802	812.494	567.0825	350.6526	517.4552
<b>Malawi</b>	7.085	12.74038	54.29168	139.696	35.56105	124.3889	195.4242	49.13117	97.00971	128.8113	129.4927	119.5054	130.0341	142.5
<b>Mauritius</b>	10.219	28.22816	71.29378	41.56468	105.3043	339.0529	382.9149	247.8426	429.958	433.3589	589.0183	293.3417	418.4301	208.2901
<b>Mozambique</b>	2.214	92.25	310.9227	107.853	112.6007	398.6556	591.5992	898.2849	1017.916	3558.544	5629.41	6175.125	4901.79	3710.783
<b>Namibia</b>	4.64	88.39111	221.5075	385.2411	386.5757	733.0249	720.2665	506.0794	793.0186	1119.794	1133.378	800.5129	431.7791	1077.779
<b>Seychelles</b>	13.937	30.95213	46.53144	85.8796	145.586	181.628	182.105	171.401	210.816	207.356	261.36	170.25	229.96	194.546
<b>South Africa</b>	14.16	850.2999	2154.422	6646.927	311.4501	6538.062	9209.172	7502.062	3635.596	4242.866	4558.847	8300.104	5770.638	1772.41
<b>Swaziland</b>	28.19987	63.63624	47.2214	-45.8539	121.0358	37.49986	105.7229	65.69763	135.6605	93.20863	89.72018	29.4457	-32.3514	-120.92
<b>Tanzania</b>	5.006	120.713	355.12	935.5206	403.039	581.5118	1383.25	952.61	1813.25	1229.38	1799.6	2087.3	2049.3	1531.5
<b>Zambia</b>	51.646	139.162	255.136	356.94	615.79	1238.7	938.8	425.601	633.9	1110	2433.4	1809.8	3194.78	1653
<b>Zimbabwe</b>	8.02	95	13.08	102.8	40	68.9	51.6	105	165.9	387	399.5	400	544.8	421
			<b>Total SADC FDI</b>	8297.043	3334.483	12528.43	19050.98	15159.57	9722.618	13503.32	14875.58	16252.15	22431.87	22025.36

Source: SADC Statistics, 2014; UNCTAD, 2016

FDI flows to individual member states are shown in table 2 above. Looking closely on the table, it is evident that the FDI flows are spread unevenly across the region showing a high degree of concentration in a few countries, a situation attributed to the differential FDI policy attractiveness among the SADC countries (Michalowski, 2012). The other factors that have led to differential receipts of FDI among SADC member states are that the market size, political stability, infrastructure quality, natural resource endowments differ among member states. These are also the factors that affect cross-border capital movements the world over, so the SADC region is therefore not immune to them. As discussed in sections above, it is also at the disposal of a country to craft policies to attract the FDI at a country level – countries like Mozambique and Angola have done that in recent years and have managed to surpass the once dominant recipient of FDI in the SADC region, South Africa, as the biggest recipients of FDI. In 2015 alone, out of the US\$17.9 billion received in the SADC region, a bigger chunk of it went to Angola (US\$8.7 billion) and Mozambique (US\$3.7 billion) (UNCTAD, 2016). This shows that Angola and Mozambique accounted for 69 percent of FDI flows in the region in 2015, evidence of skewness in FDI receipts in the region.

## **2.3 Review of FDI and GDP Country-level Dynamics**

### **2.3.1 Overview**

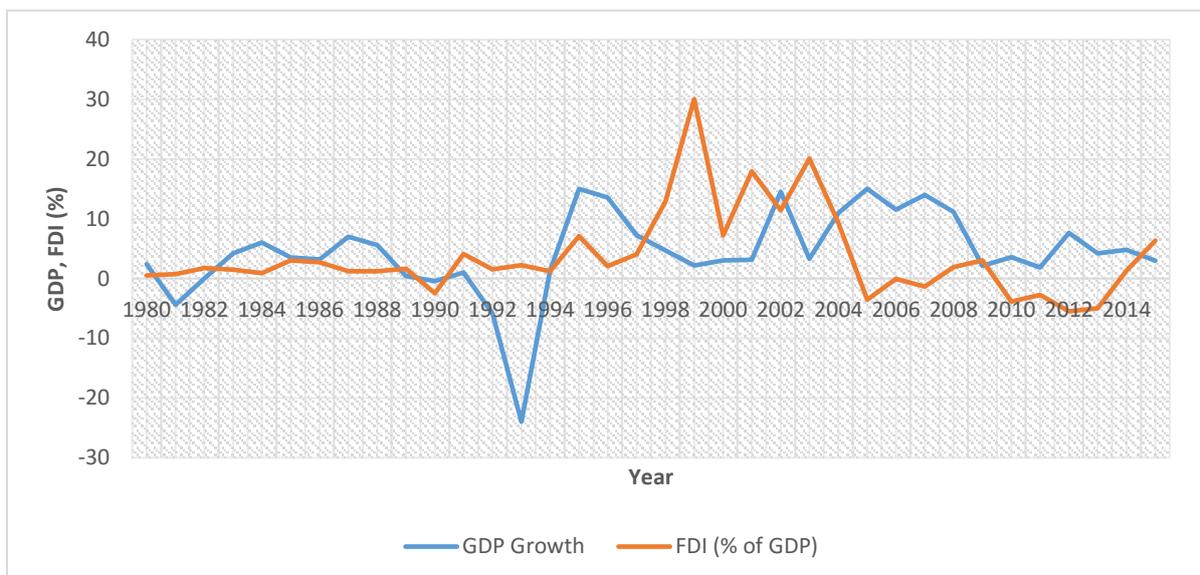
This section reviews the country-level FDI and GDP dynamics among the SADC member states. It also explores the various socio-economic policies and exposes the likely reasons why countries differ in terms of FDI receipts, investment and economic growth.

### **2.3.2 Angola**

Angola is a major oil producing country on the African continent, second only to Nigeria. A country that has been rocked by a 27-year protracted civil war in the post-independence era that only ended in the immediate past decade, 2002. However, Angola has managed to maintain political stability after the end of the civil war and has become a popular FDI destination. It is a member of the Organisation of the Petroleum Exporting Countries (OPEC). While oil is its major export, diamonds also constitute a substantial stake of the Angolan exports. The country is the second-largest economy in the SADC region after South Africa. The World Bank ranks the Angola as a middle-income country (MIC) (World Bank, 2016; AfDB, 2011).

### 2.3.2.1 Economic Growth, FDI and Economic Policy Trends in Angola

Angola is one of the world's fastest growing economies. Much of the Angola's GDP comes from the oil and gas sector, responsible for 58.9% of GDP and absorbing a large portion of FDI (AfDB, 2011). FDI into Angola took off in the late 1990s and remained high throughout the 2000s (see figure 4 below). The combined effect of political stability, prudent monetary policy and the opening up of new markets were among the key drivers for the boom. As a result of the improved FDI inflows and revenues from oil production and oil-backed loans, the Angolan economy boomed. Real GDP grew by a staggering 16.7% between 2004 and 2008 (Mouzinho, 2016). However, according to the World Bank (2016), the Angolan economy has shown signs of slowing down. GDP grew by 2.8% in 2015, down from 4.8% in 2014, mostly attributed to the decline in oil prices. The fall in the international crude oil price has had a considerable effect on the budget balances. Non-oil sectors of the Angolan economy also slowed down in 2015 on account of delays in the execution of major electricity and industrial investments.



**Figure 4: Angola GDP and FDI**

Source: UNCTAD, 2016

Following the political stability in the aftermath to the civil war, Angola became a very popular destination for FDI in the SADC region. More countries such as France and China reinforced bilateral ties with SADC's second largest economic powerhouse with exceptional economic potential. According to Cisse (2015), China imports oil from Angola and extended loans amounting to US\$15 billion since 2004 and the loans are secured by Angolan oil reserves. In 2015 alone Angola received a substantial US\$8.7 billion FDI, constituting 49% of the total FDI inflow to the SADC region in 2015.

From an economic policy perspective, the Angolan government's broad economic and development strategy is aimed at stimulating and accelerating economic growth and competitiveness through diversification and poverty reduction (AfDB, 2011). Angola is now making an effort to diversify its economy away from oil production by attracting FDI in other sectors of the economy. It is very important for the regulatory environment to be conducive to provide the necessary guarantees and protections foreign investors need to venture outside of mining. Private investment has historically been regulated by domestic legislation based largely on an inherited Portuguese commercial code law system (Mouzinho, 2016).

The Angolan government pursued a number of economic and legislative reforms aimed at improving the domestic investment climate. They overhauled the outdated legislative framework for private sector activity by enacting Law no. 11/03 of May 2003, the first private investment law. This new law prioritised non-discriminatory treatment of both domestic and foreign investors, which is at the centre of modern Angolan private investment regulation. The government also established the National Private Investment Agency (ANIP) responsible for implementing, promoting and executing the national private investment policy, thus streamlining the bureaucratic practices associated with investing in Angola (Mouzinho, 2016)., The Angolan government passed Law No. 20/11 in 2011 and Law No.14/15 in 2015. The second private law was aimed at triggering change in the types of investments and investors attracted to the Angolan market and the third private law sought to de-bureaucratise processes for approval of investments and adapt the fiscal and customs incentive and benefits system to the country's economy, making it more attractive to national and foreign investors (*Ibid*).

At a regional level, the Angolan government has shown commitment to the SADC political and military agenda of the region. However, Angola has rather shown no commitment to the regional economic agenda, as evidenced by its disinclination to enter the SADC Free Trade Area in spite of having endorsed the SADC protocol on Trade in 2003. This implies that Angola has crafted its investment policy outside of the SADC Financial and Trade Protocol (FTP). The government of Angola has stressed that further integration may hurt (especially from South Africa's competitive advantage) the Angolan industries which are still in infancy (Mouzinho, 2016).

### **2.3.3 Botswana**

Botswana is a small non-coastal country located in Southern Africa. The country once classified among the poorest in the World, with per capita income of less than US\$100, managed to reform and leaped on a long run growth trajectory, which saw it reaching the upper middle-income country rank with per capita income of US\$15839 in 2015 according to

the World Bank rankings (World Bank, 2015c). Botswana is now regarded as one of Africa's success stories because of its impressive economic transformation.

### **2.3.3.1 FDI Policy Trends and Economic Performance in Botswana**

Since attaining independence in 1966, Botswana's economic growth averaged 9 percent per annum mainly driven by diamond exports (AfDB, 2017). However, the outstanding economic growth performance was brought to test by the 2008/9 global financial crisis but rebounded strongly thereafter to GDP growth rates of 7 and 5.1 percent in 2010 and 2011 respectively. The country's successful achievement of robust economic growth is attributable to sound macroeconomic economic policies and profound use of revenue from diamond proceeds. Botswana's GDP at market prices stood at US\$14.3 billion in 2015, according to the UNCTAD (2016).

The discovery of diamonds just a year after independence saw the establishment of joint ventures between the Government of Botswana and foreign conglomerates. Therefore, investment policy design gave much attention on attracting FDI into the newly discovered diamond mining industry. For this reason, Botswana's mining sector is the biggest source of FDI, export revenues and GDP growth. Investment policy design and implementation continued to evolve. In 2001/2, Botswana crafted a Foreign Investment Code which was envisioned to deliver the uniform body of rules on investment. However, the code, on further review was found to be restrictive to investment and was dropped forthwith. Since then, Botswana has been striving to keep a more open investment regime and to attract FDI outside of the diamond industry (OECD, 2013).

FDI gradually rose from a meagre US\$ 20 million in the 1980s and peaked at US\$ 968 million in 2009. Data from Botswana Investment and Trade Centre (BITC) indicates a 16 percent increase in FDI in 2015 alone (BITC, 2015). Although much FDI is mainly channelled into the mining sector, the services industry has also witnessed FDI boom lately, especially in banking and insurance. According to the OECD (2013), Botswana is ranked as the sixth most attractive FDI destination, without taking into consideration the oil-producing countries. The countries investment attractiveness emanate from its low corruption levels, good economic governance, liberal tax system and stable democracy, together with favourable reviews from international rating agencies (Banco Santander, 2016). This is also confirmed by an empirical study carried out by Gutu, et al. (2017).

### **2.3.4 Democratic Republic of the Congo**

Democratic Republic of the Congo (DRC) is located in the Sub-Saharan African region with vast mineral resources. The World Bank ranks DRC as a low-income country and IMF categorises it as among the Highly Indebted Poor Countries (HIPC). DRC development and growth have been stalled because of continual armed conflicts and political instability that dates back to the 1990s (AfDB, 2013).

#### **2.3.4.1 Economic Context and FDI Performance in DRC**

Starting from early 2000, the DRC government began to implement sound macroeconomic policies to lay out a conducive environment for growth to take place. These macroeconomic reforms included exchange rate liberalisation, allowing flexible petroleum prices, robust monetary and fiscal policies. Economic growth responded positively to the reforms and GDP averaged US\$8 billion between 2000 and 2004 (SADC Statistics, 2014). However, DRC's economy was not spared during the global financial crisis resulting in GDP growth rate decelerating to 2.8 percent in 2009. Economic growth rate averaged 7.7 percent between 2010 and 2014, and 8.8 percent in 2015, well above the average in Sub-Saharan Africa (BEBA, 2016).

FDI in DRC is mainly channelled in the mining sector. Mining now represents an estimated 60-80 percent of FDI stock. DRC's growth prospects were hampered by economic and political instability. This highly discouraged FDI, but due to the recent stability and peace, FDI increased more than six-fold for the period 2005-2010, totalling more than US\$7 billion over this time (Oxford Policy Management, 2013). However, FDI flow to DRC fell to US\$5.8 billion in 2014 corresponding to the fall in commodity prices on the international market (National Agency for the Promotion of Investment, 2016).

However, poor infrastructure: road, buildings and rail, and unfavourable business environment: due to continued insecurity in the eastern side of the country, still stand in the way of foreign investment attraction beyond the mining sector. The World Bank projects that the country needs around US\$5.3 billion to restore and build new infrastructure (Foster & Benitez, 2011). The country still needs reforms in the area of intellectual property rights protection and reduce bureaucratic delays in administration and execution of investment contracts.

### 2.3.5 Lesotho

The World Bank ranks Lesotho as a lower middle-income country. Lesotho's economy is agro-based and is also anchored on livestock production, mining, and manufacturing (World Bank, 2017a). The country is encircled and economically dependent on South Africa. About 90 percent of Lesotho's imports come from South Africa and 65 percent of its exports go there (Hassan & Ojo, 2002).

#### ***2.3.5.1 Economic Policies to Attract FDI and Boost Economic Growth in Lesotho***

Lesotho's membership to the Common Monetary Area (CMA) has left it with limited room to manoeuvre on the macroeconomic policy front. Under the CMA, currencies are pegged at parity with the South African rand. This means the country does not enjoy monetary policy autonomy and its external competitiveness depends on the performance of the Rand. Although, on one hand the country enjoys credible monetary policy, on the other hand, suffers from currency volatility and international shocks since policy decisions the South Africa Reserve Bank (SARB) makes about the interest rate and the value of the Rand have immediate consequences on the smaller CMA countries, Lesotho included (IMF, 2012).

Lesotho's GDP growth rate immensely fluctuated during the study period. The country's economy grew at a steady rate from a negative growth rate of 2.7 percent in 1980 to a peak of 9 percent in 1988 (the year that marked the beginning of IMF stabilisation programme). From 1988, GDP growth rate averaged 3.9 percent in the aftermath of the global financial crisis of 2008/9, GDP growth rate between 2012 and 2013 averaged 4.7 percent. It, however, decelerated to 3.6 and 1.7 percent in 2014 and 2015 respectively (Lesotho Review, 2015; World Bank, 2015).

In the period between 1980 and 1988, Lesotho's FDI inflows hardly exceeded US\$4 million. The introduction of the IMF stabilisation programme in 1988 led to an increase in FDI flows reaching US\$21 million, and in 1994 reached an all-time high of US\$43 million (UNCTAD, 2003). The developments in construction and trade preferences are boosting FDI in Lesotho.

However, there is still a myriad of challenges that are hindering the country's foreign investment attractiveness and economic growth. According to the World Bank (2017), the high wage bill is stifling the fiscal space for the government, leaving them with little room to manoeuvre. Although Lesotho is commended for making progress in making reforms in the area of business and property registration, and operationalising a credit bureau, the country ranks low on key Doing Business Indicators such as dealing with construction permits,

accessing finance, and the cost of capital (*ibid*). Poor quality infrastructure and the recent political instability are also factors hindering foreign investors.

### **2.3.6 Madagascar**

Madagascar's growth prospects were very high in the 1960s. However, persistent crises led to the economic slowdown. The GDP growth rate averaged 0.5 percent during the period 1960 to 1990. The World Bank ranks Madagascar as a low-income country and it also falls under the IMF's HIPC category. Traditionally, the driver of growth in Madagascar has been an accumulation of capital rather than innovation/technology gains. This means that foreign investment matters more for Madagascar's economy to grow. The economy grows when investment flows increases and vice versa. This is corroborated by the high and positive correlation between (public and private) investment and GDP growth rates in Madagascar over the past two decades (World Bank, 2010).

#### **2.3.6.1 Economic Policies to Attract FDI and Boost Economic Growth in Madagascar**

On the macroeconomic policy front, Madagascar Action Plan (MAP), a five-year development strategy anchors enumerable policies by setting priorities, strategies, goals, and benchmarks (Government of Madagascar, 2006). Madagascar's annual economy growth rate averaged 0.46 percent in the 1980s. The country's economy experienced some sharp decline in economic growth in the review period, first in 1982 (-8.7%), 1991 (-6.3%) and reached an all-time low of -12.6 percent in 2002 which is attributed to the political crisis in that year (AfDB, 2012a).

FDI flows to Madagascar during the period under review was fairly negligible, averaging US\$9 million per annum in the 1980s and 1990s. FDI reached an all-time high of US\$1.2 billion in 2008 but declined to US\$907 million in 2011. FDI as a percentage of GDP was 12.4 percent between 2008 and 2009 compared to the average 0.7 percent recorded in the period between 1980 and 2005.

The political turmoil during the period under review posed the greatest challenge to FDI attraction and growth of the economy. The country also suffers from adverse weather conditions due to its island location. The country is, however, commended for the reforms in the area of ownership of investment. The country allows full ownership of land and most of its sectors are open to 100 percent foreign ownership, without any restrictions on payments or transfers.

### **2.3.7 Malawi**

Malawi is ranked as a low-income country by the World Bank and is also categorised under the IMF's HIPC. The country's economic growth is mainly driven by the agriculture sector. The country exports tobacco, tea, coffee, and sugar. The agricultural sector was estimated to contribute about 28 percent to the country's GDP in 2011 compared to the services sector contribution of 33 percent. The manufacturing and mining sectors are relatively small contributing 10 and 2 percent to the country's GDP respectively

#### **2.3.7.1 Economic Context and FDI Performance in Malawi**

Since 1980, the Government of Malawi implemented macroeconomic policies that were aimed to liberalise, restructure and privatise the economy. The reforms that were implemented to lure FDI in Malawi included signing bilateral trade agreements, allowing foreign investors into the manufacturing sector, reduction of tariffs and non-tariff barriers to trade and privatisation of State-owned enterprises. The Malawian macroeconomic policy framework is anchored on a number of development strategies; Malawi Growth and Development Strategy (MDGS), Malawi Vision 2020 and Malawi Poverty Reduction Strategy (MPRS).

Despite implementing several of these reforms, very little improvement to the overall economy was realised. The Malawian GDP growth rate has been erratic, negative growth of -10.8 percent was recorded in 1981 and then averaged 3.31 percent till the early 2000s. The economic slumps are attributed to price instability, volatile exchange rate, weak and unreliable public service, this led to a slump in manufacturing activities and increased investments in low-risk assets such as Treasury Bills. However, the MDGS policy framework is commended to have achieved more than expected growth rate of 7.5 percent during its implementation (Government of Malawi, 2012).

Malawi is open to FDI and foreign investors are generally treated the same with national when it comes to investing. In the early 1980s, FDI flows to Malawi has been generally low, averaging US\$4.7 million per annum between 1980 and 1993. The country received an average of US\$64 million between 1999 and 2011. According to Malawian Investment and Trade Centre (2013), in 2012, Malawi attracted US\$1.2 billion worth of FDI constituting 22 percent of the total FDI flows to SADC region.

However, the country's unattractiveness to foreign investment emanates from landlocked geographical location, poor and inadequate infrastructure, inefficient public institutions and difficulties in accessing credit. From a regional integration perspective, Malawi is a member of SADC and COMESA. There is a growing concern that Malawi suffers in terms of investment

attraction in these regional groupings since the dominant members tend to attract FDI at the expense of its smaller neighbours (Kazembe & Namizinga, 2007).

### **2.3.8 Mauritius**

Mauritius is ranked as an upper-middle income country with GDP US\$11.682 billion and gross national income (GNI) per capita of US\$9780 in 2015 (World Bank, 2015c). Mauritius is regarded as one of Africa's successful nations, with a robust manufacturing sector and sound macroeconomic policy that are designed to buffer the country's economy from adverse external shocks (Frankel, 2010). Mauritius is commended for good policies including creating a well-managed Export Processing Zone, conducting diplomacy regarding trade preferences, spending on education, avoiding currency overvaluation, and facilitating business (*Ibid*).

#### **2.3.8.1 Economic Context and FDI Performance in Mauritius**

The economy of Mauritius came from a negative real GDP of -10 percent in 1980 and leapt to positive growth in the year that followed. Since then, the country managed to maintain an overall annual economic growth rate of around 5.5 percent, despite being hit by various economic shocks from time to time, displaying robust economic resilience. This robust economic performance resulted in an unprecedented increase in Mauritius's per capita income from US\$1000 in 1982 to more than US\$3000 in 1995, pushing the country into the upper middle-income category (Frankel, 2010).

Quantitatively, FDI inflows into Mauritius were insignificant in the early 1980s. FDI averaged US\$10 million in the 1980s before increasing to an annual average of US\$28 million in the 1990s. By 2010, FDI flows to Mauritius reached half a billion US dollars. According to Mahembe (2014), Mauritius is a major investor in the SADC region after South Africa.

Challenges hindering Mauritius from attracting as much FDI as possible and driving economic growth stem from its selective and ambiguous treatment of foreign investors. The screening of proposed FDI rests in the Non-citizens (Property Restriction) Act, and the Act "does not set out the conditions under which applications for approval are appraised nor indicate priority or reserved sectors or give guidance on what conditions may be placed on approved investments" (UNCTAD, 2001).

### **2.3.9 Mozambique**

The Mozambican economy has been growing at a faster rate for the past two decades. The country's growth averaged 7.5 Percent in last 20 years (Ross, 2014). The World Bank (2017b) classifies Mozambique among the low-income countries with GNI per capita income of

US\$590 in 2015. The World Bank (2017b) estimated Mozambican GDP at US\$14.8 billion in 2015.

### **2.3.9.1 FDI and Economic Growth Trends in Mozambique**

Mozambique boasts one of the highest growth rates of Africa's non-oil economies, averaging 7.5 percent since the turn of the new millennium. The country has engaged in considerable economic reform since its emergence from the civil war in 1992, with substantial support from development partners. From 1977 to 1992, Mozambique was embroiled in a protracted civil war. Throughout the 1990s and with considerable support from the World Bank, the International Monetary Fund (IMF) and other development partners, a burst of economic reform took place with a focus on moving away from central planning, engaging in privatisation and setting up a modern judicial and banking system (OECD, 2013). However, there has been a rapid decline in Mozambican GDP growth rate following the revelation of previous undisclosed borrowing. GDP growth rate slightly dropped to 6.6 percent and is forecasted to drop further to 3.3 percent in 2016 (World Bank, 2017b).

FDI inflows to Mozambique were insignificant, averaging at US\$72 million per annum during the period 190-1992. FDI flows to Mozambique increased gradually in the five years following the 1992 peace agreement. The FDI inflows to Mozambique was channelled into the extractive sector, especially oil and gas exploration and extraction. The extractive industry accounted for 3.3 percent of total FDI inflows in 2011. Construction and manufacturing also attracted a substantial share of FDI but remain heavily dependent on the extractive sectors. In 2015, Mozambique received a staggering FDI flows of US\$3.7 billion, accounting for 21 percent of FDI flows into the SADC region (OECD, 2013; UNCTAD, 2016).

Mozambique suffers from woes of resource-rich countries, with a fragile development model excessively focused on extractives and major projects. The country has tremendous potential but faces considerable challenges: a lack qualified workforce; a limited internal market; infrastructure insufficiencies; costly business environment; restricted economic diversification; a high dependency on imports; increasing debts levels; a narrow tax base and limited capacity for domestic resource mobilisation.

### **2.3.10 Namibia**

Namibia is ranked as an upper-middle income country by the World Bank (2017c) with GNI per capita income of US\$5190 in 2015. The World Bank estimated Namibian GDP at US\$11.5 billion in 2015 (World Bank, 2017c). The country's success is attributed to sound economic management and good governance. The country is strongly connected to South Africa through

trade, investment, and common monetary policies. The Namibian dollar is pegged to the South African rand, making economic trends closely follow those in South Africa.

### **2.3.10.1 FDI and Economic Growth Trends in Namibia**

Namibia is a member of the Common Monetary Area (CMA), therefore its economic policy is limited to fiscal and structural reforms since it doesn't enjoy monetary policy autonomy. The Namibian Government continues to pursue a fiscal strategy anchored on maintaining fiscal sustainability and economic growth. The economic growth rate has been relatively modest since the attainment of independence – fluctuating around 3.3 percent per annum (OECD, 2002). The Namibian economic growth rate slowed down to 3 percent in 2011 from 6.6 percent in 2010, following a contraction of 0.4 percent in 2009. This reflects modest performance in mining and agricultural activities due to severe flooding in the north of the country and industrial action, as well as weak demand for mineral products arising from the weaker global economy (AfDB, 2012b).

Upon gaining independence from South Africa in 1990, Namibia opened its borders through the investment framework reforms to allow foreign direct investment to take place. However, not much FDI was realised till the late 1990s. Namibia's FDI as a percentage of GFCF is higher than the average for Southern Africa, Africa and developing economies. This is attributed to the increase in equity capital and reinvestment earnings (Ikhide, 2006). From the early 2000s, FDI inflows to Namibia increased significantly, with US\$900 million recorded in 2001 up from US\$712 million the previous year.

### **2.3.11 Seychelles**

Seychelles is a Small Island Developing State (SIDS) and is one of the smallest and most indebted countries in the developing world, with a public debt stock-to-GDP of around 140 percent in 2008 (World Bank, 2009). The World Bank ranks Seychelles as a middle-income country with GNI per capita of US\$14680 and an estimated GDP of US\$1.4 billion in 2015 (World Bank, 2017d).

#### **2.3.11.1 FDI and Economic Growth Trends in Seychelles**

Seychelles GDP growth has averaged above 5 percent in the 1980s and 1990s. Real GDP growth rates of 6.64, 8 and 10 percent was recorded in 1981, 1984 and 1985 respectively. The economic growth rate slowed down in the 1990s before rising to an all-time high of 15 percent in 1997. The country's economic growth slowed down during the first half of the 2000s,

but rebounded in 2005, with real GDP growth rate recorded at 5.4 and .3 percent in 2006 and 2007 respectively (AfDB, 2009). GDP growth slowed down in 2008 to 3.1 percent.

FDI has been serving as a growth catalyst for the Seychelles economy and has only been second to tourism. Although in value terms, FDI inflows are lower than other SADC countries, its ratio to GDP is higher, averaging 5 percent in the 1980s and 1990s and then more than doubled to average at 12 percent during 2000s. All time high level of FDI inflow into Seychelles was recorded in 2007 amounting to US\$239 million. In 2012, FDI flows amounted to US\$117 million, a US\$28 million decline from the 2011 FDI inflow amount.

However, the country's growth prospects are hampered by a large debt overhang. The country's vulnerability to external shocks and less land area available for investment are some of the factors that have contributed to the decline in FDI inflows to Seychelles. The country also suffers from adverse weather conditions like cyclones.

### **2.3.12 South Africa**

South Africa is Africa's second-largest economy and the largest economy in the SADC regional bloc. The World Bank classifies South Africa as an upper-middle income country with a GDP per capita of US\$5 723 in 2015. The World Bank estimated South African GDP at US\$314 billion in 2015 (World Bank, 2015a). The South African GDP almost tripled within 20 years after the dismantling of the apartheid regime (Goldman Sachs, 2013). The country's GDP grew at a steady rate during the period leading to the global financial crisis of 2008/9, and the government was commended for its prudent monetary and fiscal policies (Goldman Sachs, 2013; World Bank, 2015b)

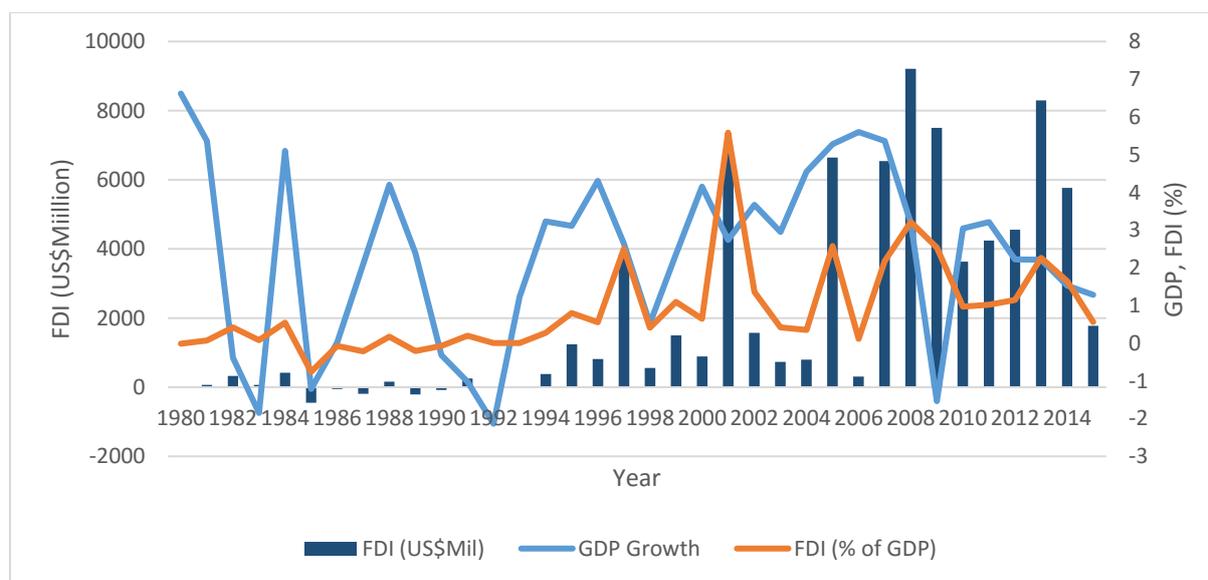
#### ***2.3.12.1 Economic Policies to Boost FDI and Economic Growth in South Africa***

The South African government has put sustainable growth as one priority area since the ushering in of a new political dispensation in 1994. From the 1994's Reconstruction and Development Programme (RDP) to National Development Plan vision 2030 (NDP), the need to attract FDI has been recognised as a major determinant of growth and development (Matjekana & Masipa, 2015).

Following the collapse of the apartheid regime, the Government of South Africa crafted Reconstruction and Development Programme (RDP) as a policy document drafted to address social and economic issues brought about by the Apartheid regime and build a democratic, non-racial, non-sexist society (Government of South Africa, 1994). The RDP included interventions focused on growing the economy such as bringing fiscal spending into check, containing government borrowing, trade liberalisation and reducing taxes. RDP was short-

lived, and it was replaced in 1996 by a new macroeconomic policy framework called Growth, Employment and Redistribution (GEAR). The Accelerated Shared Growth Initiative for South Africa (AsgiSA), the New Growth Path (NGP) and National Development Plan vision 2030 (NDP), all these policies were aimed at boosting economic growth and job creation. Although, some may have fallen short to reach their desired goals, but during their implementation, the GDP of South Africa tripled from as low as US\$144 billion in 1996 to as high as US\$314 billion in 2015 (Goldman Sachs, 2013).

### 2.3.12.2 GDP and FDI Developments in South Africa



**Figure 5: FDI and GDP Dynamics in South Africa (1980-2015)**

Source: UNCTAD, 2016

South Africa is SADC’s biggest economy, holding 49% stake of the SADC total GDP in 2015 (UNCTAD, 2016). The country is also a member of BRICS<sup>3</sup> and the Southern African Customs Union (SACU). South Africa’s GDP growth was depressed in the period 1980 to 1993 owing to economic sanctions and political opposition from South African nationalist movements (Arvanitis, 2006). Since the end of the apartheid era in 1994, the country’s GDP grew at an annual average of 3.6% till the global financial crisis of 2008/9. Figure 5 above, shows that there was negative growth of 1.5% in 2009 as the economy suffered from the financial crisis and the Eurozone sovereign debt crisis (Kganyago, 2012). Although the growth rate bounced back to 3% in 2010, it has been on the decline ever since with growth of 1.3% recorded in 2015.

<sup>3</sup> BRICS (Brazil, Russia, India, China, South Africa)

While there is no explicit investment policy or direct incentives meant to attract FDI, South Africa has traditionally used its macroeconomic policies and strategies to attract FDI (Gelb & Black, 2004). GEAR particularly stressed the significance of FDI in engendering economic growth and has been stressed in official policy documents since then (Arvanitis, 2006). FDI inflows to South Africa as a percent of GDP averaged 0.03% from 1980 to 1993. A situation that may be a result of the economic sanctions imposed on the Apartheid regime and political unrest from the country's nationalist movements. Thereafter, FDI gradually increased, reaching the peak at 5.7% of GDP in 2001. However, FDI remains low in proportion to the South African GDP (Mahembe, 2014). Of concern is that quite a substantial amounts of the FDI activities taking place in the SADC region refer to M&As: 60 percent of South Africa's FDI inflows are M&As (Tagg, 2001; Muradzikwa, 2002). M&As result in a mere change of ownership of already existing capital in the host country rather an inflow of additional capital (Johnson, 2005).

### **2.3.13 Swaziland**

The Kingdom of Swaziland is a small open economy that is greatly dependent on export-based agricultural commodities and industries, especially sugar exports. The World Bank (2017h) classifies Swaziland as a lower middle-income country with GDP estimated at US\$4.1 billion and GNI per capita income of US\$3280 in 2015. Swaziland is very closely linked to South Africa on which it depends for about 85 percent of its imports and about 60 percent of exports (*Ibid*). Swaziland is a member of SACU, COMESA and SADC regional blocs.

#### **2.3.13.1 FDI and Economic Growth Trends in Swaziland**

The country experienced rapid GDP expansion in the 1980s, with an annual average growth rate of 6.88 percent and spiking to 14.6 percent in 1987. The rapid economic expansion is attributed to an increase in FDI, mainly driven by de-investment from South Africa due to economic sanctions imposed on the Apartheid regime. However, GDP growth rate eased to an annual average of 3.7 percent in the 1990s and worsened to 2.3 percent in the 2000s. Due to a severe contraction in the country's manufacturing, Swaziland recorded the lowest GDP growth rate in the SADC region of 0.3 percent. The economic growth rate was recorded at 1.9 percent per annum in 2015 (World Bank, 2017h).

Swaziland has been the recipient of the lowest FDI inflows compared to other SADC member countries. The establishment of Swaziland Investment Promotion Authority (SIPA) has served as a catalyst in luring FDI in the country. Swaziland is still faced with a myriad of problems that are stalling economic progress. The cost of doing business is high and the country is rocked

by governance issues. The business environment is not conducive to lure foreign investors as much as may be expected.

### **2.3.14 Tanzania**

The Tanzanian economy is ranked as a low-income country with an estimated GDP of US\$45.6 billion and GNI per capita income of US\$920 in 2015 (World Bank, 2017g). According to the World Bank (2017g), Tanzania has maintained a high level of economic stability over the past 10 years making it the fastest growing economy in the East African Community (EAC).

#### **2.3.14.1 FDI and Economic Growth Trends in Tanzania**

The Tanzanian economy was performing poorly in the early years of the review period. The Government of Tanzania adopted the Economic Recovery Program (ERP) which aimed for the systematic removal of regulatory controls, structures and operational guidelines in the administration and pricing systems in the economy. This boosted investor confidence in the country (Kabelwa, 2006).

In 1980, Tanzania was in a recession, recording 2.38 percent growth rate in 1983 and increase slightly to 3.38 percent in the year that followed. Following reforms in 1996, the Tanzanian economic growth rate increase and averaged at 6 percent per year. GDP growth rate stood at 7 percent per annum in 2015 (World Bank, 2017g).

*I. Some Major Policy Developments to Attract FDI by Tanzania Since the 1990s include:*

- Establishment of Investment Promotion Centre (IPC) in 1990;
- Enactment of Banking and Financial Institutions Law in 1991 that opened doors for foreign banks to operate in Tanzania, leading to increased competition improvement of the quality of services in the financial sector;
- Launching of Mining Policy in 1996 to guide investments in the mining sector;
- Enactment of legislation that established Export Processing Zone (EPZ) in 2003.

The reforms that were undertaken improved the country's investment climate significantly. FDI inflows to Tanzania rose significantly from an annual average of US\$12.6 million in 1987-1991 to US\$416.66 million in 2002-2006. Based on 2003 figures, FDI inflows to Tanzania is relatively diversified in mining (39 percent), followed by manufacturing (22 percent), tourism (13 percent) and agriculture (7 percent). FDI inflows increased to US\$1.8 billion in 2012 on the backdrop of a surge in investment in the petroleum and natural gas activities in Tanzania.

However, the country still faces several challenges that hindering investment attractiveness and economic growth on the overall. Private sector development is constrained by weak market institutions and poor business climate, characterised by multilevel state interventions that result in high transaction costs and segmented markets. Access to finance and power shortages stand out as the most significant constraints to doing business in Tanzania. The Government of Tanzania has also accumulated the unsustainably high level of arrears (World Bank, 2016).

### **2.3.15 Zambia**

Zambia is currently ranked as a lower-middle income country by the World Bank with GDP estimated at US\$21.15 billion and GNI income per capita estimated at US\$1490 in 2015 (World Bank, 2017f). The country bossed over a decade of rapid economic expansion, with an annual average of 4.75 percent in the period 1996 to 2011. This was shaped by the expansion in the extractive sector (especially copper) and the proceeds were used to subsidise agriculture. Unfortunately, oil price shock, falling copper prices and inadequate economic management response had a knock-on effect on the Zambian economy.

#### **2.3.15.1 FDI and Economic Growth Trends in Zambia**

Prudent monetary policy by the Zambian monetary authorities has put price stability in check for a lengthy period and the Kwacha has remained relatively stable. The period between 2010 and 2014 saw the Zambian economy growing at an annual average growth rate of 6.4 percent, above the overall Sub-Saharan average. This impressive economic expansion was driven by high commodity prices, especially copper, impressive foreign investment in manufacturing and mining sectors, government's infrastructure investment, and rapid expansion in private sector investment in construction and services (World Bank, 2015).

In 2001, FDI flows Zambia was moderately high standing at US\$145.8 million. The FDI inflow to Zambia rose to a record level of US\$1.3 billion in 2007. The global financial crisis of 2008/9 caused a slowdown in FDI flow with US\$938.6 million recorded in 2008. According to Zambia Development Agency (2015), there was a 45 percent increase in FDI inflows to Zambia from US\$1.1 billion in 2011 to US\$1.6 billion in 2015. This is attributed to the implementation of sound economic reforms and investment promotion by Zambia Development Agency (ZDA) in key sectors of the Zambian economy.

However, the country is still facing numerous challenges to reach its economic growth potential and FDI attraction. The challenges include poor and deteriorating infrastructure. There is power crisis affecting all sectors of the economy. The high fiscal deficit is also

undermining investor confidence and overdependence on mineral and commodity exports are also posing a serious threat due to adverse external shocks.

### **2.3.16 Zimbabwe**

Zimbabwe is ranked by the World Bank as a low-income country, with GDP estimated at US\$14,42 billion and GNI per capita income recorded at US\$860 in 2015. The country had quite promising growth prospects, but all that has been shattered due to uncompetitive investment policies and political instability (World Bank, 2017e).

#### **2.3.16.1 Economic Policies to Boost FDI and Economic Growth in Zimbabwe**

Since independence in 1980, Zimbabwe has crafted numerous blueprints to serve as guidelines for achieving economic growth and social development, and the resulting benefits spreading to all. The first blueprint to be rolled out to the public was Economic Structural Adjustment Programme (ESAP), a policy strategy conceived by the International Monetary Fund (IMF). With the demise of ESAP came Zimbabwe Programme for Economic and Social Transformation (ZIMPREST), scheduled for implementation from 1996 through to 2000. Its main objective was the creation of a stable macroeconomic environment and the correction of the mistakes of ESAP. During the first three years of its implementation, growth rate declined from 7% in 1997 to very low growth rate levels between 1998 and the year 2000. Despite the economic decline, the same period was marked by an outstanding improvement in Zimbabwe's fiscal performance. Zimbabwe managed to reduce its budget deficit as a percent of GDP from 12.9% in fiscal year 1994/95 to 6.4% in 1997/98, a result of the improved revenue collection and enhanced expenditure management (Bonga, 2014).

Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIM ASSET) is the current policy document in force since October 2013. Zimbabwe aims to achieve sustainable economic growth and development together with social equity through the implementation of indigenisation and empowerment strategies and the prudent exploitation of the country's vast natural resources and skilled workforce (Government of Zimbabwe, 2013). The economic blueprint is anchored on attracting FDI, improving the business environment and lowering the cost of doing business in Zimbabwe.

FDI flows to Zimbabwe in the 1980s was very low averaging US\$8 million per annum. The economic reforms implemented from ESAP going forward brought about the liberalisation of the Zimbabwean markets which attracted foreign investment. The country received the highest FDI inflows of US\$444 million in 1998. However, the country was rocked by the political and economic crisis in the early 2000s and FDI declined sharply and the country suffered from

economic stagnation. The country received a mere average of US\$37 million per annum during the period 2000-2008. The period after 2008 saw the country rebounding from negative growth to a robust growth rate of 7.21 percent in 2009, 9 percent in 2010 before slowing down to 6 percent in 2011. FDI inflows also increased to US\$387 million in 2011, US\$545 million in 2014, and slightly declined to US\$421 million in 2015 (UNCTAD, 2016).

The country still faces numerous challenges to attract FDI. The recent development was the passing of the Indigenisation law which requires foreign investors to cede 51 percent of the voting stock to indigenous investors. This has made foreign investors shun away. The country is also experiencing severe liquidity crisis and political uncertainty. The country is also suffering from insufficient and deterioration of infrastructure and power shortages impacting on all sectors of the economy.

## **2.4 Conclusion**

The chapter summarised FDI and GDP dynamics in the SADC region. It also emphasised the importance of FDI policies and protocols, both at a regional and country levels. It has been noted that, even though FDI has been increasing in the SADC region, it's highly concentrated among the countries that are endowed with natural resources and those that have put in place reforms that are favourable for investment. Countries like South Africa, Angola, Mozambique, The Democratic Republic of the Congo are the biggest recipients of FDI in the SADC region. Angola received much of FDI in its oil sector and was among the fastest growing economies in the world. Therefore, the growth in GDP for most of the countries in the SADC region may be attributed to the increase in FDI: a statement this study will eventually affirm or refute.

## CHAPTER THREE

### LITERATURE REVIEW

#### 3.0 Introduction

This chapter aimed to gather the theoretical framework and empirical evidence on the impact of FDI on economic growth of a host country. Therefore, the chapter was divided into sections. In the first section, various growth models were identified which form part of the theoretical groundworks that show how FDI relate to economic growth. The emphasis was to explore both the direct and indirect effects of FDI on economic growth. Thus, the study also explored the role of FDI spillovers in enhancing economic growth of a host country. In the final section, empirical evidence on the impact of FDI on economic growth of a host country was reviewed. Various studies on this topic were identified and analysed followed by an in-depth discussion of their implications thereof.

#### 3.1 Theoretical Literature Review

This section summarises the theoretical foundations of the link between FDI and economic growth of a host country. Two major growth theories: the neoclassical growth model and endogenous growth model justifies the link between FDI and economic growth. The study decomposed these theoretical foundations in terms of direct and indirect effects of FDI on a host country' economic growth. The direct impact being the one in which FDI brings about an increase in the physical stock of capital of a host country which accelerates growth. Whereas, the indirect impact implies that the presence of MNCs generate spillovers, in terms of technology, know-how and competition, that allows the host country to enjoy accelerated growth rate in the long term (Johnson, 2005; Nowbutsing, 2009).

##### 3.1.1 Neoclassical Growth Model

Neoclassical theorists advocate for national markets liberalisation on the pretext that this would lead to increases in both domestic investment and FDI. Therefore, here increases in FDI is seen as equivalent to raising domestic savings thus increases the rate of capital accumulation (Todaro & Smith, 2012). Based on these neoclassical arguments, Robert Solow postulated a theory linking long run economic growth, the steady increase in aggregate output to capital accumulation and technological progress (Solow, 1956). Based on a Cobb-Douglass (1928) production function formulation, the model argues that an increase in the accumulation of investment stock subsequently results in an increase in economic growth holding the amount of labour and the level of technology constant (Barro & Sala-I-Martin, 1991; De Jager, 2004; Seyoum, et al., 2015).

Although the theory posits two sources of growth, empirical evidence shows that more studies were carried out assessing the growth in factor inputs than growth in total factor productivity. The reason being that factor inputs can be quantified and analysed easily, whereas total factor productivity growth poses difficulties in measurement due to the non-existence of suitable econometric modelling methods over and above absence of appropriate data (Ozturk, 2007).

The two equations below summarise the role of investment in the Solow neoclassical growth model. The first equation depicts an aggregate production function, showing the relationship between output (Y), capital input (K), labour (L), and technology (A) (Solow, 1956):

$$Y = A \cdot f(K, L) \dots \dots \dots (3.1)$$

The second equation, commonly known as the capital accumulation equation, explores the relationship between investment in tangible assets (I), and capital stock (K) (Solow, 1956):

$$\Delta K_t = I_t - \alpha K_{t-1} \dots \dots \dots (3.2)$$

Where  $\Delta$  represents a discrete change,  $\alpha$  is depreciation, and  $I_t$  is the gross investment. It is worth noting that the gross investment term can either be endogenously determined by profit maximising firms or assumed to be some fixed proportion of output, say  $sY_t$ . Also, the neoclassical model assumes competitive factor markets and constant returns to scale where all inputs are paid the value of their marginal products. Decomposition of the production function relates output growth as a weighted function of change in primary inputs, capital (K) and labour (L) and multi-factor or “Solow residual” (or  $\Delta \ln A$ ) (Solow, 1956):

$$\Delta \ln Y = \beta_K \Delta \ln K + \beta_L \Delta \ln L + \Delta \ln A \dots \dots \dots (3.3)$$

Where  $\beta_K$  is capital’s share of output,  $\beta_L$  is labour’s share of output, and the neo-classical assumptions imply  $\beta_K + \beta_L = 1$ . The technology term, A (that is,  $A = A_0 e^{g}$ ), is assumed to be exogenous to the model. In this model, therefore, capital accumulation contributes to economic growth in proportion to the capital’s share of national output (Nowbutsing, 2009).

Mankiw, et al. (1992) refined the traditional neoclassical growth theory by emphasising the concept of convergence of incomes in the growth equation. The convergence/divergence hypothesis states that poor countries tend to grow faster than rich countries. To test for convergence, Solow (1956) and Mankiw, et al. (1992), introduced initial per capita GDP as a regressant in their growth equation, with the assumption that there is convergence if the coefficient on initial per capita GDP is negative; otherwise there is divergence.

The neo-classical growth model assumes free capital movement and accumulation. However, the model’s weakness is that accumulation of capital can only explain short-run economic

growth because decreasing returns to capital do not allow for growth to take place in the long run (Gabriela, 2008). Solow (1956) added technology and knowledge among the production inputs out of the realisation that these two contribute to factor productivity which is the basis for economic growth. However, in this model technology is treated as an exogenous factor input into the production function, and this implies that technology transfer is non-existent between countries and this limit growth (Gabriela, 2008).

### **3.1.2 Endogenous Growth Model**

In the 1980s, development scholars acknowledged theoretical weaknesses in the old neoclassical growth theory and proposed a new theory that came to be known as the endogenous growth theory. The new growth theorists recognised that the assumption by neoclassical scholars that technology progress is exogenously determined was flawed and could not explain long-run economic growth. Therefore, this theoretical weakness of the neoclassical growth model was the starting point for the endogenous growth model.

Endogenous growth theorists postulated that sustained economic growth can be generated by supply-side externalities. The studies by Romer (1986) and Lucas (1988) treated investment in human capital, research and development (R&D) expenditure and FDI spillovers as the catalysts for economic growth. Although the old neoclassical model assume total factor productivity growth as exogenously given, the newer endogenous growth models attribute this component of growth to the “learning by doing” effect occurring between physical and human capital, which result in increasing returns to scale in production technology (Lucas, 1988; Mallick & Moore, 2006).

By assuming constant returns to scale with diminishing marginal productivity of labour, the neo-classical growth model distinctively differs from the endogenous growth model which assumes constant or increasing returns scale with the non-diminishing marginal productivity of capital. The endogenous growth model assumes non-diminishing marginal productivity of capital and this provides a possible pathway through which long run sustained growth can be achieved. Therefore, under the postulations of the endogenous growth theorists, accelerated economic growth rates can be achieved through liberalisation and make economies investor-friendly under the free-market system (Mallick & Moore, 2006).

The model can be presented in a simplified form as follows (Romer, 1986; Lucas, 1988):

$$Y_i = A(K) * f(K_i, L_i) \dots \dots \dots (3.4)$$

Where  $i$  represents firm-specific variables capital  $K_i$  and labour  $L_i$

$K$  refers to the aggregate capital stock, and

$A(K)$  is the technology function

While the neoclassical model assumes technological progress to be exogenous, the endogenous growth model describes technological progress as a form of investment spillover, arising from different sources; for example, tangible capital, human capital, or research and development expenditures. More importantly, however, both the neo-classical and the new growth models define capital accumulation as key ingredients to growth. Based on these arguments, it can be deduced that if FDI contributes to both growth (direct impact) and domestic investment (indirect impact), then its overall impact can be substantial. Thus, depending on the size and level of spillover it creates, FDI represents a potential source of sustainable growth and development (Nowbutsing, 2009).

The economic rationale for offering special incentives to attract FDI frequently derives from the belief that FDI produces externalities in the form of technology transfers and spillovers (Carkovic & Levine, 2003). Romer (1993), for instance, argues that important idea gaps between rich and poor countries exist. He notes that foreign investment can ease the transfer of technological and business know-how to poorer countries. According to this view, FDI may boost the productivity of all firms – not just those receiving foreign capital. Thus the transfer of technology through FDI may have substantial spillovers effects for the entire economy. In contrast, some theories predict that FDI, in the presence of pre-existing trade, price, financial, and other distortions, will hurt resource allocation and slow growth (Boyd & Smith, 1992). Thus, theory produces ambiguous predictions about the growth effects of FDI, and some models suggest that FDI will promote economic growth only under certain policy conditions.

### 3.1.3 The Indirect Impact of FDI or FDI Spillovers

There are two views on how FDI can affect the growth of a host country. The first view originates from the exogenous growth theorists who posit that FDI affects economic growth through the accumulation of capital. This means FDI adds to the host country's existing stock of physical capital. Therefore, FDI has the same effect on economic growth as the domestically owned stock of physical capital. The second view emanates from the endogenous growth theorists who extended the old neo-classical growth postulations by introducing an

augmentation to the host country's stock of knowledge via knowledge transfer as one of the major drivers of economic growth (Elboiashi, 2011). Accordingly, FDI epitomises a prospective source for sustainable growth and development. Thus, this section devotes much attention to explaining how FDI spillovers drive growth in a host country over and above the direct impact.

FDI boosts economic growth and development through increased investment, by bringing forth the much needed foreign exchange, and via employment creation. However, perhaps the most valuable contribution of FDI to sustainable long-run growth and development emanates from the FDI spillover potential. Farole & Winkler (2014) define FDI spillovers as "the productivity gain resulting from the diffusion of knowledge and technology from foreign investors to local firms and workers". MNCs play a big role in international capital movements. For this reason, the MNCs brings forth different types of spillovers which diffuse in the host country through dissimilar conduits (Elboiashi, 2011). The transmission of knowledge spillovers from MNCs to domestic firms may take place within the same industry (horizontal spillovers) or to another industry which can be referred to as vertical spillovers. In vertical spillovers scenario, MNCs can diffuse externalities to suppliers in the upstream sectors (backwards spillovers) and to consumers of the MNCs' products in the downstream sectors (forward spillovers) (Farole & Winkler, 2014).

The primary reason to attracting FDI is the technology that the MNCs bring forth, which is considered superior to domestic firms' one, hence boost the host country firm's productivity. The boost to domestic firms' productivity is referred to as productivity spillovers. According to Blomstrom and Kokko (1998), MNCs contrast themselves from their local counterparts in the host country in two ways. The first way in which the MNCs differ from their domestic producers is that they take along some aggregate of their proprietary technology to the host country. Although domestic firms enjoy the advantage of knowing the domestic markets well, business practices and domestic consumer preferences, the MNCs compete successfully against them with superior technology which serves as their firm-specific advantage. The second way is that entrance and commencement of MNCs domestic market operations destabilise the existing market equilibrium as domestic firms are forced to take action to protect their competitive edge. These ways may produce varied forms of spillovers (Elboiashi, 2011).

The FDI spillovers from MNCs activities in the host country can diffuse horizontally or vertically. The horizontal spillovers occur when the activities of MNCs propagate externalities to local players in the same industry. This means FDI in an industry by MNCs, which usually have superior technology, will encourage the domestic firms operating within the same sector as the foreign investor firm to brace up to compete and perform at the highest level possible (Hanousek, et al., 2010). According to Javorcik (2004), efficiency increases by the domestic

firms result from imitation of MNCs superior technologies or hiring workers and managers who once worked for the foreign-owned companies. Whereas, vertical spillovers happen when an MNCs activities propagate externalities to another industry, as in the case of technology transfers to domestic suppliers or customers in the production chain. Firms with operations in sectors other than that of the MNC are affected by the FDI presence if they are in direct business contact with it through backwards and forward linkages. In most cases, MNCs require higher standards from their suppliers and customers, including domestic firms. Therefore, their presence increases competition among domestic firms that want to become suppliers, resulting in higher quality and reliable inputs and efficiency of these domestic enterprises, therefore, increases (Hanousek, et al., 2010).

It is not always the case that the operations of MNCs bring forth positive spillovers. Thus, a spillover from an FDI firm can be harmful to the long-term economic growth of the host country – often referred to as negative spillovers. Dependency theorists advocated early theories on FDI and spillovers. Dependency theorists regarded FDI from developed economies as detrimental to the long-run growth prospects of developing countries (Nowbutsing, 2009). According to Hanousek, et al. (2010), a negative spillover should not always be attributed to lack of absorptive capacity of domestic firms in developing nations. It is rather a finding of lack of spillovers that is likely driven by missing absorptive capacity. Negative spillovers are often a result of competitive effects offsetting any potential positive spillover effects. According to Hanousek, et al. (2010), the bigger the human capital and technology gap between MNCs and domestic firms, the less likely domestic firms are to gain from the spillovers.

The 1970s marked a period when development scholars began to unravel growth implications of FDI spillovers. Hymer (1976) proposed a theory in which he identified international differences across firms at a scientific and technological level as a trigger of FDI spillovers and technology transfer. By assuming FDI to represent the transfer of a package in which capital, management, and new technology are all combined, Hymer (1976) characterised FDI as an international extension of the industrial organisation theory (Nowbutsing, 2009; Hymer, 1976). Positive spillovers are found therefore in more technologically advanced sectors or in more industrialised countries. Wang & Blomstrom (1992), showed that technology transfer is positively related to the efficiency of an indigenous firms' and the level of operational risks in the country (that is, political instability, poor macroeconomic environment). However, they concluded that some technology transfer always takes place irrespective of the subsidiary's active learning effort. According to Blomstrom & Kokko (1998), spillovers occur when the entry or presence of MNC contributes to the productivity or efficiency benefits of domestic firms.

### 3.2 Review of Empirical Literature

Many scholars, researchers and policy makers alike have explored the fundamentals of how FDI relate to host country's economic growth. The empirical evidence accumulated so far shows mixed findings. A discussion of some important findings is laid out in this section.

Many scholars and researchers have carried empirical studies to establish whether FDI drives economic growth in a host country. In many instances, the host countries would have received FDI for longer periods. One of the most cited empirical work was done by Borensztein et al. (1998). Borensztein et al. (1998) aimed to establish the effect of FDI on economic growth in a cross-country regression framework. Their sample composed of 69 developing countries who were receiving FDI from industrial countries for two decades. The empirical analysis shows that FDI facilitated the transfer of technology from foreign conglomerates, who are believed to have superior technology, to domestic firms. The study further highlighted that FDI contributed more to growth than domestic investment (Borensztein, et al., 1998).

The findings of Durham (2004) study correlate with those of Borensztein et al. (1998). The empirical research aimed to assess the impact of FDI and equity foreign portfolio investment on the host country's economic growth. The sample data composed of 80 countries for a 19 year period between 1979 and 1998. He used the extreme bound analysis (EBA) which confirmed the robustness of the findings compared to other empirical studies. The results of the study showed that FDI impacted positively on economic growth contingent of the absorptive capacity of the host country.

A study was carried out using data from Sub-Saharan African countries by Adams (2009) with the aim to examine the impact of FDI and domestic investment on economic growth of a host country. The study made use of OLS and Fixed Effects econometric estimation techniques to analyse the data. The findings of the study show that FDI exerted a positive effect on economic growth. Adams (2009) concluded that in Sub-Saharan Africa, countries need a targeted approach to FDI and improve their absorptive capacity and Governments should seek to enter into mutually beneficial investment agreements.

A study by Zhang (2006) identified the possible channels through which FDI may affect both positively and negatively the Chinese economy over period 1992-2004 and found that FDI seems to promote economic growth. The positive growth effects seem to rise over time and are stronger in coastal than inland regions. The marginal productivity of foreign capital is larger than that of domestic capital. Tsai (1994), focuses on the popular hypothesis of the demand-side determinants of FDI and studied the influence of FDI on economic growth in the host countries. The study covered the periods (1975-1978 and 1983-1986). The findings showed

that FDI is the main source of economic growth. Similar conclusions were also reached by Agrawal (2015) among the BRICS economies; namely; Brazil, Russia, India, China and South Africa during the period 1989 to 2012. The empirical methodology cointegration and causality analysis at panel level were used in the study. The results confirm that FDI and economic growth are cointegrated at the panel level, indicating the presence of long-run equilibrium relationship between them. The results from the causality tests indicate that there is long-run causality running from FDI to economic growth in these economies.

Meanwhile, Suleiman, et al., (2013) examined the impact of FDI on economic growth for the Southern Africa Customs Union (SACU) countries namely; Botswana, Lesotho, Namibia, South Africa and Swaziland. The researchers employed panel data for a period of 1980 to 2010 and used Dynamic Ordinary Least Squares (DOLS). They found satisfactory evidence of the positive and significant impact of FDI on the economic growth of SACU countries.

In the same vein, a study by Hlongwane (2011), using panel data for developed and developing African countries, highlighted that inward FDI has a positive impact on economic growth of the host country through increased capital accumulation, access to superior technology, greater efficiency, increased competitiveness, and exports. He further noted that the extent to which inward FDI positively impacts on economic growth depends on the quality of the economic environment.

Further, Ayanwale (2007) investigated the relationship between FDI and economic growth in Nigeria and examined the determinants of FDI into the Nigerian economy. The researcher employed Ordinary Least Squares (OLS) and 2SLS methods to ascertain the relationship between FDI, its components, and economic growth. The results highlighted that FDI impacts positively on the economic growth of Nigeria. Similar conclusions were reached by Tiwari & Mutascu (2011) in the case of Asia countries. The study examined the impact of FDI on economic growth in Asian countries. The study utilised a panel analysis framework for the period 1986 to 2008. The results showed that FDI and exports enhance the growth process.

A study by Soumia & Abderrezak (2013) empirically examined the relationship between FDI, financial integration and economic growth of North African economies. In their empirical investigation, they used a dynamic panel system General Method of Moment (GMM) estimator. The results showed that, under particular economic and financial conditions, FDI plays a positive role in boosting the economic growth of North African countries.

On the contrary, some empirical studies found that FDI does not have a positive effect on economic growth. Examples include the following: using a panel of 85 countries, Azman-Saini, et al., (2010) concluded that FDI, by itself, does not have positive effects on economic growth.

Rather, the positive effects of FDI are observed if economic freedom is taken into account; specifically, market regulation. In their analysis, they used GMM panel estimators, which were applied to panel dynamic models. In the estimation equation, they used FDI, economic freedom indicators, and control variables to explain economic growth.

In the same vein, Mahembe & Odhiambo (2015) investigated the causal relationship between inward FDI and economic growth in Southern African Development Community (SADC) countries over the period 1980 to 2012. The study used the recent panel data analysis methods to examine this linkage. They carried out Granger Causality test for the middle-income countries within a Vector Error Correction Mechanism framework, while that for the low-income countries was conducted within a Vector Autoregressive framework. The results for the middle-income countries' panel showed that there is a uni-directional causal flow from gross domestic product to FDI, and not vice versa. They further highlighted that, for the low-income countries' panel, there was no evidence of causality in either direction. The study concluded that the FDI-led growth hypothesis does not apply to SADC countries.

These results are consistent with those of Yabi (2010); based on a panel of 57 developing countries over the period from 1980 to 1999, which concluded that FDI flows do not always have an impact on economic growth. He found that, due to the heterogeneity of countries with low economic growth, the positive impact of FDI was observed in countries with high economic growth but not in countries with low economic growth. These results were based on estimations with instrumental variables that included control variables that explained economic growth, such as domestic investment, years of secondary schooling of the male population, inflation, fertility rate, government consumption, rule of law, the number of telephone lines per thousands of people.

Similar conclusions were reached by Herve (2016) in studies conducted in West African countries; namely, Cote d'Ivoire, Benin, Senegal and Togo for the period 1980 to 2014. The study investigated the link between financial integration, FDI and economic growth. The researcher used the dynamic panel system GMM estimator with fixed effects approaches by utilising Hausman test. The results showed that FDI is not an important determinant of economic growth in West Africa.

**Table 3: The Impact of FDI on Economic Growth: Selected Studies**

Study	Countries Studied and Time Period	Econometric Technique	Empirical Evidence
Borensztein, Gregorio and Lee (1998)	69 Developing countries (1970-1979 & 1980-1989)	Cross-country regression and Seemingly Unrelated Regression (SUR) technique	FDI has a positive overall effect on economic growth, however, this is dependent upon the stock of human capital in the host country.
Durham (2004)	80 countries from 1979-1998	Extreme Bound Analysis (EBA)	FDI has a positive effect on economic growth, however, subject to the absorptive capacity of the host country.
Adams (2009)	Sub-Saharan Africa countries for the period 1990-2003	Ordinary Least Squares (OLS) and Fixed Effects estimation techniques.	FDI has a positive effect on economic growth and recommended a targeted approach to FDI
Zhang (2006)	Chinese economy over the period 1992-2004	Panel Data Analysis	FDI promote economic growth.
Agrawal (2015)	BRICS countries	Cointegration and Causality Analysis at a panel level	FDI and economic growth are cointegrated and the causality runs from FDI to economic growth.
Suleiman, Kaliappan and Ismail (2013)	SACU countries for a period 1980-2010	Dynamic Ordinary Least Squares (DOLS)	Satisfactory evidence of the significantly positive influence of FDI on economic growth.

Hlongwane (2011)	Developed and developing countries	Panel Data analysis	FDI has a positive impact on economic growth of a host country.
Ayanwale (2007)	Nigerian economy	Ordinary Least Squares and 2SLS methods	FDI impacts positively on economic growth.
Tiwari and Mutascu (2011)	Asian countries for the period 1986-2008	Panel data analysis framework	FDI enhance the growth process.
Soumia and Adderrezak (2013)	North African countries	Dynamic panel system General Method of Moment (GMM) estimator	FDI plays a positive role in boosting economic growth.
Azman-Saini, Baharumshah and Law (2010)	85 countries	General Method of Moment (GMM) estimator.	FDI does not have a positive effect on economic growth.
Mahembe and Odhiambo (2015)	15 SADC economies for the period 1980 to 2012	Granger Causality test and Vector Error Correction Mechanism (VECM)	No evidence of FDI-led growth impact.
Yabi (2010)	57 developing countries over the period 1980-1999.	Panel data analysis	Positive impact of FDI on economic growth was not observed in developing countries
Herve (2016)	4 West African countries for the period 1980-2014	Dynamic panel system General Method of Moment (GMM) estimator with Fixed Effects (FE)	FDI is not an important determinant of economic growth.

### 3.3 Conclusion

The chapter reviewed the selected literature that relates to the impact of FDI on economic growth. Two main theories of economic growth were discussed in the foregoing sections namely: the neoclassical growth theory and the new endogenous growth theory. The FDI spillovers as a source of long-term economic growth were also discussed. The theoretical exploration demonstrated that FDI is a key driver of economic growth of the host country. Through both exogenous and endogenous growth analysis, it was noted that FDI contributes directly and indirectly to economic growth and that the host country's growth may attract more FDI. Empirical literature review, on the other hand, discussed previous studies on the impact of FDI on economic growth. However, mixed results were found by different scholars, although most of the studies reviewed found a positive link between FDI and economic growth. This study sought to add to the debate on the impact of FDI on economic growth using panel data for the SADC region for the period 1980-2015.

## CHAPTER FOUR

### RESEARCH METHODOLOGY

#### 4.1 Introduction

This chapter gives an outline of the research methodology that is going to be followed to achieve the study objectives. The chapter begins with deriving an empirical model that will be testable from a theoretical one. The augmented Solow growth model will be extended with some control variables that fit the data and characteristics of the study sample. A definition of each control variable will be laid out and sources of data and time domain will be shown. Various estimation techniques are laid out in the chapter. All step by step procedures are given, including data related tests.

#### 4.2 Model Specification

##### 4.2.1 Theoretical Background of the Model

Various growth theories posit that FDI accelerates economic growth as it is one of the sources of capital inflow that helps to improve trade, creates employment opportunities, aids in the transfer of technology and knowledge in the host country (Sattarov, 2012). Therefore, the theoretical framework which underpins the methodology is based on the augmented Solow growth model. The model takes rates of saving, population growth, and technological progress as exogenous and primary sources of growth. An augmented production function is employed in deriving the empirical model. We assume a Cobb-Douglas production function, so production at time  $t$  is given by:

$$Y_t = K_t^\alpha (A_t L_t^{1-\alpha}) \dots \dots \dots (4.1)$$

$$0 < \alpha < 1$$

Where:

$Y$  = Total production (the monetary value of the goods produced in a year)

$L$  = Labour input

$K$  = Capital input

$A_{HC}$  = host country level of technology

$\alpha$  and  $1 - \alpha$  are output elasticity for labour and capital, respectively. These values are constants determined by available technology. Output elasticity measures the responsiveness of output to a change in levels of either labour or capital used in production.

The study decomposes the production function in equation 3.1 above, by modelling how FDI inflows affect the size of the physical stock of capital and how FDI can generate spillovers that improve the conditions for economic growth. Starting with physical capital, represented in equation 3.1 by  $K$ , the host country capital stock consists of foreign owned (MNC) as well as domestic capital. The following equation describes the host country's stock of physical capital  $K_{HC}$ :

$$K_{HC} = K_{DOM} + K_{MNC} \dots \dots \dots (4.2)$$

Where  $K_{DOM}$  is the domestic owned physical capital and  $K_{MNC}$  is foreign owned physical capital. According to Johnson (2005), FDI inflows can cause an increase in the stock of physical capital in the host country. It is argued that Greenfield FDI generates an increase in  $K_{MNC}$  resulting in an increase in the total stock of physical capital as long as foreign and domestic investments are not substitutes. Therefore, FDI drive economic growth in the same way domestic owned physical capital, as it results in the increase in the physical stock of capital (Johnson, 2005). M&As on the other hand result in a mere change of ownership of already existing capital in the host country rather an inflow of additional capital.

FDI can generate positive technology spillovers to the host country firms. The study models a link between FDI and the host country's level of technology given by  $A_{HC}$  in equation 4.1 above. The MNC is assumed to possess technology that is superior to the domestic firms' one. FDI has the potential to generate positive spillovers through its knowledge capital  $KK_{MNC}$  and these spillovers affect the domestic firm's level of technology,  $A_{HC}$ . Therefore, the study places the MNC's knowledge capital  $KK_{MNC}$  as an additional input in the production function in a similar fashion as in Johnson (2005).

#### 4.2.2 Empirical Model

Based on the synthesis of the literature reviewed in the foregoing section 2, an augmented Solow growth model, with control variables that have been used widely in the literature, is used as the basis of our empirical analysis (Mankiw, et al., 1992). As highlighted above in equation 3.2, physical capital ( $K$ ) is split into two; domestic-owned physical capital proxied for empirical purposes by gross fixed capital formation (gfcf) and foreign-owned physical capital represented by FDI in our empirical model. The panel regression model is specified as follows:

$$growth_{i,t} = \beta_0 + \beta_1 lngdp_{i,t-1} + \beta_2 gfcf_{i,t-1} + \beta_3 fdi_{i,t-1} + \beta_4 pop_{i,t} + \beta_5 lntrade_{i,t} + \beta_6 lntot_{i,t} + \beta_7 labourqua_{i,t} + \eta_i + \varepsilon_{i,t} \dots \dots \dots (4.3)$$

Where:

*growth* is the percentage growth of GDP

*lngdp* is the natural logarithm of initial level GDP per capita

*gfcf* is the gross fixed capital formation as a percentage of GDP

*fdi* is gross inward FDI as a share of GDP

*pop* is the active labour force

*trade* is trade openness

*lntot* is the natural logarithm of the terms of trade

*labour* is the percentage of the labourforce with tertiary level qualification

$\eta$  is a countries' unobservable individual effects

$\varepsilon$  is the error term

The objective of the study is to test the hypothesis of a potentially significant impact of FDI on economic growth in the SADC region. This study utilises static panel data regression to estimate the parameters of the model. Static panel regression technique is the most appropriate technique for an investigation of this nature as it has an advantage of producing the information necessary to deal with both the intertemporal dynamics and individuality of the entities being investigated.

### 4.3 Definition of Variables

In view of the recent literature reviewed in the foregoing section 2, this study will include the following control variables: **Gross domestic product** (*lngdp*) is the market value of all goods and services produced within the boundaries of the country. In the context of this study, this will refer to real GDP per capita lagged once to control for persistent growth shocks and economic convergence (Abaid, 2013; Sghaier & Abida, 2013). Per capita GDP is believed to serve as a good proxy for the general development and sophistication of institutions (Alfaro, et al., 2003; Sghaier & Abida, 2013). The prior expectation for ( $\beta_1$ ) is negative. **Trade openness** (*trade*) is included in the analysis because it is considered important as foreign investors are said to increasingly pursue strategies which require an unrestricted trade of

intermediate goods at all stages of the production process (Agrawal, 2015; Asiedu, 2013). In this study, trade openness will be measured as exports plus imports divided by GDP as in (Pigka-Balanika, 2011). Trade openness ( $\beta_5$ ) is expected to have a positive impact on economic growth. The level of domestic investment with the **gross fixed capital formation (gfcf)** as its proxy will be included in our analysis. This is informed by empirical evidence as many studies have included it in their analysis (Doan, 2010). The expected sign for ( $\beta_2$ ) is assumed to be positive. Gfcf will be lagged once in our model to see the effects of this variable of the previous period of economic growth (Adewumi, 2006). Ogutcu (2002) argues that **FDI (FDI)** is a major catalyst for development and the integration of developing countries into the global economy. The same line of argument is given by (Chen, 1992). The expected sign for ( $\beta_3$ ) is therefore positive. Lagged FDI is included in our model to reduce the simultaneity or endogeneity bias that would result if contemporaneous FDI was used as an independent variable and further, the impact of FDI is not likely to be felt on economic growth the same year it came (Juma, 2012; Adewumi, 2006; Choe, 2003). **Labour force (pop)** is believed to be one of the key factors that stimulate growth. The Higher population will result in higher labour supply. Empirical evidence has shown that labour has a positive impact on economic growth (Suleiman, et al., 2013). The prior expectation for ( $\beta_4$ ) is therefore positive. **Terms of trade (tot)** are included in the analysis because an improvement in a country's terms of trade (say, a permanent increase in export prices) can also increase real national income and stimulate economic growth (Toulaboe, et al., 2008). The expected sign for ( $\beta_6$ ) is therefore positive. **Labour quality (labour)** is a human capital variable that measures the percentage of labour force with tertiary education level qualifications and is used as a proxy for the FDI absorptive capacity of a host country. The variable was integrated into the augmented Solow growth model by Mankiw, et al. (1992). The expected sign for ( $\beta_7$ ) is, therefore, positive (Mankiw, et al., 1992).

#### 4.3.1 Data Sources and Time Domain

In order to investigate the impact of FDI on economic growth in SADC countries, the study use panel data analysis framework. The sample covers 15 SADC countries from 1980-2015. Data availability played a major role in the selection of sample period and we also took into consideration the period in which major reforms by the SADC region to attract FDI was explicitly implemented. During this period, SADC countries as a regional bloc and individual countries explicitly pursued policies aimed at attracting FDI such as economic liberalisation, privatisation, the establishment of special economic zones and offering incentives and tax holidays to foreign investors (Mahembe, 2014). The table 4 below shows variable definition as used in the study and the respective sources of the data.

**Table 4: Variables Used in this Study and their Sources**

Number	Acronym	Variable Description	Source
1	FDI	Inward FDI flows as a percentage of GDP.	World Investment Report (WIR) and United Nations Conference on Trade and Development (UNCTAD) Database (www.unctadstat.unctad.org).
2	GDP	Real GDP: US Dollars at constant prices (2005) and constant exchange rates (2005) in millions.	SADC Statistics and United Nations Conference on Trade and Development (UNCTAD) Database (www.unctadstat.unctad.org).
3	GFCF	Gross fixed capital formation: is used to measure the net additions to the (physical) capital stock measured as a share of GDP (SEDA, 2012).	SADC Statistics and United Nations Conference on Trade and Development (UNCTAD) Database (www.unctadstat.unctad.org).
4	POP	Labour force: refers to the currently active population, comprises all persons who fulfil the requirements for inclusion among the employed or the unemployed during a specified brief reference period.	SADC Statistics and United Nations Conference on Trade and Development (UNCTAD) Database (www.unctadstat.unctad.org).
5	Trade	Trade openness refers to the sum of exports and imports of goods and services measured as a share of the gross domestic product.	World Development Indicator Database and United Nations Conference on Trade and Development (UNCTAD) Database (www.unctadstat.unctad.org).
6	TOT	Terms of trade is an index representing the ratio of the price of a country's exports to the price of imports of commodities.	World Development Indicator Database and United Nations Conference on Trade and Development (UNCTAD) Database (www.unctadstat.unctad.org).
7	Labourqua	Percentage of labour force with tertiary education level qualifications	World Bank Databank and Barro & Lee (2016)

#### 4.4 Estimation Techniques

Prior to estimation, tests for stationarity will be conducted using the Im, Pesaran and Shin (IPS) (1997) unit root test (Im, et al., 2003). Carrying out panel unit root tests is important because they increase the power of the test relative to the Augmented Dickey-Fuller unit root

tests used for time series data. Estimation of the empirical model will be carried out using the fixed effects panel regression technique.

#### 4.4.1 Panel Unit Root Test

The existence of unit roots indicates the non-stationarity in panel data. In this study testing for stationarity will be done using the Im, Pesaran and Shin (IPS) (2003) and Levin, et al. (2002) (LLC) unit root test (Im, et al., 2003; Levin, et al., 2002).

##### 4.4.1.1 Im, Pesaran and Shin (IPS) (2003)

Tests using this model are based on cross-sectional independence. The test allows for heterogeneity in the coefficient of the lagged dependent variable across all units of the panel. The model with individual effects and no time trend is as shown below:

$$\Delta Y_{i,t} = \alpha_i + \rho_i Y_{i,t-1} + \sum_{z=1}^{p_i} \beta_{i,z} \Delta Y_{i,t-z} + \varepsilon_{i,t} \dots \dots \dots (4.4)$$

The null hypothesis to be tested is defined as  $H_0 : \rho_i = 0$  for  $i = 1, \dots, N$  and the alternative hypothesis is  $H_1 : \rho_i < 0$  for  $i = 1, \dots, N$  and  $\rho_i = 0$  for  $i = N_1 + 1, \dots, N$ , with  $0 < N_1 \leq N$ . The errors  $\varepsilon_{i,t}$  are assumed to be independent across the units of the sample. The alternative hypothesis allows for some (but not all) of the individual series to have unit roots. Thus, instead of pooling the data, the IPS use separate unit roots test for the N cross-section units. This test is based on the Augmented Dickey-Fuller (ADF) (1980) statistics averaged across groups.

##### 4.4.1.2 Levin, Lin and Chu (LLC) (2002)

The LLC test allows for possible correlation and heteroscedasticity, though still assuming continued independence across cross-sections. The null hypothesis under the LLC is that each individual time series contains a unit root against the alternative that each time series is stationary. The LLC unit root method follows three-step procedure, with preliminary regressions and normalisations necessitated by cross-sectional heterogeneity. In the first step run a separate Augmented Dickey-Fuller regression for each cross-section of the form:

$$\Delta Y_{i,t} = (\rho_i - 1)Y_{i,t-1} + \sum_{j=1}^{p_i} \gamma_{i,j} \Delta Y_{i,t-j} + \delta_{mi} d_{mt} + v_{i,t} , \quad m = 1, 2, 3 \dots \dots \dots (4.5)$$

Where  $d_{mt}$  denotes the vector of deterministic variables,  $v_{i,t}$  denotes the residual process of the AR equation,  $\rho_i$  is the lag-order which is permitted to vary across cross-sections and is determined by choosing a  $\rho_{max}$  and then use a  $t$ -statistic of  $\gamma_{ij}$ ;  $v_{i,t}$  is assumed to be independently distributed across  $i$  and  $t$ ,  $i = 1, \dots, N, t = 1, \dots, T$ .

Thereafter estimate the long-run and short-run standard deviations and computing panel test statistics. The  $t$ -statistic  $t_{\rho}^*$  diverges to minus infinity, and thus has to be re-centered and normalised to induce convergence towards a well defined limiting distribution:

$$t_{\rho}^* = \frac{t_{\rho} - N\tilde{T}\hat{S}_{N\sigma_{\varepsilon}^2}\hat{\sigma}(\hat{\rho})\mu_{m\tilde{T}}^*}{\sigma_{m\hat{T}}} \sim N(0,1) \dots\dots\dots(4.6)$$

As T and N turns to infinity,  $t_{\rho}^*$  approaches a normal distribution. Using a one tail test, we reject the null hypothesis if test statistic is smaller than the critical value (-1.645) or if  $p < 0.05$ .

#### 4.4.2 Panel Regression Model

This study will utilise the panel regression model that incorporates individual effects. There are two options: the Fixed Effect model and the Random Effect model. This allows us to account for individual heterogeneity. Heterogeneity of countries under consideration for analysis can influence measurements of the estimated parameters (Bevan & Danbolt, 2004). Further, Serrasqueiro & Nunes (2008) highlights that developing countries differ in terms of their colonial history, their political regimes, their ideologies and religious affiliations, their geographical locations and climatic conditions, not to mention a wide range of country-specific variables. If this heterogeneity is not taken into account, it will inevitably make the results biased, no matter how large the sample is (Tiwari & Mutascu, 2010). The panel regression model is specified the same as equation 4.3 above:

$$growth_{i,t} = \beta_0 + \beta_1 lngdp_{i,t-1} + \beta_2 gfcf_{i,t-1} + \beta_3 fdi_{i,t-1} + \beta_4 pop_{i,t} + \beta_5 lntrade_{i,t} + \beta_6 lntot_{i,t} + \beta_7 labourqua_{i,t} + \eta_i + \varepsilon_{i,t} \dots\dots\dots(4.7)$$

In the **Fixed Effects model** case  $\eta_i$  and  $\varepsilon_{i,t}$  represent the decomposition of the disturbance term.  $\eta_i$  denotes unobservable individual country time-invariant specific effect and  $\varepsilon_{i,t}$  is the remainder disturbance term which varies both with individual countries and time.

When considering the **Random Effects model** the equation 4.7 will be the same. However, the case of  $\eta_i$  is presumed to have the property of zero mean, independent of individual observation error term  $\varepsilon_{i,t}$ , has constant variances  $\sigma_{\varepsilon}^2$ , and independent of the explanatory variables. The choice between the two models is done by carrying out the Hausman specification test, as explained in section 4.4.3 below.

#### 4.4.3 Hausman Specification Test

According to Tiwari & Mutascu (2010), there may be a correlation between countries' unobserved individual effects and growth determinants. If there is no correlation between countries' unobservable individual effects and growth determinants, the most appropriate way to carry out the analysis is using a panel model of random effects. On the contrary, if there is a correlation between countries' individual effects and growth determinants, the most appropriate way of carrying out the analysis is using a panel model of fixed effects. In order to assess the significance of the fixed effects (FE) versus the random effects (RE) method of panel data analysis, we will use the Hausman specification test which helps evaluate which model fits data accordingly. The test compares the parameters of the fixed and random effects model and makes conclusions on the correlation between errors and regressors.

$H_0$ : Random Effects model preferred;

$H_1$ : Fixed Effects model preferred;

The test is based on two estimates, one coefficient from the fixed effects model and one from the random effects specification. The fixed effects coefficient ( $\tilde{\alpha}_{1FE}$ ) under the  $H_0$  hypothesis is consistent and inefficient and inconsistent under  $H_1$  while random effect estimator ( $\tilde{\alpha}_{1RE}$ ) under  $H_0$  is consistent and efficient and inconsistent under  $H_1$ . The test relies mainly on estimation of the equation M below:

$$M = (\tilde{\alpha}_{1RE} - \tilde{\alpha}_{1FE})^T \times [var(\tilde{\alpha}_{1RE}) - var(\tilde{\alpha}_{1FE})]^{-1} \times (\tilde{\alpha}_{1RE} - \tilde{\alpha}_{1FE}) \sim X_{kw}^2 \dots \dots \dots (4.8)$$

If M is significant, considering the asymptotic distribution with  $kw$  representing the number of regressors within the regression, we reject  $H_0$  and we select the fixed effects model.

#### 4.5 Conclusion

This chapter established the building blocks of the study by stating the methodology and model formulation. The formulated empirical model established the various variables that are critical for the analysis of the impact of FDI flows on economic growth in the SADC region. The study made use of panel data regression techniques. Various data analytical techniques have been established including panel unit root tests, Hausman specification test to minimise errors and to obtain meaningful results.

## CHAPTER FIVE

### PRESENTATION, INTERPRETATION AND ANALYSIS OF RESULTS

#### 5.0 Introduction

Presentation, analysis and interpretation of the results from the empirical regression estimations employed in the study are done in this chapter. The chapter began with panel stationarity tests for all the variables employed in the study. The study used IPS (2003) and Levin, et al. (2002) (LLC) to test for stationarity of variables. The chapter presented results on whether FDI has a significant positive impact on economic growth in the SADC economies or not. The chapter also shed light on establishing whether the growth enhancing potential of FDI, if any, differed according to income level. Finally, the chapter closed with a discussion on the results obtained from various panel estimation procedures carried out.

#### 5.1 Descriptive Analysis

Table 5 below presents summary statistics of the variables used in the empirical model in terms of the mean, standard deviation, minimum and maximum values. The SADC regional bloc's mean GDP growth rate was 3.8 percent and 5.4 percent as the standard deviation, out of 540 observations from 15 countries from 1980-2015. The minimum rate of GDP growth recorded was -24 percent and the maximum was 55.5 percent.

**Table 5: Descriptive Statistics of Variables**

VARIABLES	MEAN	STANDARD DEVIATION	MINIMUM	MAXIMUM	OBSERVATIONS
<b>GDPGROWTH</b>	3.794432	5.354862	-23.9834	55.53382	540
<b>GDPUSMIL</b>	22 320.07	56 118.39	385.7874	332 956.6	540
<b>FDI(% OF GDP)</b>	3.329996	5.10072	-7.03961	44.19827	540
<b>GFCF</b>	21.74272	11.3689	0.00000	74.82202	540
<b>TRADE</b>	88.59955	44.37846	12.90739	233.0576	540
<b>TOT</b>	109.0715	35.77959	44.3299	312.3077	540
<b>POP</b>	5 785	6 294	191	29 765	540
<b>LABOURQUAL</b>	1.553148	1.459487	0.1	7.2	540

The mean value of real GDP for the entire sample was US\$22 320.07 million for the period 1980 to 2015 as shown in Table 5 above. During the same period, the lowest GDP in the sample was recorded at US\$385.79 million and the highest at US\$332 956.60 million. This shows a large deviation of the size of the economies as measured by the GDP levels in the SADC region. The standard deviation of US\$56 188.39 provided further evidence to that effect.

The mean FDI as a percent of GDP for the sample was 3.3 percent for the period 1980 to 2015. The minimum FDI to GDP ratio was -7 percent and the maximum was 44.2 percent. The standard deviation was recorded at 5.1 percent. This shows that the ratio of FDI to GDP was varied across the sampled countries. It also implies uniqueness of the sampled countries when it comes to FDI levels and its importance in these economies.

Table 6 below presents the correlation matrix for all the explanatory variables used in the analysis. Pearson (r) correlation was run using SATA vs 10.1. The correlation matrix provides the first rudimentary expectation of the relationship between these variables. The essence is to identify potential sources of multicollinearity in our estimation model (Ezeoha & Cattaneo, 2011).

Table 6 below shows that GDPGRR (GDP growth rate) has a positive correlation with FDI\_1, GFCF\_1, TRADE, LNTOT and LABOUR, as theoretically predicted. Although some variables like the GDP\_1, TOT, LABOUR have a weak relationship, other variables FDI\_1, GFCF\_1 and TRADE have a relatively strong relationship with GDPGRR. However, LNGDPGR\_1 and POP had unexpected signs though significantly correlated with GDPGROWTH. Still, the general direction of movement of the relationship is positive for all the variables as theoretically predicted.

**Table 6: Correlation Matrix of the Variables Included in Specification Model**

	<b>GDPGR</b>	<b>LNGDP_1</b>	<b>LNFDI_1</b>	<b>LNTRADE</b>	<b>GFCF_1</b>	<b>LNTOT</b>	<b>POP</b>	<b>LABOUR</b>
<b>GDPGR</b>	1.0000							
<b>LNGDPGR_1</b>	0.2692	1.0000						
<b>LNFDI_1</b>	0.1536	0.1800	1.0000					
<b>TRADE</b>	0.1987	0.1177	0.3788	1.0000				
<b>GFCF_1</b>	0.2257	0.1986	0.3239	0.4753	1.0000			
<b>LNTOT</b>	0.0352	0.0159	-0.1352	-0.2658	-0.0965	1.0000		
<b>POP</b>	-0.0187	0.0538	-0.0099	-0.4599	-0.2394	0.1880	1.0000	
<b>LABOURQU</b>	0.0129	-0.0868	-0.0795	0.0458	0.0732	-0.1717	-0.0157	1.0000

## 5.2 Panel Unit Root Test Results and Interpretation

Testing for stationarity of variables has often been ignored by past researchers and yet it is a central issue before making the appropriate specification. Therefore, the first step in our data analysis process was testing for a unit root in all the variables used in the study. Review of literature has identified a number of techniques that can be used for panel data stationarity tests among variables of interest. Among many unit root testing methods available for use, the study made use of IPS (2003) and Levin, et al. (2002) unit root test methods. The two methods above are the most widely used in literature. However, the main weakness of the LLC (2002) unit root method is that it assumes that the unit root process for the panel is common or homogenous. Im, et al. (2003) on the other hand, allow for heterogeneity in the dynamics of autoregressive coefficients. The two tests are used for robustness (Mahembe, 2014).

The stationarity results for all the variables used in this study are shown in Table 7 below. The results indicate that for all variables, the null hypothesis of panel unit root cannot be rejected at levels. Therefore, the results show that GDPGROWTH, FDI\_1, LNGDP\_1, GFCF\_1, LNTOT, LABOUR, POP and TRADE variables are non-stationary at levels by using IPS (2003) and Levin, et al. (2002) unit root test methods. The results of panel unit root tests, based on IPS (2003) and LLC (2002) at first difference for each variable are shown in the last two columns of Table 7. All the variables became stationary in their first difference. This implies that all the variables are integrated of order one,  $I(1)$ . It is, therefore, deemed safe to go ahead with panel data model estimations.

**Table 7: Panel Unit Root Tests**

Variables	LEVELS		FIRST DIFFERENCE	
	IPS (2003) (P-Value)	LLC (2002) (P-Value)	IPS (2003) (P-Value)	LLC (2002) (P-Value)
<b>GDPGROWTH</b>	19.2519 (1.0000)	20.8748 (1.0000)	-25.3749*** (0.0000)	-22.7009*** (0.0000)
<b>FDI_1</b>	2.97803 (0.9985)	5.94000 (1.0000)	-29.1868*** (0.0000)	27.0436*** (0.0000)
<b>LNGDP_1</b>	8.20893 (1.0000)	4.13636 (1.0000)	-10.9461*** (0.0000)	-9.66523*** (0.0000)
<b>GFCF_1</b>	2.98674 (1.0000)	2.21992 (0.9868)	-21.6502*** (0.0000)	-22.7882*** (0.0000)
<b>LNTOT</b>	2.05082 (1.0000)	2.05082 (1.0000)	-18.5865*** (0.0000)	-17.0010*** (0.0000)
<b>LABOUR</b>	1.92459 (0.9729)	5.79795 (1.0000)	-11.2407*** (0.0000)	-17.0473*** (0.0000)
<b>POP</b>	12.7410 (1.0000)	7.50814 (1.0000)	-5.43777*** (0.0000)	-5.74026*** (0.0000)
<b>TRADE</b>	022318 (0.5883)	0.17825 (0.5707)	-17.9124*** (0.0000)	-18.0639*** (0.0000)

**Notes:** \*\*\* this asterisk denote rejection of the null hypothesis at 1% level;  
P-values are shown in parenthesis ();  
Selection of lags is based on Schwarz Information Criterion (SIC).

### 5.3 Empirical Results – Impact of FDI on Economic Growth in SADC Countries

This section presents and discusses the empirical findings from static panel data regression techniques carried out to establish the impact of FDI on economic growth for the study sample. The regression results are presented in Table 8 and 9. Table 8 presents the findings for the full sample. Finally, Table 9 presents the results for the subsample: middle-income countries and low-income countries.

### 5.3.1 Overall Results

**Table 8: SADC Countries Panel Data Model Dependent Variable GDP growth per capita**

Independent Variables	MODEL 1 (RE)	MODEL 2 (RE)	MODEL 3 (RE)	MODEL 4 (RE)	MODEL 5 (RE)	MODEL 6 (FE)	MODEL 7 (FE)
<b>FDI_1</b>	0.163*** (0.049)	0.161*** (0.052)	0.099** (0.049)	0.110** (0.050)	0.061 (0.041)	0.064 (0.056)	-0.026 (0.047)
<b>LNGDPGR_1</b>		-0.083 (0.257)	0.060 (0.237)	0.017 (0.242)	1.069*** (0.243)	-0.739 (0.738)	0.682*** (0.256)
<b>GFCF_1</b>			0.092*** (0.024)	0.091*** (0.024)	0.055*** (0.020)	0.072** (0.028)	0.045* (0.025)
<b>LNTOT</b>				1.224 (0.949)	0.216 (0.807)	0.599 (1.070)	-0.499 (0.943)
<b>LABOURQUA</b>					-0.049 (0.158)	-0.034 (0.028)	-0.225 (0.255)
<b>POP</b>						0.005* (0.001)	0.003*** (0.009)
<b>TRADE</b>							0.022** (0.010)
<b>FDI*LABQUA</b>							0.016 (0.038)
<b>CONSTANT</b>	3.278 (0.277)	2.800 (4.979)	0.950 (2.238)	-4.383 (4.717)	0.479 (3.879)	3.706 (7.823)	1.594 (4.549)
<b>R<sup>2</sup></b>	0.17	0.18	0.21	0.38	0.47	0.51	0.68
<b>HAUSMAN</b>	0.98	0.92	0.98	0.98	0.78	0.00	0.00
<b>CROSS SECTION</b>	15	15	15	15	15	15	15
<b>PERIODS</b>	36	36	36	36	36	36	36
<b>TOTAL OBS.</b>	525	525	525	525	525	525	525

**Notes:** \*, \*\*, and \*\*\* these asterisks denote significance at 10%, 5% and 1% respectively.

Standard errors are shown in parenthesis ( ).

RE random effects

FE fixed effects

The study estimates the impact of FDI on economic growth in SADC countries for the period 1980 to 2015 after controlling for potential biases induced by endogeneity and country-specific effects. The empirical work started by examining only the effect of FDI on economic growth in SADC countries without including any control variables as shown in Table 8 above, Model 1. Afterwards, the study extended the model by adding six control variables one at a time. In this way, the study constructed the basic specification model for the study (Model 7). The reason behind the stepwise forward regression formulation was to see whether the key variable, FDI, significantly changed when the study augmented the number of explanatory variables.

Table 8 above presents the empirical results and the regression coefficients retained three decimal places. The section for the overall results, fixed effect model was used instead of the random effect to estimate Model 7. The choice between the fixed effect and random effect was formally done using the Hausman specification test. Table 8 shows that the Hausman test for Model 7 confirms the choice of using fixed effects estimator, as its p-value (0.00) is much less than 0.05.

Under the static fixed effect regression, in the combined sample for the SADC region for the period 1980 to 2015, the study found out that FDI exerts a negative impact on economic growth, although the coefficient of the FDI variable is not statistically significantly different from zero effectively implying that FDI has no impact on economic growth. From Model 1 to 5, FDI is statistically significant at 1 and 5 percent level. However, becomes negative when the Trade openness is added into the growth equation. The study's findings are not in line with the theoretical expectations discussed earlier in chapter three, although a number of empirical studies also found a negative relationship between FDI and economic growth as in this study. The results show that for every US\$1 increase in FDI in the SADC countries for the period 1980 to 2015, the SADC region's GDP growth per capita would shrink by US\$0.026. This implies that FDI does not seem to have an independent effect on economic growth for the panel of countries studied. This maybe because FDI flows to Africa and into the SADC countries, in particular, are channelled mainly to the extractive sector with little or no linkages with the other sectors of the host country economy. According to the AfDB (2015), the enclave nature and capital intensity (minimal employment creation opportunities) of the mining sectors in Sub-Saharan Africa have resulted in countries failing to leverage their mineral wealth. Moreover, on the overall, be it the extractive industry, manufacturing or any other sector thereof, Governments, have blamed the exploitative nature of global conglomerates for repatriating much of their proceeds and minimal reinvestments. MNCs have already figured out how to repatriate profits and pay trivial tax rates, resulting in substantial fiscal leakages. This is in line with assertions by (Ndikumana & Verick, 2008; Adams & Opoku, 2015). The findings of this study are also in line with some studies with samples which share some

characteristics with those in this study's panel (see, for example, Herzer, et al., 2008; Gui-Diby, 2014).

The coefficient on LnGDPGR\_1 (initial GDP per capita), a proxy for the general development and sophistication of institutions and convergence/divergence in per capita GDP, is positive and statistically significant at 1 percent level. This does not render support to the hypothesis of GDP per capita convergence<sup>4</sup> among SADC countries during the period under consideration. To test for convergence, Solow (1956) and Mankiw, et al. (1992), introduced initially per capita GDP as a regressant in their growth equation, with the assumption that there is convergence if the coefficient on initial per capita GDP is negative; otherwise there is divergence. The findings of this study are in sharp contrast to the predictions by Mankiw, et al. (1992) whose seminal work concluded that once investment in the physical and human capital are controlled for, cross-country data generally support per capita GDP convergence. However, a number of studies reached the same conclusion as this study (see, for example, Johnson, 2005; Aboagye & Turkson, 2013).

Domestic investment as measured by GFCF\_1 was found to put forth a positive impact on the SADC's economic growth. It was found to be statistically significant at 5 percent. A US\$1 increase in domestic investment would holding other growth determinants constant, result in a US\$0.045 percent increase in GDP growth per capita of the host country. The estimated coefficient of domestic investment is generally higher than the coefficient of FDI, implying that, domestic investment is a more important source of growth than FDI for the SADC countries. The results are in tandem with the findings of (Adams, 2009; Lean & Tan, 2010; Sghaier & Abida, 2013).

The coefficient of LnTOT, which measures the terms of trade is found to be negative but statistically insignificant. This means SADC countries suffer from unfavourable terms of trade. SADC countries are generally small open economies and net importers and further, most of these countries trade in primary commodities. The findings of this study confirm the hypothesis of long-run terms of trade worsening associated with primary commodities, especially agricultural commodities and the 'resource curse' hypothesis (Cordon, 1984). This falls short of the theoretical and empirical underpinnings discussed earlier. Trade openness (TRADE) has the same positive impact on economic growth in the SADC region. It was found to be statistically significant at 5 percent level. This suggests that the more the countries reform and open up to unrestricted movement of capital, goods and services, people and ideas, this would drive economic growth of the host country. The result for trade openness is in line with

---

<sup>4</sup> Per capita GDP convergence hypothesis as predicted by the Human Capital – Augmented Solow Growth Model (HC-ASM).

theoretical predictions. The findings of this study are consistent with that of (Asiedu, 2006; Ndikumana & Verick, 2008).

Human capital variables, POP and LABOURQUA, both exerted a positive and negative influence on economic growth in the SADC region respectively. POP which measures the labour force, its influence was in line with the theoretical prediction that labour has a positive influence on economic growth (Mankiw, et al., 1992; Lucas, 1988; Solow, 1956). Labour quality (LABOURQUA) measured the percentage of the labour force with tertiary level qualification. This was used as a proxy for the absorptive capacity of a host country. It was found to be negative and statistically insignificant. This may be attributed to the low skills sets of the SADC countries labour force. Moreover, MNCs have the capacity to efficiently remunerate their workforce and therefore reduce skilled personnel departure to the domestic firms. Meanwhile, economic theory predicts that the level of spillovers is dependent on the recipient country's absorptive capacity (Adams, 2009). This means SADC countries somehow are falling short of this important characteristic to benefit from the spillovers effect of FDI as the absorptive capacity was found to be negative for the region.

The study also included an interaction term (FDI\*LABQUA) of FDI and labour quality. This interaction term was found to be positive though statistically insignificant. This implies that labour force quality enhances spillovers from FDI. The more educated the labour force the higher the assimilation of MNCs managerial know-how, technology and competition effects. The insignificant findings may be a result of a conflict of interest between MNCs and domestic firms if they are operating in the same sector. This could result in positive horizontal FDI spillovers being limited by MNCs incentives to restrict the flow of commercial secrets to domestic firms, for example, via intellectual property rights and pay efficiency wages to reduce personnel departures (see, Lederman & Xu (2010)).

### **5.3.2 Does growth-enhancing potential of FDI depend on the income level of the host country?**

In this section, the study subdivided the sample into two groups of countries based on the income level in accordance with the World Bank methodology: middle-income countries and low-income countries (World Bank, 1996). Out of the 15 SADC countries, 9 are classified as middle-income countries and 6 as low-income countries. The reason is to assess whether the growth-enhancing potential of FDI if any, is influenced by the income level of the host country. Thus, analysing the middle and low-income countries separately allows us to see whether the impact of FDI on economic growth is stronger or weaker in middle-income countries than in low-income countries in the SADC region. The empirical regression results for the sub-samples are presented in Table 9 below.

**Table 9: SADC Low and Middle-Income Countries Dependent Variable GDP growth per capita**

<b>Independent Variables</b>	<b>LOW-INCOME COUNTRIES (RE)</b>	<b>MIDDLE-INCOME COUNTRIES (FE)</b>
<b>FDI_1</b>	-0.001 (0.076)	0.015 (0.068)
<b>LNGDPGR_1</b>	0.900* (0.482)	0.682** (0.291)
<b>GFCF_1</b>	0.108** (0.054)	0.049* (0.026)
<b>LNTOT</b>	-0.717 (1.455)	2.217* (1.192)
<b>LABOURQUA</b>	-0.068 (0.419)	0.059*** (0.022)
<b>POP</b>	0.0003** (0.0001)	0.0002 (0.0001)
<b>TRADE</b>	0.030 (0.019)	0.016** (0.011)
<b>FDI*LABQUA</b>	-0.105 (0.121)	0.029 (0.039)
<b>CONSTANT</b>	1.067 (6.946)	-8.405 (5.422)
<b>R<sup>2</sup></b>	0.68	0.36
<b>HAUSMAN</b>	0.33	0.00
<b>CROSS SECTION</b>	6	9
<b>PERIODS</b>	35	35
<b>TOTAL OBS.</b>	210	315

**Notes:** \*, \*\*, and \*\*\* these asterisks denote significance at 10%, 5% and 1% respectively.  
Standard errors are shown in parenthesis ( ).  
RE random effects  
FE fixed effects

For the middle-income countries subgroup, the fixed effect estimator was used instead of the random effect estimator. The choice was made formally using the Hausman specification test. Table 9 below shows that the Hausman test for the middle-income countries sub-sample confirms the choice of using fixed effects estimator, as its p-value is 0.000 which is far less than 0.05 significance level. For the low-income countries sub-sample, random effects estimator was used instead of the fixed effect estimator. The reason being that the random effect estimator allows for controlling of a certain amount of heterogeneity by including time dummy variables for each group. Formally, the Hausman specification test was carried which confirmed using the random effect estimator, as its p-value was 0.33 which is much higher than the 0.05 significance level.

The empirical regression results did not show many differences between the middle and low-income countries. However, the findings worth mentioning was that, in the middle-income countries subsample for the SADC region, the study found out that FDI exerts a positive impact on economic growth though insignificant. The findings highlight that a US\$1 increase in FDI for the middle-income host countries in the SADC region would result in a US\$0.015 increase in SADC's middle-income countries GDP growth per capita. Comparing with the overall sample results, it can be seen that, for the middle-income countries, the impact of FDI on economic growth is pronounced than for the overall sampled countries as well as for the low-income countries sample. The growth acceleration realised as a result of increases in FDI shown in the middle-income countries may be credited to the improved institutional reforms, especially those aimed at curbing gross fiscal leakages, and efforts to diversify the economies away from the extractive sector dominance by attracting FDI into other sectors of the economy (Cisse, 2015). The results are in line with theoretical and empirical expectations as discussed in chapter three. The findings for the low-income countries sub-sample show a negative impact of FDI on economic growth just as in the overall sample.

To establish the growth-enhancing potential of FDI, the study focused attention on two conditions according to Johnson (2005). These are the absorptive capacity in the host country measured by the labour quality, that is, the skills and managerial expertise of the labour force to assimilate MNCs knowledge capital and technology, and the level of per capita stock of physical capital as proxied by the gross fixed capital formation (GFCF) in this study. For the middle-income countries sub-sample, the study found that the domestic physical stock of capital as measured by GFCF exert a significant positive (at 10 percent significant level) influence on SADC's economic growth for the period 1980 to 2015. The estimated coefficient of GFCF\_1 was higher than the coefficient of FDI, implying that, domestic investment is a more important source of growth than FDI. The results are in tandem with the findings of (Adams, 2009; Lean & Tan, 2010; Sghaier & Abida, 2013) the same as for the overall sample.

It is interesting to note that, the impact of GFCF was much higher for the low-income subgroup than for the middle-income countries sub-group. The findings show that SADC' GDP per capita would increase by US\$0.108 for the low-income countries compared to US\$0.049 for the middle-income countries for each US\$1 increase in GFCF. This is presumably a result of the differences in size of the physical stock of capital between the low and middle-income countries in the SADC region. The size of the physical stock of capital is important for it has implications for the returns to scale on investment. Therefore, middle-income countries tend to have larger per capita stock of physical capital suggesting that there should be diminishing returns to investment. It is the opposite case for the low-income countries which tend to have a small stock of physical capital implying increasing returns to investment. However, this does not occur in a vacuum, there are other factors to consider like the market structure of the host country too (Johnson, 2005).

FDI spillovers can be realised much more if the host country has the capacity to absorb such spillovers. To put that into context, for the middle-income countries sub-sample in the SADC region for the period 1980 to 2015, the study found that the absorptive capacity of the host country as measured by the quality of the labour force (LABOURQUA), has a positive and significant influence on economic growth. This would imply that the growth-enhancing potential of FDI through spillovers will be much greater for the middle-income countries given the positive and significant influence it has on economic growth.

The absorptive capacity (LABOURQUA) of the low-income countries was found to be negative and statistically insignificant. This implies that low-income countries in the SADC region are failing to absorb knowledge capital and technology spillovers from MNCs because their labour force is not skilled enough to assimilate foreign know-how that is high enough to accelerate economic growth. Although this may be the case, there are other factors that may be preventing technological transfer and diffusion from MNCs, for instance, patents and copyrights and also MNCs have the capacity to efficiently remunerate their workforce and therefore reduce skilled personnel departure to the domestic firms (Adams, 2009).

The study also included an interaction term between FDI and labour quality (FDI\*LABQUA). This interaction term in the middle-income countries sub-sample was found to be positive though statistically insignificant. This suggests that the quality of the labour force increases spillovers from FDI. As in the overall sample, presumably, the insignificant findings may be a result of a conflict of interest between MNCs and domestic firms, especially, if they are operating in the same sector. Meaning to say MNCs have the incentives to restrict the flow of commercial secrets to domestic firms, for example, through intellectual property rights and paying efficiency wages to reduce personnel departures (see, Lederman & Xu (2010)).

However, for the low-income countries sub-sample, the study found the opposite to that of the middle-income sub-sample. The interaction of FDI and labour quality was found to be negative. This is presumably a result of restrictive nature of MNCs to share their trade secrets and their power to retain their labour. More especially given that low-income countries hardly have well-crafted investment policies (especially the ones to deal with intellectual property rights and negotiating terms for foreign ownership of entities and so forth) to maximise the absorption of foreign knowledge capital and technology.

No evidence of income convergence was found in this study for both sub-samples in the SADC region for the period 1980 to 2015 just as in the overall sample. This is in line with earlier empirical studies that have mostly failed to find evidence of convergence (Johnson, 2005).

As for the international trade indicators, terms of trade and trade openness, the study found that the low-income countries suffer from unfavourable terms of trade. Trade openness has a positive impact on economic growth for the for both low and middle-income countries subsamples in the SADC region though it was found to be statistically insignificant for the low-income sub-sample.as for the middle-income countries, trade openness was found to be statistically significant at 5 percent. This implies that the more the countries reform and open up to unrestricted international trade, this would serve as a catalyst for economic growth for the host country. The result for trade openness is in line with theoretical predictions as for the overall sample above.

Therefore, the results of the GFCF, labour quality and the interaction term between FDI and labour quality, which measures the conditions for realising the growth-enhancing potential of FDI inflows, are indicative that they are positive and exert a positive influence on economic growth for the middle-income economies in the SADC region than for the low-income economies for the period 1980 to 2015. With exception of a positive impact of GFCF for the low-income countries, the study can conclude that the growth-enhancing potential of FDI is higher in middle-income countries than in the low-income countries in the SADC region in the period 1980 to 2015.

## 5.4 Conclusion

As highlighted above, the main aim of the study was to establish how FDI impacted on the SADC countries' economic growth. From the empirical work carried out, on the overall, the findings of the study show a negative effect of FDI on economic growth in the SADC countries. The findings are not in tandem with theoretical predictions from growth theorists. The findings of the study imply that FDI does not seem to have an independent effect on economic growth for the panel of countries in the SADC region. This maybe because FDI flows to Africa and into the SADC countries, in particular, are channelled mainly to the extractive sector with little to no linkages with the other sectors of the host country economy. In order to ascertain whether the growth-enhancing potential of FDI is dependent on the income level, the findings of the study show that the growth-enhancing potential of FDI is higher in middle-income countries than low-income countries in the SADC region.

## CHAPTER SIX

### SUMMARY, CONCLUSION AND POLICY RECOMMENDATIONS

#### 6.0 Introduction

This chapter summarises and concludes the study. It also provides recommendations for policy. The first section provides a brief summary of each chapter of the dissertation. A discussion of the findings of the study and its policy implications is carried out in the second section of this chapter. In the last section, limitations of the study are presented as well areas of further research and this section, therefore, marks the end of this study.

#### 6.1 Summary of the Main Findings

The study aimed to empirically examine the impact of FDI on economic growth in the SADC countries for the period 1980-2015. The study also aimed to establish whether the growth-enhancing potential of FDI is dependent on the income level of the host country. To achieve these two objectives, the study implemented panel data analysis techniques, from testing for stationarity in the data itself to regression model estimation using the fixed effects and random effects panel data method. This section provides a summary of the main findings per chapter.

The study noted extraordinary increases in global FDI flows between 1980 and 2015. Global FDI flows grew from US\$50 billion in 1980 to US\$1.8 trillion in 2015. In 2015 alone, global flows of FDI rose by 40 percent to US\$1.8 trillion, the highest since the global economic and financial crisis began in 2008. FDI flows into the SADC countries also rose from a mere US\$372 million in 1980 to US\$17.9 billion in 2015, although remained relatively low compared to inflows into other regions (for example developing Asia).

Chapter 2 explored the FDI and GDP trends in the SADC region and policies implemented, both at a country and regional level, to attract FDI and to register robust growth in GDP. It was noted that SADC member states recognise the importance of a favourable investment climate to broaden the horizons of their economies, creating new labour skills, developing infrastructure, and enhancing their participation in regional and global value chains. Therefore, over the years, the regional bloc fashioned policies, protocols and processes intended to boosting FDI and enhancing economic growth. Among them include the SADC Treaty, Finance and Investment Protocol, Investment Policy Framework etc. In spite of these endeavours, there are still disparities in the region's investment policy frameworks but it is evident that all countries have made efforts to reform over the last five to ten years.

It has also been noted that there is wide disparity among SADC countries in attracting and retaining FDI, including across national sectors. In addition, few countries have succeeded to attract significant amounts of investment beyond the extractive sector. This suggests that the investment regime could be still inadequate or lack consistency.

Chapter 3 reviewed the selected literature that relates to the impact of FDI on economic growth. Two main theories of economic growth were discussed in the foregoing sections namely: the neoclassical growth theory and the new endogenous growth theory. The FDI spillovers as a source of long-term economic growth were also discussed. The theoretical exploration demonstrated that FDI is a key driver of economic growth of the host country. Through both exogenous and endogenous growth analysis, it was noted that FDI contributes directly and indirectly to economic growth and that the host country's growth may attract more FDI. Empirical literature review, on the other hand, discussed previous studies on the impact of FDI on economic growth. However, mixed results were found by different scholars, although most of the studies reviewed found a positive link between FDI and economic growth.

Chapter 4 established the building blocks of the study by stating the methodology and model formulation. The formulated empirical model established the various variables that are critical for the analysis of the impact of FDI flows on economic growth in the SADC region. The study made use of panel data regression techniques. Various data analytical techniques have been established including panel unit root tests, Hausman specification test to minimise errors and to obtain meaningful results.

Empirical results are summarised below

As highlighted above, the main aim of the study was to establish how FDI impacted economic growth in the SADC countries. From the empirical work carried out, on the overall, the findings of the study show a negative effect of FDI on economic growth in the SADC countries. The findings are not in tandem with theoretical predictions from growth theorists and some empirical studies carried out on the same topic. The findings of the study imply that FDI does not seem to have an independent effect on economic growth for the panel of countries in the SADC region for the period 1980 to 2015. This maybe because FDI flows to Africa and into the SADC countries, in particular, are channelled mainly to the extractive sector with little to no linkages with the other sectors of the host country economy. In order to ascertain whether the growth-enhancing potential of FDI is dependent on the income level, the findings of the study show that the growth-enhancing potential of FDI is higher in middle-income countries than low-income countries in the SADC region.

## 6.2 Conclusion and Policy Recommendations

Several significant, insightful, and far-reaching implications emerge from the findings of this study. First, examining the full sample, the study finds a negative impact of FDI on economic growth in the SADC countries. The findings of the study imply that FDI does not seem to have an independent effect on economic growth for the panel of countries in the SADC region. Further, by examining subsamples based on the level of income to ascertain whether the growth-enhancing potential of FDI depends on income level, the study found a positive effect of FDI for the middle-income countries subsample and negative effect for the low-income countries. Therefore, the findings of the study show that the growth-enhancing potential of FDI is higher in middle-income countries than low-income countries in the SADC region.

The findings of this study confirm that FDI into African countries (SADC countries, in particular) has not resulted in growth. This is mainly because foreign investors have a tendency of repatriating their earnings back to their country of origin. Secondly, since MNCs contribute to host country's revenue via taxes, mismanagement and corruption in the host country systems tend to result in substantial leakages of such revenues.

It is recommended that the SADC countries continue to craft policies that promote domestic investment, infrastructure development, education, research and development among other drivers of growth. These have been found to drive the economic growth far more than FDI. However, this does not mean that policies aimed at attracting FDI should be halted altogether, but they should be designed in such a way that they attract FDI in other sectors like manufacturing, rather than just the extractive industry.

Revenue collection system should also be watertight to avoid leakages of revenue via unscrupulous means. SADC countries should start making an effort to diversify their economies away from the extractive sectors by attracting FDI in other sectors of the economy. For growth to be realised, It is very important for the regulatory environment to be conducive to provide the necessary guarantees and protections that foreign investors need to venture outside of mining. Further, the SADC region should continue to pursue regional integration initiatives through the removal of tariffs and non-tariff barriers to trade among themselves. This would attract more market-seeking FDI and in turn boost economic growth.

### **6.3 Limitations of the Study and Areas of Further Research**

The main limitations of the study are that generally, the studies on FDI are rocked by measurement issues and this study is no exception. Thus, it ran the risk of omitted variables due to data unavailability.

The study used FDI flows measured annually. This occurrence does not distinguish the effect of each sectors' contribution to economic growth. Quarterly data could have been more appropriate in estimating the effects of FDI on economic growth in the SADC region. Nonetheless, the study utilised annual data to accommodate the unavailability of quarterly data.

Since this study did not investigate the impact of sectoral FDI into SADC countries or make use of data on sectoral FDI to explain economic growth in the SADC region. Therefore, this could be any area where future research may focus on.

## 6. REFERENCES

Abaid, M., 2013. *The Impact of Foreign Direct Investment and Exports on Economic Growth: Case Study of Countries of MENA Region 1980 to 2011*. Southern Illinois: Southern Illinois University Carbondale .

Aboagye, S. & Turkson, F. E., 2013. *An Empirical Investigation of Per Capita Income Convergence Hypothesis in Sub-Saharan Africa*, Accra, Ghana: CSAE .

Adams, S., 2009. Foreign Direct Investment, Domestic Investment, and Economic Growth in Sub-Saharan Africa. *Journal of Policy Modeling*, Volume 31, pp. 939-947.

Adams, S. & Opoku, E. E. O., 2015. Foreign Direct Investment, Regulations and Growth in Sub-Saharan Africa. *Economic Analysis and Policy*, Volume 47, pp. 48-56.

Adewumi, S., 2006. *The Impact of FDI on Growth in Developing Countries: An African Experience*. Jonkoping: Jonkoping International Business School, Jonkoping University.

AfDB, 2009. *Seychelles: Interim Strategy Note 2009-2010*, Tunis-Belvedere: African Development Bank.

AfDB, 2011. *Angolan Country Strategy Paper 2011 - 2015*, Tunis-Belvedere: African Development Bank.

AfDB, 2012a. *African Economic Outlook 2012*, Tunis-Belvedere, Tunisia: African Development Bank.

AfDB, 2012b. *African Economic Outlook: Namibia*, Tunis-Belvedere: African Development Bank.

AfDB, 2013. *Democratic Republic of Congo: 2013-2017 Country Strategy Paper*, Tunis-Belvedere, Tunisia: African Development Bank.

AfDB, 2015. *African Economic Outlook: Zimbabwe 2015*, Tunis-Belvedere, Tunisia: African Development Bank.

AfDB, 2017. *African Development Bank Group*. [Online]

Available at: <https://www.afdb.org/en/countries/southern-africa/botswana/botswana-and-the-afdb/>

[Accessed 9 April 2017].

Agrawal, G., 2015. Foreign Direct Investment and Economic Growth in BRICS Economies: A Panel Data Analysis. *Journal of Economics, Business and Management*, 3(4), pp. 421-424.

Alfaro, L., Chanda, A., Kalemli-Ozcan, S. & Sayek, S., 2003. Foreign Direct Investment and Economic Growth: The Role of Local Financial Markets. *Journal of International Economics*, pp. 1-27.

Al-Iriani, M. & Al-Shamsi, F., 2006. *Foreign Direct Investment and economic Growth in GCC Countries: A Causality Investigation Using Heterogeneous anel Analysis*. Sana'a: Sana'a University.

Arvanitis, A., 2006. *Foreign Direct Investment in South Africa: Why has It Been So Low?*, Washington DC: International Monetary Fund.

Asiedu, E., 2006. *Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability*, Kansas: University of Kansas.

Asiedu, E., 2013. *Foreign Direct Investment, Natural Resources and Institutions*, London: International Growth Centre.

Ayanwale, A. B., 2007. *FDI and Economic Growth in Nigeria: Evidence from Nigeria*, Nairobi: AERC Research Paper 165.

Azman-Saini, W. N. W., Baharumshah, A. Z. & Law, H. S., 2010. Foreign Direct Investment, Economic Freedom and Economic Growth: International Evidence. *Economic Modelling*, Volume 27, pp. 1079-1089.

Banco Santander, 2016. *Banco Santander*. [Online]  
Available at: <https://en.portal.santandertrade.com/establish-overseas/botswana/investing-3>  
[Accessed 10 April 2017].

Barro, R. & Lee, .. W., 2016. *Barro-Lee Educational Attainment Dataset v2.1*. [Online]  
Available at: <http://www.barrolee.com/>  
[Accessed 18 February 2017].

Barro, R. & Sala-I-Martin, X., 1991. Convergence Across States and Regions. *Brookings Papers on Econoic Activity*, 1991(1), pp. 107-182.

BEBA, 2016. *USA Department of State*, Washington DC: Bureau of Economic and Business Affairs.

Bevan, A. A. & Danbolt, J., 2004. Testing for Inconsistencies in the Estimation of UK Capital Structure Determinants. *Applied Financial Economics*, 14(1), pp. 55-66.

BITC, 2015. *Botswana Investment and Trade Centre Annual Report 2015*, Gaborone, Botswana: Botswana Investment and Trade Centre.

Blomstrom, M. & Kokko, A., 1998. Multinational Corporations and Spillovers. *Journal of Economic Surveys*, 12(2), pp. 1-31.

Bonga, W. G., 2014. *Economic Policy Analysis in Zimbabwe: A Review of Zimbabwe Economic Policies*, Harare: SSRN.

Borensztein, E., Gregorio, J. D. & Lee, J.-W., 1998. How Does Foreign Direct Investment Affect Economic Growth?. *Journal of International Economics*, Volume 45, pp. 115-135.

Boyd, J. H. & Smith, B. D., 1992. Intermediation and the Equilibrium Allocation of Investment Capital: implications for Economic Development. *Journal of Monetary Economics*, Volume 30, pp. 409-432.

Carkovic, M. & Levine, R., 2002. *Does Foreign Direct Investment Accelerate Economic Growth?*, Minneapolis: University of Minnesota.

Carkovic, M. & Levine, R., 2003. *Does Foreign Direct Investment Accelerate Economic Growth?*, s.l.: University of Minnesota.

Chen, E. K. Y., 1992. Changing Pattern of Financial Flows in the Asia-Pacific Region and Policy Responses. *Asian Development Reviews*, Volume 10, pp. 46-85.

Choe, J., 2003. Does Foreign Direct Investment and Growth Domestic Investment Promote Economic Growth. *Review of Development Economics*, 7(1), pp. 44-57.

Cisse, D., 2015. *Globalriskinsights.com*. [Online]  
Available at: <http://globalriskinsights.com/2015/07/angola-enjoys-post-war-fdi-boom/>  
[Accessed 30 January 2017].

Cobb, C. & Douglas, P. H., 1928. A Theory of Production. *American Economic Review*, Volume 18, pp. 139-165.

Cordon, M., 1984. Booming Sector and Dutch Disease Economics: Survey and Consolidation. *Oxford Economic Papers*, Volume 36, pp. 359-380.

De Jager, J., 2004. *Exogenous and Endogenous Growth*. Pretoria: University of Pretoria ETD.

- Dhrifi, A., 2015. Foreign Direct Investment, Technological Innovation and Economic Growth: Empirical Evidence Using Simultaneous Equations Model. *International Review of Economics*, 62(4), pp. 381-400.
- Doan, C., 2010. *FDI and Economic Growth in Developing Countries: The Growth Effects of Vertical, Horizontal and Export-Platform FDI*. RM Houten: Erasmus University of Rotterdam.
- Durham, J. B., 2004. Absorptive Capacity and the Effects of Foreign Direct Investment and Equity Foreign Portfolio Investment on Economic Growth. *European Economic Review*, Volume 48, pp. 285-306.
- Elboiashi, H. A. T., 2011. *The Effects of FDI and Other Foreign Capital Flows on Growth and Investment in Developing Countries*. Glasgow: University of Glasgow.
- Ezeoha, A. E. & Cattaneo, N., 2011. *FDI Flows to Sub-Saharan Africa: The Impact of Finance, Insitution and Natural Resource Endowment*. Grahamstown, CSAE .
- Farole, T. & Winkler, D., 2014. *Making Foreign Direct Investment Work for Sub-Saharan Africa: Local Spillovers and Competitiveness in Global Value Chains*. Washington D. C: The World Bank.
- Foster, V. & Benitez, D. A., 2011. *The Democratic Republic of Congo's Infrastructure: A Continental Perspective. Policy Research Working Paper No. 5602*, Washington DC: The World Bank.
- Frankel, J., 2010. *Mauritius: Africa Success Story*. Accra, Havard Kennedy School, Fuculty Research Working Paper Series.
- Gabriela, S., 2008. *FDI role in Promoting Economic Growth - An International Review*, Cluj-Napoca: MASCA SERBU.
- Gechamo, T. Z., 2012. *Determinants of Foreign Direct Investment Inflows to Sub-Saharan Africa: A Panel Data Analysis*. Sodertorns Hogskola: Sodertorns University.
- Gelb, S. & Black, A., 2004. Foreign Direct Investment in South Africa. In: S. Estrin & K. E. Meyer, eds. *Investment Strategies in Emerging Markets*. Cheltenham: Edward Elgar Press.
- Ghosh, R. A. & Van den Berg, H. F., 2006. Foreign Direct Investment and Economic Growth: A Time Series Approach. *Global Economy Journal*, 6(1), pp. 1-19.
- Goldman Sachs, 2013. *Two Decades of Freedom - A 20-Year Review of South Afrrica*, Johannesburg: Goldman Sachs.

Government of Madagascar, 2006. *Madagascar Action Plan 2007-2012: A Bold and Exciting Plan for Rapid Development*, Antananarivo: Government of Madagascar.

Government of Malawi, 2012. *Malawi Economic Recovery Plan (MERP)*, Lilongwe: Government of Malawi.

Government of South Africa, 1994. *Government of South Africa*. [Online]  
Available at: <http://www.gov.za/sites/www.gov.za/files/governmentgazetteid16085.pdf>  
[Accessed 2 February 2017].

Government of Zimbabwe, 2013. *Zimbabwe Agenda for Sustainable Socio-Economic Transformation 2013-2018*, Harare: Government of Zimbabwe.

Grossman, G. & Helpman, E., 1991. *Innovation and Growth in the Global Economy*.  
Massachusetts: MIT Press Cambridge.

Gui-Diby, S. L., 2014. Impact of Foreign Direct Investment on Economic Growth in Africa: Evidence from Three Decades of Panel Data Analyses. *Research in Economics*, Volume 68, pp. 248-256.

Gutu, M., Anastasiadou, Omar, M. & Osei, C., 2017. Foreign Direct Investment in Zimbabwe and Botswana: The Elephant in the Room. In: A. Ahmed, ed. *Managing Knowledge and Innovation for Business Sustainability in Africa*. s.l.:Springer International Publishing, pp. 167-194.

Hanousek, J., Kocenda, E. & Maurel, M., 2010. *Direct and Indirect Effects of FDI in Emerging European Markets: A Survey and Meta-analysis*, Michigan: William Davidson Institute Working Paper Number 976.

Hassan, F. M. A. & Ojo, O., 2002. *Lesothos Development in a Challenging Environment*, Abidjan, Ivory Coast: The African Development Bank.

Hermes, N. & Lensink, R., 2003. Foreign direct Investment, Financial Development and Economic Growth. *Journal of Development Studies*, Volume 38, pp. 1-42.

Herve, D. B. G., 2016. Financial Integration, Foreign Direct Investment and Growth: Panel Data Analysis for West African Economic Nonetary Union (WAEMU). *Applied Economics and Finance*, 3(4), pp. 48-56.

Herzer, D., Klsen, S. & Nowak-Lehmann, F., 2008. In Search of FDI-led Growth in Developing Countries: The Way Forward. *Economic Modelling*, Volume 25, pp. 793-810.

- Hlongwane, X., 2011. *The Employment Spillover of Foreign Direct Investment and Host Country Productivity*, Pretoria: University of Pretoria.
- Hoekman, B. & Javorcik, B., 2006. Lessons from Empirical Research on Technology Diffusion through Trade and Foreign Direct Investment. In: B. Hoekman & B. Javorcik, eds. *Global Integration and Technology Transfer*. Washington DC: Palgrave/World Bank, pp. 1-28.
- Hymer, S. H., 1976. *The International Operations of National Firms: A Study in Direct Foreign Investment*, Cambridge, MA: MIT Press.
- Ikhide, S. I., 2006. *Review of Foreign Direct Investment (FDI) and Domestic Investment: The Experience of Developing Countries*, Windhoek: Bank of Namibia.
- IMF, 2012. *Regional Economic Outlook Sub-Saharan Africa: Maintaining Growth in an Uncertain World*, Washington DC: International Monetary Fund.
- Im, K., Pesaran, M. & Shin, Y., 2003. Testing for Unit Roots in Heterogenous Panels. *Journal of Econometrics*, 115(1), pp. 53-74.
- Jallab, M. S., Gkakou, M. B. P. & Sandretto, R., 2008. *Foreign Direct Investment, Macroeconomic Instability and Economic Growth in MENA Countries*, Écully : GATE Groupe d'Analyse et de Théorie Économique.
- Javorcik, B. S., 2004. Does Foreign Direct Investment Increase the Productivity of Domestic Firms? In Search of Spillovers Through Backward Linkages. *The American Economic Review*, 94(3), pp. 605-627.
- Jawaid, S. T. & Raza, S. A., 2012. *Foreign Direct Investment, Growth Convergence Hypothesis: A Cross Country Analysis*, Karachi, Pakistan: Munich Personal RePEc Archive (MPRA).
- Jenkins, C. & Thomas, L., 2002. *Foreign Direct Investment in Southern Africa: Determinants, Characteristics and Implications for Economic Growth and Poverty Alleviation*, London: CSAE.
- Johnson, A., 2005. *The Effects of FDI Inflows on Host Country Economic Growth*, Jonkoping: Jönköping International Business School.
- Jugurnath, B., Chuckun, N. & Fauzel, S., 2016. *Foreign Direct Investment and Economic Growth in Sub-Saharan Africa: An Empirical Study*, Reduit, Mauritius: Scientific Research Publishing Inc.

- Juma, M. A., 2012. *The Effect of Foreign Direct Investment on Growth in Sub-Saharan Africa*. Amherst: Amherst College.
- Kabelwa, G., 2006. *Potential Impacts of FDI on Economic Development in Tanzania*. Dar-es-Salaam, Economic and Social Research Foundation (ESRF).
- Kazembe, P. & Namizinga, N., 2007. *The Impact of Foreign Direct Investment on Development: Policy Challenges for Malawi*, Lilongwe: Government of Malawi, Ministry of Industry, Trade and Private Sector Development.
- Kganyago, L., 2012. *The Impact of the Eurozone and Global Financial Crisis on South Africa*. Pretoria, South African Reserve Bank.
- Kobrin, S., 2005. The Determinants of Liberalisation of FDI Policy in Developing Countries: 1991-2001. *Transnational Corporations*, 14(1), pp. 67-103.
- Lean, H. & Tan, B., 2010. Linkages Between Foreign Direct Investment, Domestic Investment and Economic Growth in Malaysia. *Econ. Coop. Dev.*, 32(4), pp. 75-96.
- Lederman, D. & Xu, L. C., 2010. *FDI in Southern Africa: Microeconomic Consequences and Macro Causes*, Washington, D.C: World Bank.
- Lensink, R. & Morrissey, O., 2006. Foreign Direct Investment: Flows, Volatility, and Impact on Growth. *Review of International Economics*, 14(3), pp. 478-493.
- Lesotho Review, 2015. *The Lesotho Review*. [Online]  
Available at: <http://www.lesothoreview.com/foreign-trade-investment-2015.php>  
[Accessed 26 April 2017].
- Levin, A., Lin, C. F. & Chu, C.-S. J., 2002. Unit Root Test in Panel Data: Asymptotic and Finite Sample Properties. *Journal of Econometrics*, Volume 108, pp. 1-22.
- Lucas, R. E., 1988. On the Mechanics of Economic Development. *Journal of Monetary Economics*, 22(1), pp. 1-42.
- Mahembe, E., 2014. *Foreign Direct Investment Inflows and Economic Growth in SADC Countries - A Panel Data Approach*, Pretoria: University of South Africa.
- Mahembe, E. E. & Odhiambo, N. M., 2015. Does Foreign Direct Investment Cause Economic Growth? A Dynamic Panel Data Analysis for SADC Countries. *International Journal of Emerging Markets*, 11(3), pp. 316-332.

Malawian Investment and Trade Centre, 2013. *Malawian Investment and Trade Centre*.  
[Online]

Available at: <http://www.mitc.mw/index.php?Itemid=648>

[Accessed 29 April 2017].

Mallick, S. & Moore, T., 2006. *Foreign Capital in a Growth Model*. Crete, European Economics and Finance Society (EEFS).

Mankiw, G., Romer, D. & Weil, D., 1992. A contribution to the Empirics of Economic Growth. *The Quarterly Journal of Economics*, 107(2), pp. 407-437.

Markowitz, C., 2016. *South African Institute of International Affairs*. [Online]

Available at: <http://www.polity.org.za/article/the-rise-of-sustainable-fdi-emerging-trends-in-the-sadc-region-2016-09-13>

[Accessed 5 November 2016].

Matjekana, K. S. M. & Masipa, T. S., 2015. *Does Foreign Direct Investment and Exports Translate to Economic Growth and Job Creation in South Africa?*, s.l.: ESSA.

Melnyk, L., Kubatko, O. & Pysarenko, S., 2014. The Impact of Foreign Direct Investment on Economic Growth: Case of Post Communism Transitional Economies. *Problem and Perspectives in Management*, 12(1), pp. 17-24.

Michalowski, T., 2012. *Foreign Direct Investment in Sub-Saharan Africa and its Effects on Economic Growth of the Region*, Gdansk: Institute of International Business University of Gdansk.

Mouzinho, A., 2016. *Understanding the Angolan FDI Regulatory Landscape*, Johannesburg: South African Institute of International Affairs.

Muradzikwa, S., 2002. *Foreign Investment in SADC*, Cape Town: Development Policy Research Unit, Working Paper 02/67.

Nahidi, M. M. & Badri, A. K., 2014. The Effect of Foreign Direct Investment on Economic Growth. *International Journal of Management, Accounting and Economics*, 1(2), pp. 175-184.

National Agency for the Promotion of Investment, 2016. *Volume of Foreign Direct Investment*, Kinshasa, DRC: National Agency for the Promotion of Investment.

Ndikumana, L. & Verick, S., 2008. The Linkages Between FDI and Domestic Investment: Unravelling the Developmental impact of Foreign Investment in Sub-Saharan Africa. *Development Policy Review*, 26(6), pp. 713-726.

Nowbutsing, B., 2009. *Smartech.gatech.edu*. [Online]

Available at:

[https://smartech.gatech.edu/bitstream/handle/1853/35284/1245002088\\_BN\\_1.pdf](https://smartech.gatech.edu/bitstream/handle/1853/35284/1245002088_BN_1.pdf)

[Accessed 8 August 2016].

OECD, 2002. *African Economic Outlook: Namibia*, Paris: Organisation for Economic Cooperation and Development.

OECD, 2008. *OECD Benchmark Definition of Foreign Direct Investment*. 4th ed. Paris: Organisation for Economic Co-operation and Development.

OECD, 2013. *OECD Investment Policy Reviews: Botswana*, Paris, France: Organisation for Economic Cooperation and Development.

OECD, 2013. *OECD Investment Policy Reviews: Mozambique*, Paris: Organisation for Economic Cooperation and Development.

OECD, 2015. *Addressing Developing Challenges in Southern Africa: An Investment Policy Framework for Southern African Development Community*, Paris: Organisation for Economic Cooperation and Development.

Ogutcu, M., 2002. *Foreign Direct Investment and Regional Development: Sharing Experiences from Brazil, China, Russia and Turkey*, s.l.: Organisation For Economic Cooperation and Development.

Oxford Policy Management, 2013. *The Impact of Mining in the Democratic Republic of Congo*, s.l.: Oxford Policy Management.

Ozturk, I., 2007. Foreign Direct Investment - Growth Nexus: A Review of the Recent Literature. *International Journal of Applied Econometrics and Quantitative Studies*, 4(2), pp. 79-98.

Pigka-Balanika, V., 2011. *The Impact of Trade Openness on Economic Growth: Evidence From Developing Countries*, s.l.: Erasmus Universiteit Rotterdam, Master Thesis.

Regimana, E. V., 2012. *Foreign Direct Investment and Economic Growth in Small Island Economies: The Case of Solomon Islands*. Palmerston North: Massey University.

Rodrik, D., 2003. *Appel Inaugural Lecture*. s.l.:Columbia University.

Romer, D., 1986. Increasing Returns and long Run Growth. *The Journal of Political Economy*, 94(5), pp. 1002-1037.

Romer, P., 1993. Idea Gaps and Object Gaps in Economic Development. *Journal of Monetary Economics*, 32(3), pp. 543-573.

Ross, D. C., 2014. *Mozambique Rising: Building a New Tomorrow*. Washington DC: International Monetary Fund.

SADC Statistics, 2014. *Southern African Development Community*. [Online] Available at: <http://www.sadc.int/information-services/sadc-statistics/#Yearbook> [Accessed 26 January 2017].

SADC, 1992. *Declaration and Treaty of the Southern African Development Community*, Kinshasa: SADC.

SADC, 1996. *Protocol on Trade*. Gaborone: Southern African Development Community.

SADC, 2006. *Protocol on Finance and Investment*. Maseru: Southern African Development Community.

Sattarov, K., 2012. *Determinants of Foreign Direct Investment in Transition Economies: A Case Study of Kazakhstan and Uzbekistan*. s.l.:UMEA UNIVERSITET.

Seetanah, B. & Khadaroo, A. J., 2007. *Foreign Direct Investment And Growth: New Evidences from Sub-Saharan African Countries*, Pointes-Aux-Sables Reudit : Centre for the Study of African Economies.

Sengupta, S. & Ntembe, A., 2015. *US Foreign Direct Investments and Economic Growth in Sub-Saharan Africa: Evidence from Panel Data*. [Online] Available at: <http://ssrn.com/abstract=2775323> [Accessed 26 June 2016].

Serrasqueiro, Z. & Nunes, M., 2008. Determinants of Capital Structure: Comparison of Empirical Evidence from the Use of Different Estimators. *Journal of Applied Economics*, 5(1), pp. 14-29.

Seyoum, M., Wu, R. & Lin, J., 2015. Foreign Direct Investment and Economic Growth: The Case of Developing African Economies. *Social Indicators Research*, 122(1), pp. 45-64.

- Sghaier, I. M. & Abida, Z., 2013. The Effect of Foreign Direct Investment, Financial Development and Economic Growth: Empirical Evidence from North African Countries. *Journal of International and Global Economic Studies*, 6(1), pp. 1-13.
- Solow, R. M., 1956. A Contribution to the Theory of Economic Growth. *The Quarterly Journal of Economics*, 70(1), pp. 65-94.
- Soumia, Z. & Abderrezak, B., 2013. *Foreign Direct Investment, Financial Integration, and Growth: Panel Data Analysis for North African Countries*. Nottingham, GEP.
- Suleiman, N. N., Kaliappan, S. R. & Ismail, N. W., 2013. Foreign Direct Investment and Economic Growth: Empirical Evidence from Southern Africa Customs Union (SACU) Countries. *Journal of Economics and Management*, 7(1), pp. 136-149.
- Swan, T. W., 1956. Economic Growth and Capital Accumulation. *Economic Record*, 32(2), pp. 334-361.
- Tagg, S., 2001. *FDI in SADC: Who is Investing in What and Where?*, Cape Town: Development Policy Research Unit.
- Tiwari, A. & Mutascu, M., 2011. Economic Growth and FDI in Asia: A Panel Data Approach. *Economic Analysis and Policy*, 41(2), pp. 173-187.
- Todaro, M. & Smith, S., 2012. *Economic Development*. 11th ed. Boston, M.A: Pearson.
- Toulaboe, D., Terry, R. & Johansen, T., 2008. Foreign Direct Investment and Economic Growth in Developing Countries. *Southwestern Economic Review*, pp. 155-170.
- Tsai, P. L., 1994. Determinants of Foreign Direct Investment and Its impact on Economic Growth. *Journal of Economic Development*, 19(1), pp. 137-163.
- UNCTAD, 2001. *Investment Policy Review: Mauritius*, New York and Geneva: United Nations.
- UNCTAD, 2003. *Investment Policy Review of Lesotho*, Geneva, Switzerland: United Nations Conference on Trade and Development.
- UNCTAD, 2016a. *United Nation Conference on Trade and Development*. [Online] Available at:  
[http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS\\_ChosenLang=en](http://unctadstat.unctad.org/wds/ReportFolders/reportFolders.aspx?sCS_ChosenLang=en)  
[Accessed 26 January 2016].

UNCTAD, 2016b. *World Investment Report 2016*, Geneva: United Nations Conference on Trade and Development.

UNCTAD, 2016. *World Investment Report 2016*, Geneva: United Nations Conference on Trade And Development.

UNESCO, 2015. *UNESCO Science Report: Towards 2030*. 2nd ed. Paris: UNESCO Publishing.

Wang, J. Y. & Blomstrom, M., 1992. Foreign Investment and Technology Transfer: A Simple Model. *European Economic Review*, 36(1), pp. 137-155.

Wan, X., 2010. A Literature Review on the Relationship between Foreign Direct Investment and Economic Growth. *International Business Research*, 3(1), pp. 52-56.

Wentworth, L., Schoeman, M. & Langalanga, A., 2015. *Foreign Direct Investment and Inclusive Growth in Southern Africa*, Cape Town: University of Cape Town.

World Bank, 1996. *World Debt Tables: External Finance for Developing Countries, Vol. 1 (Analysis and Summary Tables)*, Washington, D.C: The World Bank.

World Bank, 2009. *The World Bank*. [Online]  
Available at: <http://www-wds.worldbank.org>  
[Accessed 30 April 2017].

World Bank, 2010. *Madagascar - Economic Update: 2009 and Beyond*, Washington DC, USA: The World Bank.

World Bank, 2015a. *World Bank*. [Online]  
Available at: <http://data.worldbank.org/country/south-africa>  
[Accessed 31 January 2016].

World Bank, 2015b. *World Bank*. [Online]  
Available at: <http://www.worldbank.org/en/country/southafrica/overview>  
[Accessed 31 January 2017].

World Bank, 2015c. *The World Bank*. [Online]  
Available at: <http://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD?locations=BW>  
[Accessed 9 April 2017].

World Bank, 2015c. *The World Bank*. [Online]  
Available at: <http://data.worldbank.org/country/mauritius>  
[Accessed 29 April 2017].

World Bank, 2015. *Lesotho Macro Poverty Outlook*, Washington DC, USA: The World Bank.

World Bank, 2015. *Zambian Economic Brief: Powering the Zambian Economy*, Washington DC: The World bank.

World Bank, 2016. *Tanzania Economic Update The Road Less Travelled: Unleashing Public Private Partnerships in Tanzania*, Washington DC: The World Bank.

World Bank, 2016. *World Bank*. [Online]  
Available at: <http://www.worldbank.org/en/country/angola/overview#1>  
[Accessed 30 January 2017].

World Bank, 2017a. *The World Bank*. [Online]  
Available at: <http://www.worldbank.org/en/country/lesotho/overview>  
[Accessed 26 April 2017].

World Bank, 2017b. *The World Bank*. [Online]  
Available at: <http://www.worldbank.org/en/country/mozambique/overview>  
[Accessed 29 April 2017].

World Bank, 2017c. *The World Bank*. [Online]  
Available at: <http://data.worldbank.org/country/namibia>  
[Accessed 30 April 2017].

World Bank, 2017d. *The World Bank*. [Online]  
Available at: <http://data.worldbank.org/country/seychelles>  
[Accessed 30 April 2017].

World Bank, 2017e. *The World Bank*. [Online]  
Available at: <http://www.worldbank.org/en/country/zimbabwe/overview>  
[Accessed 30 April 2017].

World Bank, 2017f. *The World Bank*. [Online]  
Available at: <http://data.worldbank.org/country/zambia>  
[Accessed 30 April 2017].

World Bank, 2017g. *The World Bank*. [Online]  
Available at: <http://data.worldbank.org/country/Tanzania>  
[Accessed 30 April 2017].

World Bank, 2017h. *The World Bank*. [Online]  
Available at: <http://www.worldbank.org/en/country/swaziland/overview>  
[Accessed 30 April 2017].

Yabi, O. G., 2010. *Investissements Directs Etrangers Et Croissance. Theories Et Analyse Econometrique Appliquee Aux Pays En Voie De Developpement*, s.l.: Universitaires Europeennes.

Yormirzoev, M., 2015. *Influence of Foreign Direct Investment on the Economic Growth: The Case of Transitional Economies in Central and Eastern Europe and the Commonwealth of Independent States*, s.l.: ВЕСТНИК УДМУРТСКОГО УНИВЕРСИТЕТА.

Zambia Development Agency, 2015. *Zambia Development Agency Annual Report*, Lusaka: Zambia Development Agency.

Zhang, K. H., 2006. *Foreign Direct Investment and Economic Growth in China: A Panel Data Study for 1992-2004*. Beijing, University of International Business and Economics (UIBE).

## APPENDICES

### APPENDIX A: SADC Country List

<b>LOW-INCOME COUNTRY</b>	
<b>ACRONYM</b>	<b>COUNTRY</b>
DRC	The Democratic Republic of the Congo
MAD	Madagascar
MAL	Malawi
MOZ	Mozambique
TAN	Tanzania
ZIM	Zimbabwe
<b>MIDDLE-INCOME COUNTRY</b>	
ANG	Angola
BOT	Botswana
LES	Lesotho
MAU	Mauritius
NAM	Namibia
RSA	Republic of South Africa
SWA	Swaziland
SEY	Seychelles
ZAM	Zambia

## APPENDIX B: Panel Unit Root Test for Individual Variables

Panel unit root test: Summary

Series: D(GDPGROWTH)

Date: 02/24/17 Time: 12:38

Sample: 1980 2015

Exogenous variables: Individual effects

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0 to 6

Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-22.7009	0.0000	15	490
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-25.3749	0.0000	15	490
ADF - Fisher Chi-square	405.865	0.0000	15	490
PP - Fisher Chi-square	418.685	0.0000	15	510

\*\* Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary

Series: D(FDI)

Date: 02/24/17 Time: 12:39

Sample: 1980 2015

Exogenous variables: Individual effects

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0 to 5

Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-27.0436	0.0000	15	494
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-29.1868	0.0000	15	494
ADF - Fisher Chi-square	462.973	0.0000	15	494
PP - Fisher Chi-square	427.467	0.0000	15	510

\*\* Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary

Series: D(LNGDP)

Date: 02/24/17 Time: 12:44

Sample: 1980 2015

Exogenous variables: Individual effects

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0 to 8

Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-9.66523	0.0000	15	491
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-10.9461	0.0000	15	491
ADF - Fisher Chi-square	186.403	0.0000	15	491
PP - Fisher Chi-square	226.869	0.0000	15	510

\*\* Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary

Series: D(GFCF)

Date: 02/24/17 Time: 12:48

Sample: 1980 2015

Exogenous variables: Individual effects

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0 to 2

Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-22.7882	0.0000	15	506
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-21.6502	0.0000	15	506
ADF - Fisher Chi-square	366.269	0.0000	15	506
PP - Fisher Chi-square	377.770	0.0000	15	510

\*\* Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary

Series: D(LNTOT)

Date: 02/24/17 Time: 12:58

Sample: 1980 2015

Exogenous variables: Individual effects

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0 to 3

Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-17.0010	0.0000	15	502
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-18.5865	0.0000	15	502
ADF - Fisher Chi-square	311.332	0.0000	15	502
PP - Fisher Chi-square	358.616	0.0000	15	510

\*\* Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary

Series: D(LABOUR)

Date: 02/24/17 Time: 13:07

Sample: 1980 2015

Exogenous variables: Individual effects

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0 to 7

Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	39.0684	1.0000	15	462
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-11.2407	0.0000	15	462
ADF - Fisher Chi-square	201.174	0.0000	15	462
PP - Fisher Chi-square	385.134	0.0000	15	509

\*\* Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary

Series: D(POP)

Date: 02/24/17 Time: 13:09

Sample: 1980 2015

Exogenous variables: Individual effects, individual linear trends

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0 to 2

Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-5.43777	0.0000	15	507
Breitung t-stat	-1.12017	0.1313	15	492
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-5.74026	0.0000	15	507
ADF - Fisher Chi-square	99.8161	0.0000	15	507
PP - Fisher Chi-square	98.5740	0.0000	15	510

\*\* Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Panel unit root test: Summary

Series: D(TRADE)

Date: 02/24/17 Time: 13:11

Sample: 1980 2015

Exogenous variables: Individual effects, individual linear trends

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 0 to 1

Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	-17.9124	0.0000	15	505
Breitung t-stat	-10.3996	0.0000	15	490
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-18.0639	0.0000	15	505
ADF - Fisher Chi-square	297.491	0.0000	15	505
PP - Fisher Chi-square	380.993	0.0000	15	507

\*\* Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.